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Tendering Campaigns for Strategic Defence Equipment

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Tendering Campaigns for Strategic Defence Equipment

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ABSTRACT

While gambling on the future, an industrial marketing campaign for the supply of high-cost politicly-sensitive Defence equipment occurs within an information management framework. The ongoing campaign receives periodic requests to tender (bid) for the supply of equipment. In the absence of substantive tendering theory, or an existing performance metric for monitoring such tendering projects, I conducted retrospective contrasting case studies comprising two three-year multi-billion dollar tendering efforts. One tender project is conclusive in that it delivers a contract agreement; the other is problematic and requires the intervention of the defence minister. Given the presence of a meagre corpus and an open systems context, the sociology of tendering is considered within a constructivist theoretical perspective enjoining the epistemology of social constructionism and ontological realism. At best, such an endeavour leads to suggestive middle-range theory. Three key insights evolved.

First, I show that these campaigns and projects present as politicly and socially complex, where cultural diversity amongst the stakeholders ensures generally that different enduring myths take precedence: a mess. The resulting information distortions and ambiguities underlie the conflicts, problem definitions, and proposed solutions: a wicked mess. This is a world of desired political 'ends' moulded by political reasoning rather than 'means'. Decision-making is not problem solving.

Second, this research identifies specifically *collaborating* properties amenable to description in terms of the legitimacy of organisational engagements. Such legitimacy is a state of mutualism negotiated by the coalition of organisations comprising the tender enterprise: a coalition that includes the defence minister's political office. A problematic tendering project fails to evince progressively, vital classes of organisational legitimacy. Additionally, with respect to the conclusive tender project, a client bid management team receives more classes of organisational legitimacy than does its bureaucratic parent organisation.

Third, from an organisational *coordinating* process perspective, the conclusive tender project displays progressive patterns of: (1) value propositions and positioning, (2) co-evolution, (3) enforced disruption, (4) orienting to absence, (5) issuing mutual legitimacy, (6) enacting negotiating games, and (7) stabilising negotiating patterns. In contrast, the problematic tender displays ostensive "fits and starts" of belated and politicly infused coordinating and negotiating efforts.

Against this background, the study develops middle-range explanatory theory that infers value generation through connectivity and awareness (phenomenological intentionality). Patterns of collaborating and coordinating provide complementing paths of reasoning about the contingent (political) arrangements shaping the progressive efficacy of major Defence equipment supply competitions.

ACRONYMS AND ABBREVIATIONS

ACRONYM	EXPANSION OR EXPLANATION
ACAT 1 project	Major capital equipment acquisitions that are normally the Australian Defence Force's most strategically significant. They are characterised by extensive project and schedule management complexity and very high levels of technical difficulty, operating, support, and commercial arrangements.
ADF	Australian Defence Force
ANAO	Australian National Audit Office
CDD	Capability Definition Document
CDF	Chief of the Defence Force
CDG	Capability Development Group
CEO	Chief Executive Officer
COTS	Commercial-off-the-shelf equipment
CR	Critical Realism
DCP	Defence Capability Plan
Defence	Australian Defence Organisation
DMO	Defence Materiel Organisation
DSTO	Defence Science and Technology Organisation
FMS	Foreign Military Sales
HMAS	Her Majesty's Australian Ship
MINSUB	Ministerial Submission
MOTS	Military-off-the-shelf equipment
MPR	Major Projects Report
NPOC	Net Personnel and Operating Costs
NSC	National Security Committee of Cabinet
RAN	Royal Australian Navy
RFI	Request for Information
RFP	Request for Proposal
RFT	Request for Tender
SME	Small and medium size enterprises
SMI	Sense-Making Item
The minister	Minister for Defence
TP	Tendering Purpose

PREFACE

Exactly where and when the genesis of a research project occurs might be uncertain, but on reflection, a confluence of disquieting systemic issues matured during my consulting and contracting relationships with the Australian Department of Defence. I used the characterisation and consequences of systemic cultural issues as a point of departure in the quest for a sociological understanding of tendering for high-cost politicly-sensitive Defence equipment: the political games within the competition.

Administrative personalities involved with Defence tender evaluation operate within a bureaucratic paradigm of policies and procedures, accompanied by endemic personal performance appraisals related to promotion. As this 'reporting' occurs throughout the chain-of-command, the potential for prejudice is latent. Risk aversion and defensive demeanours are palpable. Meanwhile, ill-conceived tendering policies and problematic procedures replicate with disciplined momentum for fear of a misstep.

During these consulting episodes, I confronted routine tender evaluation procedures that produced a weighted-average score against each supplier. Simply stated, the defined tender assessment criteria are normalised relatively (0% through 100%) [1]. For each submitted bid, the evaluation panel delivers a collegiate rating against each criterion [2]. The sum of the products [1] x [2] produces the final supplier score: the highest score wins.

An administrative officer, often unskilled in the technical detail at hand, convenes the process. Two issues subvert the intent of supplier selection. The first considers the politics of collegiate performance ratings. The second is the weighted-average score's sensitivity to high ratings of low-weighted criteria. The outcome might produce a winning supplier who scores high consistently on low-weighted (less important) criteria, while scoring low on high-weighted criteria. Some tender evaluation panels treat price as a criterion, while others deal with it separately. A similar, but more complicated procedure is the Analytical Hierarchy Procedure (AHP): an unprovable (heuristic) algorithm. Being matrix based, it becomes unmanageable with more than a few criteria. In the AHP case, the method limits the assessment. Generally unbeknown to suppliers and the consultants who proffer this method, it contains a 'black box' statistical routine, and the removal of any one criterion might, and usually does, produce a rank reversal of supplier scores.

'Nobody is happy.' Nevertheless, the means are the ends. The courts are not interested in the actual evaluation method; as long as the specification advises all suppliers that, 'a roulette wheel will be used'!

The second issue that I confronted is a problem regarded as real by the recipients, and as fanciful, by the alleged perpetrators or their superiors generally. Loosely characterised as 'game playing', its pervasive presence reflects normatively in the sense of taken-for-granted. Examples include: a scheduled meeting at which only the supplier presents; the supplier's chair being deliberately lowered for negotiations; the 'wild goose chase' during which a consultant is advised to meet with a certain 'important' person, who in turn recommends another 'important' person and so forth; an interview at which a bureaucrat talks incessantly for exactly the allocated time; power plays within and between departments, and undeliverable follies that might cost taxpayers millions of dollars. The seasoned players and politicians understand that 'the fish rots from the head' and cascades down the chain-of-command. In turn, only 'positive' reports find their way up. Recognition of this game playing is a matter of commercial survival.

Regardless of whether these perceptions are accurate or not, the procurement of major Defence equipment does occur in a contingent socio-political context. For theory development, the real question is how potential theory *exploits* a contingent socio-political context. The outcome will then influence the idea and prospect of a general (predictive) tendering theory. However, in the first instance, I needed to address how theory frames a problematic milieu and contributes to its understanding.

To achieve this objective, and in the apparent absence of a substantive tendering theory, I progressed a sequential inductive approach to building a framework for middle-range theory. The outcome produced a case-based framework for reasoning: a framework that engages with 'theory for tendering'. There is no pretention towards predictive 'tendering theory' or 'a theory of tendering'. Rather, the framework comprises multiple existing theories and ideas that offer complementing paths of reasoning about a tender project in a contingent socio-political context.

Some complementing paths of reasoning are likely to be domain specific and contingent on a political process where politicians define a tender strategy and select the preferred supplier for high-cost and politicly-sensitive Defence equipment.

From previous experience prior to this inquiry and from the interviews conducted during the research, I found that any political process is a compromise and has a natural propensity to be disordered. Politicians make decisions; they do not solve problems. Hence, this wicked context is disordered, complex and messy (in the sense of a puzzle known only to the designer). The first challenge for this study therefore, was to demonstrate that this *is* the case.

The second interesting challenge dealt with the *ongoing efficacy* of a tender project where a client supplies a specification and a supplier responds with a priced proposal. The cost to each supplier is upwards of fifty million Australian dollars. Defence equipment supply has long lead times and comprises the development of complex integrated systems. Hence, the specification is incomplete and subject to change. The contractual relationship is between a monopsonistic client and an oligopolistic supplier.

However, the overarching relationship is between the government and foreign powers who *might* supply Australia with advanced defence technology. I had seen several projects where some tenders progressed to completion, yet others were withdrawn from the market as one or more key players found the risks unmanageable. The research question that arose from this reality relates to why some tender projects are successful while others are not.

Once short-listed suppliers receive their invitation to participate in the tender competition, the importance of technology and price appears to recede. In part, issues of difference in the success or otherwise of the tendering project (nothing to do with which supplier wins the tender) reflect broadly in the political alignment of the government, the client, the supplier, the industries, international alliance obligations and so forth. Such political alignment might be described by a justifying politician as delivering 'value-for-money'.

Experienced players take a normative approach to this spectrum of the realpolitik and its inherent disorder of changing political priorities, ambiguities and conflicting certitudes. Rather than just responding to disorder, oligopolistic suppliers appear to *actively corral and shape the disorder*, as an exploitable resource. The question then relates to how the activation or mining of this resource shapes the value-frames of the political decision-makers: values that the purchasing client then appropriates. This was the third challenge for the research project.

It starts with recognising: (1) disorder is the natural way of things; (2) non-pejorative myths and symbolism are applied to bridge knowledge gaps; (3) complexity is a carrier of socially constructed ideology, (4) a tender project instance punctuates an ongoing industrial marketing campaign by *both* buyer and seller during which time, the buyer seeks the seller as much as the seller seeks the buyer: a reflection of relationships between a monopsonist and an oligopolist, and (5) the tendering process is underwritten with information management not necessarily controlled by the client.

Stakeholder networks are vital for projecting and receiving ideas and shaping the making of meaning.

Even though the outcome of the study cannot theorise at a general predictive level, it does offer generalisation to theory, that is, middle-level explanatory theory. In contrast to generalised theory, middle-range theory retains its links to the informing context and philosophical tenets that both inspire and guide the research project.

Nevertheless, there are hints as to where future effort might contribute constructively to the recognition of tendencies towards a successful tender project or otherwise. It relates to the efforts to corral and shape the disorder, and interestingly, the efforts of the supplier require a parallel effort by the client. Multilateral diplomacy is never far below the surface.

The idea and conduct of the research program presented risks that were political in nature and therefore required a political response. Direct support for the study came in writing from the CEO Defence Materiel Organisation (DMO) responsible for equipment tenders, the defence minister and a former defence minister who, until recently, was Australia's ambassador in Washington DC. The Deputy CEO DMO assumed the role of 'fixer' to negotiate with DMO staff and suppliers. The CEO DMO undertook the role of ex officio co-supervisor of the research program: potentially a risk mitigation strategy. The incubation period was around eighteen months during which there were dark periods of bureaucratic inaction and high-level academic efforts to terminate the study.

A peer-reviewed publication received the 'best paper' prize.

> White, A. S. (2005). *Public Sector Tendering - Issues & Analysis.* Paper presented at the Association of Researchers in Construction Management (ARCOM), SOAS, London.

The CEO DMO requested a pause in further publications until examination of the dissertation. His awareness of the political risks is salutary.

In bringing these threads together, the research objective is to progress a paradigm shift away from microeconomics towards the use of language that affords a fresh way of thinking about situational awareness, connectivity and trust during tendering campaigns for high-cost politicly-sensitive Defence equipment.

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Prologue

Before the opinions of women were generally recognised[1], the 'man on the Clapham omnibus'[2] may be asked to consider who selects strategic military equipment and who decides how they are to be procured. Against this prosaic level of awareness, the following gallery of opinion, personal reflections and transcripts, offer views on the Australian Defence equipment procurement domain.

Annexure A provides a robust assembly of conversations, but an enduring theme, whether anecdotal or rigorously researched, is that strategic defence equipment purchases are messy affairs and the subject of bureaucratic, industrial and political intrigues; the domain of 'political engineering'.

Messy political contexts pose research challenges. Between the commencement of this research project and its conclusion, the sentiments of senior defence department officials appear to change from an apparent denial of the potential for contextual mess, to a problematic recognition of the nature of complex projects (Whitty & Maylor, 2009).

Meanwhile, politicians can 'wash their hands' and ascribe procurement mess to the bureaucracy (Kennedy & Trioli, 8 July 2011).

The grounding of contextual mess is a matter of perspective, but the following opinion pieces, and extracts of official government reports, offer potential pointers (McPhee, 3 April 2012; Tebbutt, 6 December 2011).

The very essence of mess implies that rigorous attempts to understand a messy context are matters of history because the mess moves on; and the defensive bureaucratic boundary riders are ever vigilant (Smithson, 2010).

Against the assembly of opinions presented in this prologue, lie the many 'success' stories that do not reach the public consciousness (Gillis, 2008). Some of these strategically-critical defence projects are delivered without competitive tendering and rely on a sole-source contract with an alliance country (Kelton, 2008).

While the dissertation following this prologue considers cases of competitive tendering, the ambit of political intrigue might apply to all strategic Defence procurements (Yule & Woolner, 2008).

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[1] See Clegg (2006) for a critical realist approach to gender issues.

[2] **The man on the Clapham omnibus** is a hypothetical reasonable person, used by the courts in English law where it is necessary to decide whether a party has acted in the way that a reasonable person should.

Gallery of Opinion

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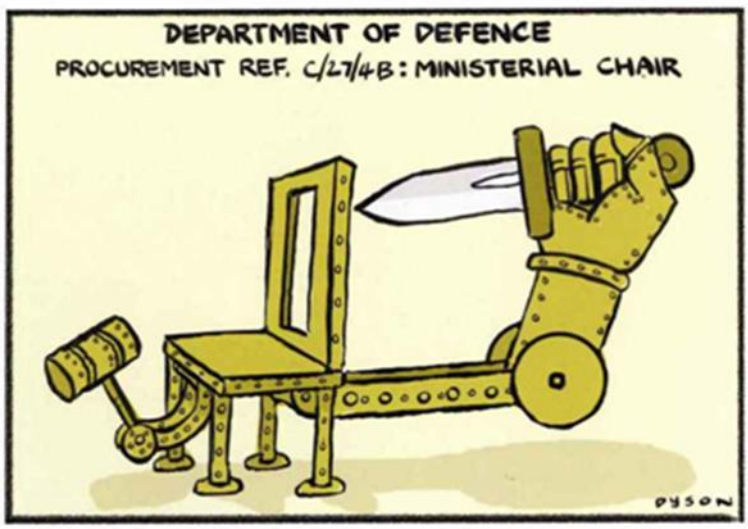
"I don't want the truth. I want something I can tell parliament."

- WITH APOLOGIES TO JIM HACKER MP



Andrew Dyson Ministerial chair
The Age 27 March 2009

Opinion pieces[3]

"There was a guy in my team. I went to his funeral. He never knew how to play the game. He took all the stress onboard. He didn't understand that it really wasn't all that serious. You take on a persona and you play. It's game playing with acting."

- KIM GILLIS, DEPUTY CEO DEFENCE MATERIEL ORGANISATION (DMO)

"It's a game; we were flying by the seat of our pants 99% of the time. I was trying to read between the tea-leaves and trying to understand what path the government was really going to pursue."

- AN AUSTRALIAN PRIME CONTRACTOR'S BID MANAGER

"I encourage companies to read the tea-leaves to understand where government, as a purchaser, is going and what we need to do for national capability. ...It's our job to present government with the data." [4]

- DR STEVE GUMLEY, CEO DEFENCE MATERIEL ORGANISATION (DMO)

"From what I hear, the decision in the 2009 Defence White Paper to go to twelve submarines, to double the submarine fleet, was Kevin Rudd's; a situation where Rudd literally pulled a number out of the air. That's the word around Canberra. It's no surprise then that DMO and Defence do struggle with this sort of ad hoc political management."

- CAMERON STEWART, ASSOCIATE EDITOR. 'THE AUSTRALIAN' NEWSPAPER

[Senator Marise Payne: Minister for Defence in the Turnbull Coalition Government]

"The Government's handling of tendering process for the next crop of submarines was considered poor, and a key factor in the shift among a number of South Australian MPs to support Mr Turnbull to take the reins. Senator Payne dodged questions about that process saying she would not speculate so early in her tenure. However, she did comment briefly on the need for more consultation on ship building procurement. 'I know that there is a competitive line of state premiers and industry ministers out there who are very keen to engage on those issues, from all the states you mentioned'." [5]

- ANNA HENDERSON, ABC NEWS ONLINE

"At one stage I asked Navantia [a Spanish ship designer and builder], I asked to actually meet the leadership of Navantia, the president and key officials, because I wanted to impress upon them that the ultimate [tender] decision was going to be made by me and that I would be making the recommendation to the Cabinet and it didn't matter what the Navy wanted, I was the one that was going to make that decision on behalf of taxpayers."

- DR BRENDAN NELSON MP, MINISTER FOR DEFENCE IN THE HOWARD COALITION GOVERNMENT

"While some political commentary over the recent failure argues tendering is a transparent process, the government's ability to 'manage success' through tender conditions provides for significant political influence." [6]

- JOHN TEBBUTT, LA TROBE UNIVERSITY

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[3] All unreferenced quotations come from the transcript of interview with the researcher.

[4] (Barker, August 2006)

[5] (Henderson, 22 Sep 2015)

[6] (Tebbutt, 6 December 2011)

"Former Defence Minister Kevin Andrews visited the facility in July and said 'when we get the right decision we'll be in a position to make an announcement.'" [7]

- JACKSON GOTHE-SNAPE AND IAN MCPHEDRAN, NEWS CORP AUSTRALIA NETWORK

"While Defence will no doubt do a good job of the '[commercial] evaluation process', the results will therefore be more amenable to interpretation. Simply put, the selection of the contestants and the lack of detail in the information provided means that it will be easier for the government to make a decision other than the one that might be recommended by Defence." [8]

- GRAEME DUNK, AUSTRALIAN BUSINESS DEFENCE INDUSTRY

"I think politics, or the desires of the political system can and does dictate an outcome. I simply say, "That's life". I think probably - 'ever has it been thus' and probably 'ever will it be thus' in an environment like this. It may not be the common public perception, but you don't have to be in the system for very long to understand that that's reality. There's an old German saying, '*Der Fisch stinkt vom Kopf her* - the fish rots from the head'. That applies to Government and Defence."

- DR JOHN WHITE, ADVISORY BOARD, DEFENCE SA

"We had sessions with consulting economists that went like this; we have billions of dollars coming across the desk and we are trying to do it this way so that's the policy, now go away and justify it theoretically. In other words, write the microeconomic rationale to match the politics."

- DEFENCE ADVISOR IN THE POLITICAL OFFICE OF DEFENCE MINISTER ROBERT HILL

"If you said to me what's the single most important thing we can do for Defence, it is to improve personal and institutional accountability..." [9]

- STEPHEN SMITH MP, MINISTER FOR DEFENCE IN THE GILLARD LABOR GOVERNMENT

"The whole [Defence] organisation manages up. By the time the information gets to the Minister, it's like a whale carcass that's been dragged through a pool of sharks. You often have to do a post-mortem on the sharks to get the information you're after."

- DR BRENDAN NELSON MP, MINISTER FOR DEFENCE IN THE HOWARD COALITION GOVERNMENT

"The [defence] minister [Smith] believed that if he found new faces, new people he could trust, and establish them in positions of power and responsibility he might, just might, be able to change what he regarded as the endemic culture of learned helplessness existing behind the spit-and-polish facade of 'can-do' assurance. The problem was that he was pitted against an institution that was used to watching ministers (and department secretaries) come and go." [10]

- NICHOLAS STUART. 'THE CANBERRA TIMES' NEWSPAPER

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[7] (Gothe-Snape & McPhedran, October 4, 2015)
[8] (Pittaway, December 5, 2015)
[9] (Kennedy & Trioli, 8 July 2011)
[10] (Stuart, 17 March 2012)

"On one occasion, we had to tell DMO that the contractors were unhappy with the sheer detail they had to process in the tender documents and that it had to be halved. So DMO reduced the font, produced a stand-alone index, and the volume of paper was almost halved."

- DEFENCE ADVISOR IN THE POLITICAL OFFICE OF THE MINISTER FOR DEFENCE IN THE RUDD LABOR GOVERNMENT

"Part of the problem stems from our past employees. When we negotiate, the people sitting on the other side of the negotiating table are often former officers of the Department or DMO. So they sit there, sometimes on chairs that we had deliberately lowered, knowing what we are doing because they used to do it and they have their responses prepared."

- AN ENGINEERING MANAGER IN THE DEPARTMENT OF DEFENCE

"I know and you know that [cost overruns] are actually coming from the Majors and the Lt Colonels [seconded to DMO] who are looking over their shoulder to their Service Chief [in another branch of Defence and who controls their promotion] who is telling them that instead of rubber wheels, he wants steel wheels. And then they will be told, I don't want steel wheels, I want titanium wheels. And for all you know, you are going to end up with diamond wheels! And that's compounded by churn. You have people roiling through positions in 18 month [cycles] as they go hell, west and crooked because of the high operational tempo or because there are greener pastures in other departments where you get promoted to, and you get some more money and all that sort of stuff." [11]

-ALLAN BEHM, CHIEF OF STAFF TO GREG COMBET MP

"Then there are the real lobbyists, the hardened professionals who hang around Parliament House, as prolific as bogong moths in season [a dense cloud of moths that are attracted to the lights of Parliament House], and far more pestilential. True or not, [these lobbyists] have to be considered as part of the whole immensely complex and time-consuming process of government [for whom] the real and only purpose of politics [is] winning elections." [12]

-MUNGO MACCALLUM

"Generally speaking, a minister is not going to meet a lobbyist without their client. The reason I'd meet them is because I'd be testing the information all the time. Like Defence would give me information, DMO would give me advice but I am always interested to hear what the prospective supplier thinks and why they think it. It's a way of me then taking these arguments back to them [DMO & Defence] and saying they say this or they say that.

Some of these companies actually do need lobbyists. They need someone who knows how to shape the argument and distil the key points. Because some of these companies come to you and talking a whole lot of stuff and you think, what on earth are they on about? You need someone that is professional and can take what they are actually on about and convert it into plain language."

- DR BRENDAN NELSON MP, MINISTER FOR DEFENCE IN THE HOWARD COALITION GOVERNMENT

[11] (Behm, 10 February 2009)
[12] (MacCallum, April 2010)

"For governments, better value-for-money is being re-elected."

- ALLAN BEHM, CHIEF OF STAFF TO GREG COMBET MP

"However, [defence minister] Smith and predecessors for 15 years are entitled to a strong sense of grievance about being continually distracted from higher policy, strategy and logistics by sex and bullying scandals, pay and equipment stuff-ups and endemic problems of procurement, project management and multi-million-dollar weapon platforms that don't work, don't arrive, don't coordinate with other equipment. And by politically mischievous leaks." [13]

- JACK WATERFORD (EDITOR-AT-LARGE). THE CANBERRA TIMES

"But journalists do more than contribute to the national conversation; they shape its parameters." [14]

-CHRIS KENNY, THE WEEKEND AUSTRALIAN

"Too right, and on those things, like the press... when it comes to [aircraft] JSF, Super Hornets, [ships] Mistral, Navantia, Gibbs Cox, yes, it has some influence, but seriously, it's marginal. But when it comes to stuff that the basic personnel are using, the press has a big influence because that's what the normal person understands. Normal people expect whatever happens that their Defence personnel are going to get the best and they are certainly not going to get anything that's going to expose them to any danger, whether in a military context or in an occupational health and safety sense. And also, people have an interest in...you know, if you are going to buy trailers that means that 300 people are going to be employed in a regional community; that's important. If you, on the other hand, you are going to import your trailers, you'd better have a pretty good reason for doing so."

- DR BRENDAN NELSON MP, MINISTER FOR DEFENCE IN THE HOWARD COALITION GOVERNMENT

"This most recent review adds to the mounting and substantial body of evidence that the acquisition and sustainment of Defence's major capital equipment is beset by long standing problems that persist despite numerous reviews and reform programs." [15]

- SENATOR ALAN EGGLESTON, CHAIR, SENATE FOREIGN AFFAIRS, DEFENCE AND TRADE REFERENCES COMMITTEE

"All I can say is that it would have been a whole lot better if DMO had talked to industry and listened a bit more to what we were saying. They hide behind all the industry briefings and probity, but in fact were very poor communicators."

- SENIOR EXECUTIVE WITHIN THE GLOBAL DEFENCE INDUSTRY

"For a contractor, you have to be known in Canberra. It's not all about price; it has much more to do with trust when it works properly, but it's also about the confidence that I know that the person *is* going to do it." [16]

-ALLAN BEHM , CHIEF OF STAFF TO GREG COMBET MP

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[13] (Waterford, 2012, March 10)
[14] (Kenny, 18-19 December 2010)
[15] (Australian Parliament Senate Foreign Affairs Defence and Trade References Committee, December 2011)
[16] (Behm, 10 February 2009)

"Let's say Tenix [Australian ship builder], as it was then, wins with a Navantia design [Spanish ship designer] for the LHD [Landing Helicopter Dock ships], so Thales [Australian ship builder] is devastated; it doesn't get the contract. Thales does not then subsequently go around and say to everybody, 'Oh, that's terrible, they've bought the wrong design of the ship, that's a shocker, it's going to let them down' and so and so forth. They deal with it internally, often ruthlessly internally. But they behave professionally towards government and their competitors. What I discovered, however, is when you get down to the smaller stuff [low unit cost], what happens is that company A doesn't get the tender for the soldiers' pants or trucks or trailers, they then go to the soldiers and say the Army's buying inferior equipment, inferior things, or they're buying an unsafe vehicle or inferior trailer or the guy that was running the [DMO tender] project is an idiot or something like that. As I say, I don't know, I have no reason to believe any of that has happened, but there's a greater tendency for it in that area."

- DR BRENDAN NELSON MP, MINISTER FOR DEFENCE IN THE HOWARD COALITION GOVERNMENT

"They thought it would be a good idea since the New Zealand Army had bought them, and in the US mindset, Australia, New Zealand, hey, they all have a funny accent and drive on the wrong side of the road, they must want the same thing."

-THE AUSTRALIAN MANAGER OF A US SUBSIDIARY

"**Q.** We also did a couple of press releases, I think—correct me if I am wrong—indicating that Dechaineux [an Australian Collins Class submarine] had participated successfully in this exercise when the fact is that it had mechanical problems and never left the wharf. How does this all occur?"

A. I understand that the press releases would have been referring to the intent for Dechaineux to participate." [17]

- SENATE ESTIMATES HEARING

"Once it became clear that Britain could not help us [during WWII], we transferred our sense of dependence, which has dogged Australia since Federation, from Britain to the United States. That sense of dependence remains to this day. Today I believe we should be old enough, we should be mature enough to grow out of it and recognise the reality." [18]

-MALCOLM FRASER, PRIME MINISTER OF AUSTRALIA 1975-83

"So here is what this region must know. As we end today's wars, I have directed my national security team to make our presence and mission in the Asia-Pacific a top priority. This is the essence of America's leadership." [19]

- BARAK OBAMA, PRESIDENT OF THE UNITED STATES OF AMERICA, SPEAKING TO THE AUSTRALIAN PARLIAMENT

Four Corners – ABC TV

"ANONYMOUS DEFENCE OFFICIAL: A decade ago, the RAAF [Royal Australian Air Force] hierarchy recommended that we get the Super Hornets early on and then the JSFs [Joint Strike Fighters] later when the aircraft actually was suitable and

[17] (The Senate, 31 May 2011, p. 25)
[18] (Fraser, 6 June 2012)
[19] (House of Representatives, 17 November 2011)

entered service. But he [the then head of the RAAF, Air Marshal Angus Houston] was not pleased about that idea at all. His comment or something was, uh... 'The Government would not like that'.

As I said, normally we would have gone through a competitive tendering process and worked out what the aeroplane could do, what its cost and its schedule was. Now we were proposing that we buy something being developed for the US Air Force, if you like, on a whim.

PRESENTER: Armed with this recommendation from the head of the RAAF, on June the 11th 2002, then Prime Minister John Howard arrived in Washington on an official visit. Just around the corner from the White House, at the Willard Hotel, he sat down with representatives of Lockheed Martin. At this secret meeting, John Howard signed up Australia to the JSF program.

In the meantime, other aircraft companies were preparing to go head-to-head for a lucrative Australian contract. The huge French aircraft manufacturer Dassault pitched its front line fighter, the Rafael. In Paris, Dassault's representative Daniel Fremont prepared for the upheaval of moving to Australia for a five year campaign to sell the French plane. On June the 27th, 2002, just 16 days after Howard's secret meeting in Washington, Fremont arrived in Canberra, unaware of the meeting between John Howard and Lockheed.

The Dassault representative had barely driven in from the airport when he received a call. The then Defence Minister Senator Robert Hill was giving a press conference to announce that "we've decided to, as a government, to participate in the system development and demonstration phase of the Lockheed Martin Joint Strike Fighter". The Howard Government had decided to completely abandon the decades-long practice of a considered tendering process and put its money on a paper plane.

HUGH WHITE: I think [Prime Minister] Howard himself was pretty keen on this. I think Howard was keen on it as a demonstration of Australia's support for the United States. There're lots of uncertainties built into the price. But having said that, um you know - take a stab. These things are going to cost us 150 million bucks each and they're going to cost us another 200 million bucks each to operate through their lives.

PETER GOON: The really scary part about the Lockheed Martin marketing strategy was that they were able to get people in the departments and ministries of defence around the western world; they actually got those people to do their marketing for them. And by having people in the departments and ministries of defence doing the marketing was an easy way of getting a decision early, and that's what they achieved. Lockheed Martin's marketing strategy is basically designed to enable Lockheed Martin to rape, plunder and pillage taxpayers around the western world for the next 40 to 50 years. The way the aircraft's designed requires people to go back to Lockheed Martin, go back to the contractors if they want to do any changes." [20]

- EXCERPTS FROM: ABC TV FOUR CORNERS - REACH FOR THE SKY

[20] (ABC TV: Four Corners, 18 February 2013)

Rear Vision ABC Radio

"STAN CORREY: When did defence acquisition [major equipment] become a key talking point as part of the political debate in Australia? Adam Lockyer is a research fellow in defence studies at the University of New South Wales, Sydney.

ADAM LOCKYER: The Joint Strike Fighter falls into the tradition of 'the defence of Australia' doctrine. This was the doctrine that emerged in the 1970s and 1980s as a way of structuring Australia's defence in the wake of forward defence, which was no longer applicable, mostly because our allies [US and UK] had withdrawn from the region. Now, what this defence of Australia doctrine recommended was that Australia should invest heavily in naval and air capabilities and defend the sea and air gap to Australia's north. If anybody was going to have to attack Australia they were going to cross this big moat to Australia's north and that's where we should fight.

STAN CORREY: With self-reliance, the technological advantage was supreme. Any criticism of delays in delivery or cost blow-outs was met with arguments about superior performance or technological edge. Behind this rhetoric was a remarkable bureaucratic concept: 'political engineering'. In the case of defence spending it meant bureaucrats, politicians and business design a project, so that no matter what happens, it can't be stopped.

Adam Ciralsky is a former Pentagon and CIA analyst, and in recent years an award-winning journalist.

ADAM CIRALSKY: Political engineering isn't necessarily a new phenomenon when you come to the development of weapons programs in the United States. It dates back to probably the '60s or '70s. But the F-35 has certainly honed political engineering to high art. And the primary difference in this case is that Lockheed and it's overseers in the Pentagon didn't just politically engineer the program within the continental United States by spreading the largesse around 46 of the 50 states, they spread the money around the world actually to a number of allies, Australia among them.

And the idea really is rather cynical. It's not that we simply want Australia to have the best fighter aircraft, we want to make the program such that if Australia pulls out of the program or if Congress (God forbid) tries to kill the program, that it is not just a political problem in the United States, it's a diplomatic problem for the United States.

STAN CORREY: It kind of links the creation of defence procurement...it links it in, very much, into strategic and regional alliance issues doesn't it really?

ADAM CIRALSKY: It absolutely does, it's almost like a suicide pact. If Australia cancelled its buys of the F-35, the price per plane for the United States would go up and it would also presumably for the rest of our allies. And so you get this domino effect that is supposed to be so painful that we don't want it to happen and so nobody wants to cut the plane and nobody wants to address the fundamental problems with the plane. That's why I refer to it as literally a suicide pact.

STAN CORREY: Winslow Wheeler is director of the Strauss Military Reform Project at the Project for Government Oversight in Washington DC.

WINSLOW WHEELER: Equating cost with performance assumes that higher costs mean better performance. We know from a lot of aviation history that's simply not the case. Making promises about cost and performance; that's standard behaviour. It's part of a politically driven effort to extract commitments from our Congress and from the civilian leadership of the Pentagon to commit to the program. Basically it's a buy-in. It's political engineering to get a commitment financially and morally to

build the aeroplane before we start knowing what the real cost and performance are going to be.

STAN CORREY: Winslow Wheeler, discussing a familiar scenario in what's called the ‘iron triangle’. That's a term used to describing a historical relationship between Congress, the Pentagon and the defence companies who make the weapons.

Since the 1960s, the jargon of defence spending has multiplied almost as fast as the budgets for jets. Words like 'concurrency', described by industry journal *Defense Industry Daily* as a form of political engineering, where a project is designed to make it too expensive for politicians to cancel.

WINSLOW WHEELER: The transformational language is just some of the hypester's technobabble gibberish to make people think that there is something super-duper about the aeroplane. The more you scratch that language, the more disappointed you find yourself about what the actual content of the aeroplane is. The language about there being no alternative is an effort to box us all in to buy this thing despite its cost and despite its performance. There are plenty of alternatives.

STAN CORREY: Creating the transformational language for the high-tech weapons systems are literally hundreds of lobbyists working for the defence contracting firms. None does it better in Washington than Lockheed Martin, the creator of the Joint Strike Fighter.

ADAM CIRALSKY: Lockheed had been working behind-the-scenes with DARPA, our Defence Advanced Research Projects Agency, with black budget money. They had been working on such a program for years, so they were light years ahead of Boeing. So in one sense the fix was in. Lockheed was going to get this contract and they did. And when they did they spread it around to 46 states, not because 46 states in the United States each has some tremendous aviation base but they certainly have members of Congress who vote.

STAN CORREY: Once they got the project and it was sold and other countries joining into the project, things started to go wrong, but Lockheed managed this incredible lobbying campaign to maintain the faith in the project. How significant is that kind of lobbying campaign that I suppose still goes on today?

ADAM CIRALSKY: It's incredibly important. I don't think it's a stretch to say that you would be hard pressed to find a member of Congress or more than one member of Congress who will speak out against the F-35. John McCain has done it on occasion, and then you see things like the military will move a squadron of F-35s to Arizona. This whole thing is interlocked in a way that is very smart and is very cynical.

STAN CORREY: One of your sources in your story, you actually had to meet in an area where he thought no one else [would be]—*people who were lobbyists* or belonging to the Pentagon—would see him. That was an interesting image you painted there. Why did he feel so afraid? (emphasis added)

DWIGHT EISENHOWER [archival]: In the councils of government we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the disastrous rise of misplaced power exists and will persist. We must never let the weight of this combination endanger our liberties or democratic processes.

STAN CORREY: Republican President Dwight Eisenhower with his concerns in 1961 of what might happen if the military-industrial complex exerted too much influence on the political process. In Washington DC not much has changed.

ADAM CIRALSKY: I did work in government. I started out at the Pentagon and I worked at the CIA. And it's about interests, and I think in the wake of two wars in Iraq and Afghanistan, there are now two camps; you have the guys in the military who are war fighters, and then you have people who are part of the acquisition machine, and the people who are part of the acquisition machine see their career a very different way." [21]

- EXCERPTS FROM: ABC RADIO, REAR VISION – HIGH-TECH HEAVEN: DEFENCE SPENDING FROM THE F-111 TO THE F35

"Warships costing billions of dollars have been sold after a round at the Royal Canberra Golf Club. These are not the places the deals are done – they are the places where the deals are won. The mammoth agreement to sell destroyers to Sri Lanka did not sprout from a long lunch. It was an accord germinated during one of the city's [Canberra] most important rounds of golf. [By invitation] eight time a year, ambassadors and high commissioners from nations as diverse as the US and Botswana play alongside deputy secretaries of federal government departments ... and other heavy hitters, such as David Hurley, chief of the Australian Defence Force." [22]

- PHILLIP THOMSON. SUNDAY CANBERRA TIMES

"A MINORITY Report tabled by Independent MP for Lyne, Robert Oakeshott, in Parliament today has called for a Code of Conduct inquiry into the actions of one of Australia's most senior public servants.

Mr Oakeshott's report calls into question the actions of Defence Material Organisation (DMO) Chief Executive Officer Dr Stephen Gumley and his alleged $2 million taxpayer-funded failed attempt to end the employment of senior Defence employee Ms Jane Wolfe.

Ms Wolfe lost her job in 2009 and at the time was reported in The Canberra Times to be 'the highest ranking federal bureaucrat to be dismissed for underperformance'.

The dismissal was endorsed by then-Minister for Defence Personnel Warren Snowden, who was reported as saying 'The Government is confident that the Public Service Commissioner [Lynelle Briggs], together with the CEO of DMO, have complied fully with their legislative responsibilities and acted with due regard to fairness, natural justice and privacy'.

However, on April 8th 2010, the Federal Court of Australia determined that Ms Wolfe had been unlawfully removed from her SES band three role by Dr Gumley and Ms Briggs under sections 29 and 38 of the Public Service Act 1999 (Cth) respectively.

Ms Wolfe is now back at the same level of appointment within DMO as she had prior to these attempts to have her employment 'ended', which began just four months after she had actually been employed." [23]

- ROBERT OAKESHOTT, MP

"As Canberra seeks to engage with this growing international interest, it is learning some sharp diplomatic lessons under the watchful eye of Washington about whom it can and cannot trust to help it build a submarine fleet that would be the bedrock of Australia's national security for a generation. This intriguing international tale is rich

[21] Correy and Lockyer (11 January 2015)
[22] (P. Thomson, 3 March 2013, p. 10)
[23] (Oakeshott, 2 July 2010)

with political sabotage and even industrial espionage, and has unfolded in earnest since the election of the Abbott government last September." [24]

- CAMERON STEWART. THE WEEKEND AUSTRALIAN

Senate Economics Reference Committee: Australian Submarine Corporation (ASC)

"ACTING CHAIR (Senator Edwards): Before we proceed, and in the absence of the Chair, Senator Dastyari, I would like to put on the record my absolute outrage at what I believe is a complete abuse of Senate committee process. In all my time in this building, in this office, I have never been denied a witness to a committee hearing. Labor [political party] has denied the Defence Materiel Organisation [DMO] from appearing here this morning, so we cannot pursue the competitive evaluation process and we cannot fully ascertain how you people, Australian shipbuilders, can compete in this process. I think it is rank hypocrisy.

With that, I welcome witnesses from ASC Pty Ltd. I thank you for appearing today. I am sure you also would have been interested in DMO's appearance today.

I invite you to make a brief opening statement, should you wish to do so.

MR WHILEY: No, we do not wish to do so, thank you.

SENATOR EDWARDS: Have you had any dialog with the government since the Prime Minister gave a commitment to involve Australian shipbuilders in the competitive evaluation process?

MR WHILEY: No, but we stand ready for those conversations.

SENATOR EDWARDS: Are you being proactive? Have you reached into the defence minister's office and sought him out?

MR WHILEY: No, we have not. As you know, the defence minister was at ASC two weeks ago, but we definitely have not sought him out since then. But in terms of being proactive inside the organisation, we are certainly thinking about the future.

SENATOR EDWARDS: Since Tuesday of last week nobody in your organisation has sought out any kind of competitive evaluation process from the defence minister?

MR WHILEY: No.

SENATOR EDWARDS: Why not?

MR WHILEY: We assumed that we were going to be informed by government on that process.

SENATOR EDWARDS: Are you being entrepreneurial in sitting back?

MR WHILEY: I do not think we are sitting back. The debate is ongoing about the process. Only a little bit of time has passed since the announcement was made. We are waiting to be contacted—

SENATOR EDWARDS: Why aren't you kicking in the door? I have been selling things a long time in my life, and I would be rat-tat-tat on the door. twiddling—maybe—your thumbs waiting for the documents to arrive in the mail?

MR WHILEY: I do not think we are twiddling our thumbs. Behind the scenes we are actually strategising and preparing the tools that we may need.

[24] (Stewart, 2014, pp. P13-14 Inquirer)

SENATOR CONROY: The minister flew with Senator Edwards and a range of people down to the front gates of the ASC and stood where they promised previously and made the announcement that they would build 12 [submarines] right there. Did he seek a meeting with you when he came down to Adelaide to inform you of the government's new position?

MR WHILEY: Not specifically on this. It was just a general meeting regarding our capabilities and showing him what we do.

SENATOR CONROY: They do not tell you that there is a new process. The minister and Senator Edwards and gang turn up, meet with you, tour the facility and do not mention there was a process. They held a press conference announcing a process, and that was Tuesday last week, so it is just over a week and you have not heard from the minister, the DMO, the department or anybody else about the new process yet?

MR WHILEY: That is correct

SENATOR CONROY: Even though you have met with the official, Mr Gould, yesterday—who is going on a world tour to inform people of the process—you still have no information a week later, including a meeting with the relevant official who is doing the world tour.

MR WHILEY: That is correct. It is a matter for government when they inform us of the process.

SENATOR CONROY: The competitive evaluation process has been mentioned a fair bit in recent days. Have you been able to find a definition of it in the Defence Procurement Policy Manual? I am sure you must have gone looking for it when you heard the announcement.

MR WHILEY: Actually, I did not, no.

SENATOR CONROY: The only place I have been able to find mention of a competitive evaluation process is the government's own talking points, which were published by *The West Australian* newspaper. Have you seen that? The acting Chief of Defence acknowledged this last week. Mr Whiley, have you seen that *West Australian* newspaper article?

MR WHILEY: No.

SENATOR CONROY: I will help you out. These are the talking points given to backbenchers, including the two senators on my left. It said:

> Decisions on a design partner and construction of the submarines will be based on a competitive evaluation process managed by the Department of Defence that takes fully into account capability requirement, cost, schedule, technical risk and value for money considerations. Any Australian company that can credibly meet these criteria will be considered on merit, as will potential international partners.

Senator Abetz clarified it all on 10 February, when he said: 'A methodology will be employed whereby an evaluation is taken on a competitive basis.' I am sure that has cleared it up for you, and you will draw the papers up straightaway. Are you aware or do you have any documentation to assist you with understanding what a competitive evaluation process is?

MR WHILEY: No. I took the words the government used to describe the selection of the future submarine process at face value. It is a question for government to outline the meaning behind those words.

SENATOR CONROY: You would be aware that unsolicited bids have been submitted into the government so far by at least a German consortium and possibly a Swedish consortium?

MR WHILEY: I heard the rumour that that was the case.

SENATOR CONROY: There have been press articles saying that this was the case. No-one has denied that.

MR WHILEY: No.

ACTING CHAIR: Why didn't you put one in? There is no space to be a shrinking violet, I would have thought.

SENATOR XENOPHON: In terms of Defence—and again this goes to Senator Conroy's line of questioning—at what level and frequency do you have communications from government on the future submarine project, given that it is such a contentious issue?

MR WHILEY: We have not had any discussions, certainly in my tenure in the role, with government on future submarines.

SENATOR XENOPHON: I am surprised by that. So, not even in terms of the parameters for the project, or on what it might be appropriate for the ASC to say about it, given that you would be asked questions on this in the media all the time? There is no direction, no guidance, no assistance from government on that?

MR WHILEY: No, no. The answer is quite simply no.

SENATOR EDWARDS: Senator Xenophon, you are surprised; I am speechless."[25]

- EXCERPTS FROM SENATE ECONOMICS REFERENCE COMMITTEE – NAVAL SHIPBUILDING

Correspondents Report – ABC Radio National. Elizabeth Jackson interviews [retiring journalist] Andrew Fowler on the suicide of Merve Jenkins.

"ELIZABETH JACKSON: What about at the ABC; what would have been your favourite story?

ANDREW FOWLER: The story that to me made a difference culturally to the people I was reporting to, was a story of Merve Jenkins.

He was a [Australian] Defence liaison officer in Washington who took his own life and the reason that Jenkins took his own life was because [of] the pressure that was put on him by Australian Government departments, Defence and Foreign Affairs; because he had revealed information to the Americans about what the Indonesians were doing in [East] Timor.

And Jenkins was a heroic person - much loved by his community - and a very brave person, but the pressure that was put on him was such that he found life intolerable and decided to commit suicide. And what's important about that story were two things: that the people inside the Defence community understood - and they told me that Jenkins was a really good person - and they said, you know, that story just made us realise that, [just] like journalists, you've got to have somebody else other than the institution to support you.

Jenkins put everything into the institution and didn't share it with his family, so when the pressure got on him, he had nowhere to turn. When I went down to Canberra with Peter Cronau, the [ABC] producer on that particular story, we went to see Jenkins's wife, to talk her into talking to us. [It] would help to tell the story, and the son of Merve Jenkins, Lionel, was there and when we walked in, he said, "Hey mum, we've got some friends here, somebody who will help us." And I must say, of all the

[25] (Senate, 19 February 2015)

things that break your heart...that breaks your heart. A representative of Australia, his son thinks that Four Corners is going to be his friend to help repair some of the damage done to his father.

And I realised then that when people talk to you as a journalist, they talk to you as a... they very often share their inner secrets with you and their inner fears and hopes, and I think as journalists we need to respect and protect that, even though, we are very brash and hard-nosed about exposing information that others want kept secret, I think we also should never lose our humanity. It's those moments that stay with me and the other stuff is really just about Timor and the terrible tragedy that was, and how disreputable the [Australian] government was in my opinion, in the way they handled that particular situation, and the terrible killings that took place ... quite clearly we knew that the Indonesian military were hand-in-glove with the gangs that were murdering people.

And what Jenkins did was to tell the Americans the truth about what was going on there and so, that's why I think he was courageous, but that's why, in the end, he was alienated because he stood out; he was an outsider in a very insider club." [26]

- EXCERPTS FROM: ABC RADIO NATIONAL – CORRESPONDENTS REPORT

Senate Rural and Regional Affairs and Transport Legislation Committee - Estimates

"**CHAIR (Senator Heffernan):** I declare open this public hearing of the Senate Rural and Regional Affairs and Transport Legislation Committee.

:

:

CHAIR: Obviously everyone, including Senate committees, is frustrated with the changes in the way we are running the show. There are movements afoot to amend it. But this was a kindly letter that I received after last estimates. I am quite happy to talk to the person. Unfortunately he didn't sign his name to this.

Dear Senator Heffernan,

I was one of the many senior public servants waiting around in the witness room to appear before you in the committee on Tuesday night.

[CHAIR:] This is in February.

We waited and waited. The appearance times and the agenda went out the window.

[CHAIR:] I agree with that.

Three hours went by as we all sat round twiddling our thumbs and watched you and your dipshit colleagues trying to score political points off each other. You are a shithouse chair and clearly have no ability to stick to an agenda. No wonder everyone wants to boot you out. And God help the animals on your farm if you run the farm like you run the Senate committee.

[CHAIR:] I am most grateful to that person—would they like to come and have a private yarn to me. Was that you, Wacka?

Senator WILLIAMS: No, I worded mine differently.

CHAIR: Righto. Anyhow, I am just disappointed that the person couldn't put their name to it, because I would not have bitten their head off. Historically, anyone who goes and tells me to get knotted, which is what this is doing, I usually ring them. I have never sent an email in my life. I ring them and say, 'Look, I am so happy you have had the opportunity to go and get knotted. Now, what can I do to help?' That is what I would do

[26] (Australian Broadcasting Corporation, 30 June 2013)

with this person. To assist this person, we recognise that the system now, which has changed in recent months, isn't working in the way it was intended so we are working towards trying to fix that. We regret that there are a lot of people coming from a long way who did not get to be witnesses because there is no control on the time. I am asking people on this committee to bear that in mind.

:

CHAIR: I thank everyone, me being—what was I described as?

Senator STERLE: A dipshit.

CHAIR: No, you blokes were dipshits; I was the shithouse chair. Thank you to that person for those compliments. I thank our witnesses, I thank the Hansard staff, who automatically leave out things like 'shit' and 'bugger', and I of course thank our professional secretariat. **Committee adjourned at 22:44"** [27]

- EXCERPTS FROM SENATE RURAL AND REGIONAL AFFAIRS AND TRANSPORT LEGISLATION COMMITTEE

Allan Behm

"JG. Who wields the power in the ministerial office?

AB. The power is actually held by the minister who is the decision-maker. What the Chief-of-Staff does, from time-to-time, is give advice and sometimes if the minister appears to be acting on a whim, you might just have to say 'hold your horses, you can't do that or if you do it, you'll be doing it without my advice'.

JG. You say in the book that nothing prepares a person for this job; chief-of-staff to a minister of the Crown. How is that?

AB. Well the job is such an usual job. It's a job where you are really supposed to keep order in situations which are inherently chaotic. And what you are really seeking to do all the time is to bring order to that chaos and to make sure that things are managed in a proper, as well as a legal and an equitable way.

JG. To take that word, Allan, of 'chaos'; has something gone awry in our process that chaos exists?

AB. Actually, I don't think so Jonathan. I mean, I think many things are inherently chaotic. You know, the art form always is not to allow the chaos so to distract you that you can't get on with the things that are important. And often in politics, what happens is that the immediate so dominates the important that the important is forgotten about. And precisely the job of the chief-of-staff is to ensure that the minister and the government, to the extent that you are impacting on the government as a whole, are not distracted by these short-term difficulties from what their long-term goal has to be which is the benefit, the welfare and the prosperity of the nation.

JG. Allan, one of the things we remark upon about modern politics is the increasing professionalisation of the craft and one aspect of that is the role, the increasing role, of the 'political staffer' in the ministerial office; over and above that of the bureaucratic staffer. Is that a healthy influence; the unelected political operative having such power and influence?

AB. It is the nature of things that ministers require a measure of support in their offices and the people who are going to do that, are generally speaking, are going to be young, enthusiastic, huge amount of energy, thrive on a lack of sleep, all of that sort of thing, and so ministers tend to surround themselves with a lot of getup and go people; many of whom do harbour political ambition themselves. I think one of the things that

[27] (Senate, 25 May 2015)

characterises modern parliaments is that across the board, well over a third of parliamentary representatives, certainly in the House of Representatives, have been staffers. On the Labor side, it is over fifty percent of members have been staffers. On the conservative side it's about a third. And I'm not sure that that is such a good thing. I think diversity in our elected political life is a very important thing to have. And it's for that reason that in the course of thinking about the development of a political class in Australia, I argue for a return to branches and members of branches as the basis for electoral pre-selection and appointment, rather than simply having the party machines impose people on the electorates.

JG. What happens if you end up working for a fool?

AB. I wouldn't work for a fool Jonathan; it's as simple as that. I mean, you can pick the fools pretty readily. They're people who lose their temper and throw things and all of that sort of thing. I wouldn't simply work... JG. [interjecting] *FOR HIM!* AB. For him ... (snigger, snigger ... snigger ... snigger).

AB. People can find themselves under incredible pressures. Quite a lot of people in Parliament House are on various sorts of medications to help them deal with anxiety on the one hand or depression on the other. So, yeh, it's a tough life.

JG. Is it a healthy environment by and large?

AB. Oh no, no. I think it's a very unhealthy environment. There's a lot of wheel spinning. I mean a huge amount is burnt and smoke created but often very little forward movement. It's not a healthy lifestyle and I'm not the first person to identify that. Dr Mal Washer MP[28] certainly identified that a couple of times in his time in the parliament.

I'm very happy that I've survived it and what's more I'm very happy that my family has survived it and welcomed me back." [29]

- EXTRACT OF INTERVIEW BY JONATHAN GREEN WITH ALLAN BEHM, FORMER CHIEF-OF-STAFF TO GREG COMBET MP; FORMER MINISTER FOR DEFENCE MATERIEL – SUNDAY EXTRA: ABC RADIO NATIONAL

[28] Liberal member of the Australian House of Representatives from October 1998 to August 2013
[29] (ABC Radio National, 21 June 2015)

Chapter 1
Setting the Scene

This chapter provides a contextual foil for a fresh perspective on the idea of a tender and the prospect of informing theory; while the following chapters entertain the literature that contributes to this mission.

However as a prelude, the political ecology of major Defence equipment tenders is highlighted; including the idea of a tender as a political artefact with consequential issues. The chapter concludes with the research objective, a theoretical argument, and propositions that might find support from this research inquiry, noting that all propositions are the subject of future investigation.

The structured prosaic presentation that follows belies the seriousness of national security and the vital function of the supply of major Defence equipment in a volatile and ever-changing political milieu. This is a 'wicked problem' situation; where competing political agendas might have a temporary resolution, but the 'problem' resists solution and reappears in a different guise. Such is the realpolitik of tendering as a process of ongoing resolutions to an ongoing wicked problem.

For now, the discussion focuses on the lineaments of the tender process and commences with the idea of a tender project.

A tender project

Tender projects for high-cost politically sensitive Defence equipment extend over three years notionally and a current project for the supply of 'land' vehicles is in its tenth year. Some tender projects are characterised as successful, in that the buyer and seller have agreed to terms and endorsed a delivery contract. With high-cost politically sensitive tenders, many issues remain undefined or unresolved and the contract to supply the equipment continues in good faith: clearly a less than stable beginning to a long-term relationship.

When a tender project struggles to reach finality, the defence minister might terminate the exercise at significant cost for taxpayers. Alternatively, the defence minister overviews a replacement tender strategy and a new tender comes to the market ('on the street' in Defence parlance). The generators of tender failure reflect the puzzle of interdependent and uncertain events (M. Thomson, Febuary 2014). Pointing the finger

at a ‘cause’ is a heroic gesture, particularly as the mess (puzzle) moves on. Suffice to say that one or more stakeholders perceive the risks as unmanageable and disengage from the process.

The political ecology

The nature of politics is one of social complexity. It means that prediction with certainty is incongruous, and at the same time, unexpected (emergent) behaviours and ideas materialise within the moving dispositions of mess: a state of ‘disorder’ in contrast to the ‘order’ of a perfect bureaucracy. Therefore, to understand a major Defence tender project is to engage with the changing manifestations of its political ecology and unpredictable influences.

The political project director

In a ‘simple’ bureaucracy where best practice is past practice, leadership ‘senses’, ‘categorises’ and ‘responds’ to the presence of ambiguity or disturbance to ongoing regularity. In an ever-changing ‘complex’ socio-political context with emerging patterns of behaviour, leadership ‘probes’ and ‘senses’ and then ‘responds’ with revised guidelines for behaviour (Dervin & Naumer, 2012; Snowden & Boone, November 2007). The objective is to progress and refocus the efficacy of the tender project; where the conformation of efficacy is a political variable.

In the case of major Defence equipment, it is the politician rather than the tender project manager who sets the tender strategy, and together with the other organisational members of the coalition that comprises the tender project, delivers the guiding parameters and reinforcements to behaviour. Additionally, the politician selects the winning supplier.

The game of Monopoly is a good analogy. Consider the board having one available property remaining. Throws of the dice will advance a player in and around the location, and with sufficient iterations, success. Indeed, I have witnessed senior bureaucrats entering and exiting the politician’s office until, after exhaustive iterations, the politicly-desired answer is proffered to the politician!

For the politician, strategic geo-political alliances might override all other issues. This begs the question as to the ‘raison d’être’ for a *competitive* procurement process. What then, is the game?

The game

The politics of tendering for arms procurement

Studies which concentrate on external factors tend to examine *why* states arm, whereas those concentrating on internal determinants look at *how* states arm (Farrell, 1993, pp. 115-150; Zolin & Dillard, 2005).

This research project considers *how* Australia arms within the domain of competitive tendering for high-cost and politically sensitive equipment. The interrogatives of 'how' and 'why', identified by Farrell and refined by Zolin & Dillard above, might be indistinguishable in the Australian context, as the 'why' of geo-political alliances might define the 'how'.

At the highest strategic level of Australian national security, defence equipment is sourced generally from the USA (Kelton, 2008) with some Australian sub-assembly where possible. Important but subordinate security objectives might lead to the sourcing of defence equipment from other countries, whose contractors reposition to become subcontractors to an Australian prime contractor. Entreaties from the US defense industry and its political and diplomatic lobby remain ever-present (Barker, August 2006).

> A confidential cable from the United States Embassy in Canberra...reveals US diplomats believe Australia should stop awarding contracts to domestic defence companies - an act that would lead to their collapse and big job losses - and procure more equipment from American companies to achieve greater value for money. (Dorling & Baker, 2010, December 14; National Commission of Audit, February 2014, p. 132)

For competitive tenders, the Australian Government, rather than its defence equipment procurement agency (the DMO), might define a restricted equipment supply market reflecting political exigencies. While the procurement agency is usually involved intimately with the design of this acquisition strategy, it might not want to be *the* architect in case the strategy fails and 'heads could role'. According to Midgley (2000), it is difficult to predict the entropy of the artificial market that occurs during Defence acquisitions, or the effort required to gain and preserve its stability, but significant government intervention is required.

The players

At a superficial level, the tender competition searches for an Australian defence-industry prime contractor who lets subcontracts to local and international suppliers,

some of whom are large transnational military equipment suppliers, and whose individual size dwarfs the Australian prime contractor; hence the term 'thin prime'.

The major Defence equipment procurement landscape comprises at least seven key players:

- the Australian Government
- Australian State and Territory governments
- foreign governments who directly or indirectly release (or withhold) advanced military technology
- the Australian Department of Defence (ADF), which uses its
- Capability Development Group (CDG) to define equipment requirements, together with
- the Defence Materiel[30] Organisation (DMO) as the government's defence equipment procurement agency, that is authorised to contract as the client
- the national and international oligopoly of defence contractors who deliver equipment that costs multi-billions of dollars, where some organisations are sovereign-owned or have foreign government equity

An eighth 'player' is a coterie of powerful agents who circulate throughout the process. They are not accountable to the people of Australia. Collectively, they play a pivotal role as 'go-betweens' or messengers between politicians and targeted individuals or public forums. Their numbers are burgeoning generally, which might be indicative of their valued service in this politicised context.

They identify as:

- an amorphous mass of government-relations specialists including contractors' in-house staff
- contractor-retained lobbyists
- present and past national and foreign politicians, heads of state and royalty
- political operatives in the defence minister's Political Office whose accountabilities are outside bureaucratic control and relevant Acts of the Australian Parliament

A ninth self-appointed 'player' is the fourth estate.

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[30] **Materiel** (Fr. matériel) refers to equipment used in warfare. The terms 'materiel' and 'equipment' are interchangeable and both are currently used in the Australian Defence context.

Politicians seeking to communicate attributable and non-attributable perspectives use journalists to deliver these messages. Consequently, journalists have access to the Defence Minister, the minister's Political Office and all other politicians and staffers. For senior journalists, the line between 'reporter' and 'player' is fuzzy, particularly as many of them churn through the offices of the defence minister and other politicians, the administrations of foreign governments, defence equipment suppliers, and government relations agencies.

Finally, a tenth 'player' comprises the pundits as typified by retired soldiers, politicians and bureaucrats. Their raison d'être might be as equally problematic as the procurement process.

Relationships and processes: an allegory

Figure 1.1 (below) presents an allegorical model of four key relationships:

- The contractor behaves as a 'prospector' in search of new opportunities (Miles & Snow, 1978).
- The decision-makers are federal Ministers of State who behave as 'reactors' to political realities and engage with the rhetoric of divination[31].
- The contracting client (the equipment procurement agency - DMO) resides within the Defence bureaucracy. The DMO is a Prescribed Agency (Department of Finance and Administration, 2003), while not extending to a Statutory Agency (created under an Act of Parliament). The DMO reports to the Minister for Defence Materiel. It has its own budget and exhibits the presence of a 'defender'. It is the subject of frequent public audits and inquiries[32], and the butt of published opinion from journalists, contractors, other government agencies and foreign governments, against whom it cannot reply; hence its 'defender' disposition.

[31] In the sense of instinctive prevision, that considers both the *idea* of political realities and their *prospects* within political ideologies (Marshall, 2009). In contrast to sense-making in a socio-technical context (immediate reaction), the divination of meaning-making in socio-political context considers the idea and prospect or implications (Hulme, 2009b; Teddlie & Tashakkori, 2009, p. 309).
[32] National Commission of Audit (February 2014, p. 280).

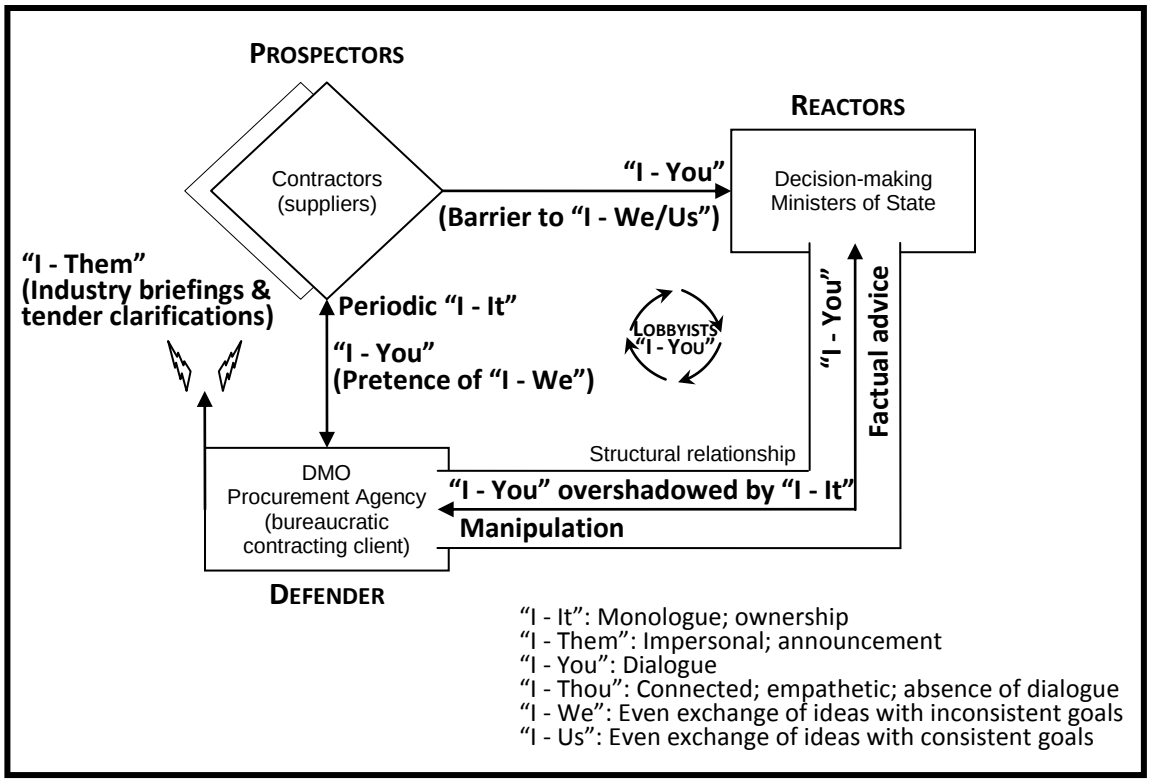

Figure 1.1: Encounters between entities and a precursor of socio-political complexity. Informed by Brown (2008) reflecting the philosophy of Martin Buber (1937).

- The contractors retain a tier of lobbyists who circulate freely. For example, some European military equipment suppliers engage their royal families for this purpose. The equivalent occurs in the USA. Other lobbyists provide ambassadorial services as they circulate throughout the international defence industries. In Australia, State and Territory governments employ defence business representatives. 'Government relations' might be a department within an organisation or a consulting service. The tier of lobbyists is self-managing apparently. Lower levels identify with individuals while the top level of the realm remains opaque.

The multiple perspectives on reality[33] reflecting a 'prospector', a 'defender' and a 'reactor' ensure that attempts at modelling the tender process are fraught. For the 'defender' alone:

> It only takes a cursory glance at a Defence procurement chart to see the convoluted and incomprehensible web of documents, committees and milestones that underpin the capability development and procurement process (Australian Parliament Senate Foreign Affairs Defence and Trade References Committee, December 2011, p. 5).

[33] Multi-ontology sense-making (Aaltonen, 2007c; Cilliers, 2007).

Figure 1.2 displays both knowledge diffusion and knowledge transfer. While based on Figure 1.1, it represents an allegory of 'Artificial Insemination', which is followed by a correspondence with a tender process.

The ability to exploit knowledge might require prior experience with the knowledge culture of the source (Midgley, 2000, p. 55): an "absorptive capacity" as described by Szulanski (2003, p. 29). Therefore, Figure 1.2 is idiographic.

- At ①, there is a diffusion of knowledge from a known source to a generic destination unit (Szulanski, 2003, p. 14).
- Events ⓪; and ② through ⑧ reflect generally, knowledge transfers. The unit of analysis is the dyad, as attention spans the individual characteristics of both the source and the recipient of knowledge (Szulanski, 2003, p. 15).
- Throughout the entire process, the Ministers of State and the contractors maintain an ongoing relation during which time, the contractors seeks to shape meaning through a focussed transfer (⓪ --- ⑧) of ideas and information: the ongoing industrial marketing campaign that spans between and across tender projects.

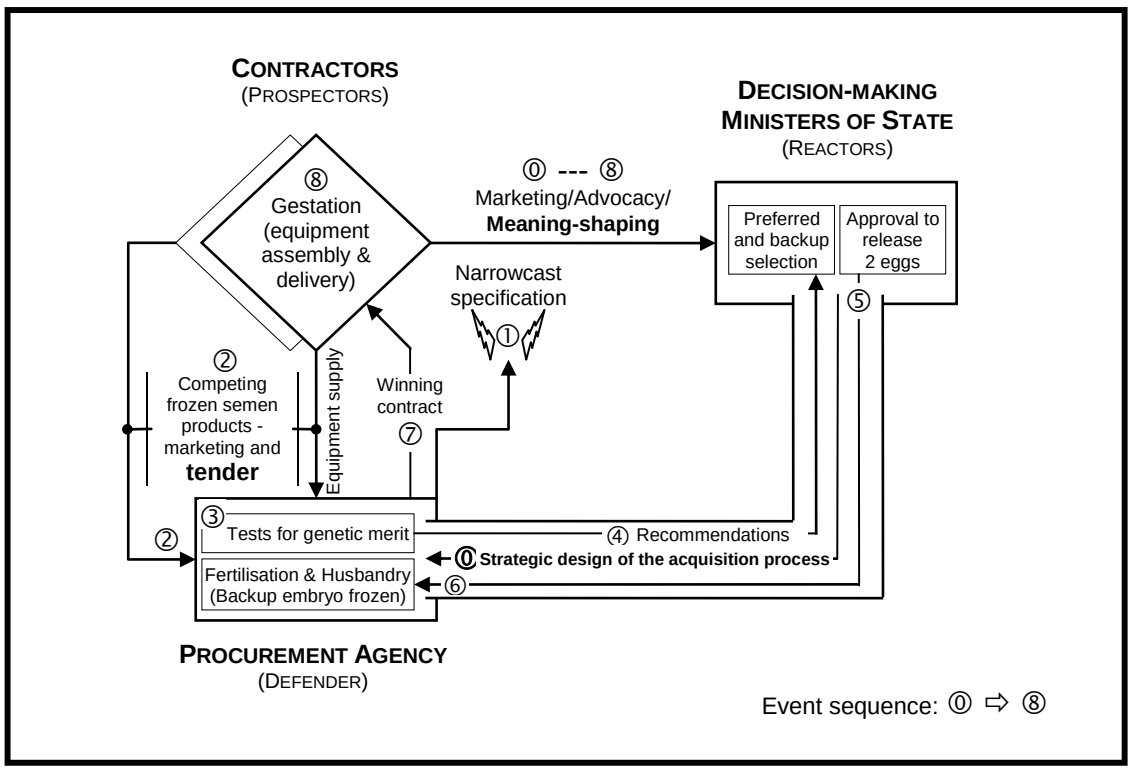

Figure 1.2: 'Procurement by numbers' - an Artificial Insemination (AI) allegory of the event sequence of a major Defence equipment supply project.

The events in the allegory have their correspondence with actual tendering events:

⓪ Politicians advise the procurement agency of the strategic political design of the equipment acquisition process.

① The tender specification adjustments might benefit politicly identified suppliers.

② The companies present themselves (such as the 'Beauty Contest') to the procurement agency (DMO) and then submit a priced bid.

③ The procurement agency evaluates these tenders using empirical data supplied by the contractor or generated test data. As a matter of policy, criteria weights are *not* applied for high-cost politically sensitive equipment tenders.[34]

④ The procurement agency, in consultation with the defence minister, offers a 'preferred' and 'backup' recommendation to the decision-making politicians.

⑤ The politicians consider and return the recommendations.

⑥ The politicians make a decision and direct the procurement agency to enter into final negotiations with the *preferred* contractor, while keeping the backup contractor in the event that negotiations fail.

⑦ The winning contractor is published.

⑧ The equipment is produced and delivered.

⓪ --- ⑧ There is near continuous meaning making and meaning through political engagement.

When the process falters, the defence minister inlays a recovery team (Clare & Smith, 2010; Combet, 2008): the euphemistic defence minister's 'projects of concern list'.

The Defence Materiel Organisation (DMO): the 'defender'

For the 2009-10 financial year, the DMO budget of $11.8 billion (subject to currency exchange rate fluctuations) comprises some 112,000 contracts, allocates $5.4 billion to sustaining existing equipment, and employs some 6500 staff, although not all are involved with DMO activities. $6.2 billion is devoted to acquiring new equipment (DMO, 2009). Aside from around 150 minor projects, of the 210 current major projects, the CEO DMO estimates that only the top 20-40 projects might require a serious understanding of the evolving political complexity of interest to this research[35]

[34]A dartboard or roulette wheel would suffice, as long as the suppliers entered the competition and submitted their bids in full knowledge that this was to be the method for selection.

[35] The latitude in this estimate is quizzical, given the CEO's function to provide the government with facts.

(Gumley, 12 October 2009). Much depends on the interpretation of 'serious' and the Helmsman Report (see The Helmsman Institute, 2009) offers some insights.

Comparisons with non-Defence project delivering organisations

The Helmsman Report suggests that:

- Defence has relatively more complex projects than other Australian organisations
- The complexity is increasing
- While not a traditional focus of a Defence organisation, Soft Systems[36] complexity is significant
- Some complexity is self-inflicted[37]

The implications identified in their report suggest that:

- DMO has to have a capability to deliver organisationally complex projects routinely.
- DMO project managers must be able to work independently as senior executives, *as the DMO systems cannot provide sufficient support.*
    - The contrast between commercial project management and public sector project management is incisive. A prime tenet of commercial project management is the singular responsibility of the project manager. The nature of a bureaucracy is that the project manager will never have singular responsibility and the capacity to choose or avoid in-house services is constrained by the needs of public financial accountability.
    - The question remains as to whether a bureaucracy can provide a consummate project management capability and what are the risks of a partial capability?
- The most difficult projects that the DMO undertakes are so complex that project management methods used on other traditional projects cannot apply.

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[36] Soft systems methodology (SSM) is a way of organising the exploration of the problematical situations, which we continually encounter in everyday life. The approach enables deliberate action-to-improve such situations to be defined and implemented. The SSN process learns its way to deciding upon and taking action, so the methodology is itself a learning system. Every situation in real life, while being ever-changing, will show much connectivity between the elements it contains; and it will also reveal multiple ways in which different people are 'seeing' and interpreting the world. These people have different worldviews and are capable of consciously forming intentions (Checkland, 2008).

[37] See also Barber (2005).

- The most complex projects will need direct support and oversight from the senior management team of Defence and the DMO in a hands-on manner.

It follows that the DMO's senior managers should act as project directors in order to provide the project's political shield. For a multi-billion dollar politically sensitive project, being a project director should be a full-time commitment.

From the perspective of a contribution to paradigm change (Kuhn, 1996; G. Morgan, 1980; Jeffrey Pfeffer, 1981), the Helmsman Report (The Helmsman Institute, 2009) is potentially the defence procurement equivalent to the Tavistock Institute (1966) report on the construction industry.

> *The idea that a commercial project delivering business is structurally incapable of supporting its own projects might be untenable for lending institutions and shareholders (stockholders). Does this idea resonate with the DMO, or are they merely stewards of a political process?* (National Commission of Audit, February 2014, p. 132)

The Helmsman Report represents 'a turn' against the prevailing tide of Defence doctrine and, for the purpose of this research, the implications are expressed in the first proposition (Whetten, 1989, p. 492).

PROPOSITION #1:	A rationale exists for a *paradigm shift* in management thinking and *a fresh approach to theory* as it relates to tendering and project delivery in the Defence context.

Foundations of socio-political complexity

The structural arrangements prevailing during this research study, display in Figure 1.3.

Under the agreed business model[38] for the DMO (2009) as a prescribed agency, the 'CEO DMO Ministerial Directive' identifies that the CEO DMO is directly accountable to (1) the Minister for Defence for DMO's performance, but remains accountable to (2) the Secretary of the Department of Defence and (3) the Chief of the Defence Force (see Figure 1.3).

[38] On 1 July 2005, the DMO was established as a prescribed agency under the Financial Management and Accountability Act 1997. While the DMO remains inextricably linked to Defence with regard to provision of equipment for the ADF, it is now required to account directly to the Minister for Defence on its financial management (*Defence White Paper: Defending Australia in the Asia Pacific Century - Force 2030*, 2009).

The point being that through the CEO, the DMO is accountable to three superiors with different ontological perspectives (Aaltonen, 2007c, pp. 15-26). The ramifications are significant and reflect in the following vignettes.

In the context of *inter alia* 'self-inflicted complexity'[39], a former Defence senior executive effused:

> Loyalties are conflicting for serving officers who are either seconded to the DMO or seconded to the civilian divisions within the Department of Defence. Their promotion is dependent on their Service Chief, not on the Division Head for whom they are working [during the tendering process].[40]

Emeritus Professor Paul Dibb expresses a similar sentiment:

> ...the loyalty of uniformed officers in the CDG [Capability Development Group] is to their service commanders who control their careers and promotions and who expect the officers to deliver the equipment that they want sometimes regardless of competition, cost and wider strategic and economic considerations. (Dibb & Barker, 2010)

Ferguson (31 March 2008) adds further insight:

> Defence uniformed staff are highly motivated, trained and carefully selected. They undergo rigorous selection and training processes to gain advancement. Most roles are maintained for around two years for Officers.
>
> The Public Sector however has a different culture. This culture is more stewardship based. This contrasts to the outcome and mission-time focus of the war-fighters.
>
> The cultural clash can create serious tensions within defence as the uniformed staff try to manage the tensions between heavy ongoing operational demands and decaying equipment.[41]

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[39] See Barber (2005).

[40] The CEO DMO has control over military staffing policy with the DMO. These are not Reserve Powers but the CEO DMO has direct control over the selection of incoming Senior Officers and has a 'red card' authority over other ranks who might be pandering to their Service. Nevertheless, the sentiments about 'looking over the shoulder' remain a reality but are not necessarily unfettered.

[41] Former defence minister Brendan Nelson had a similar perspective. "Well, I'm immediately thinking of one very big project where the Minister did not take their [Defence] advice and thank God, the taxpayer would be very grateful that that was the case."

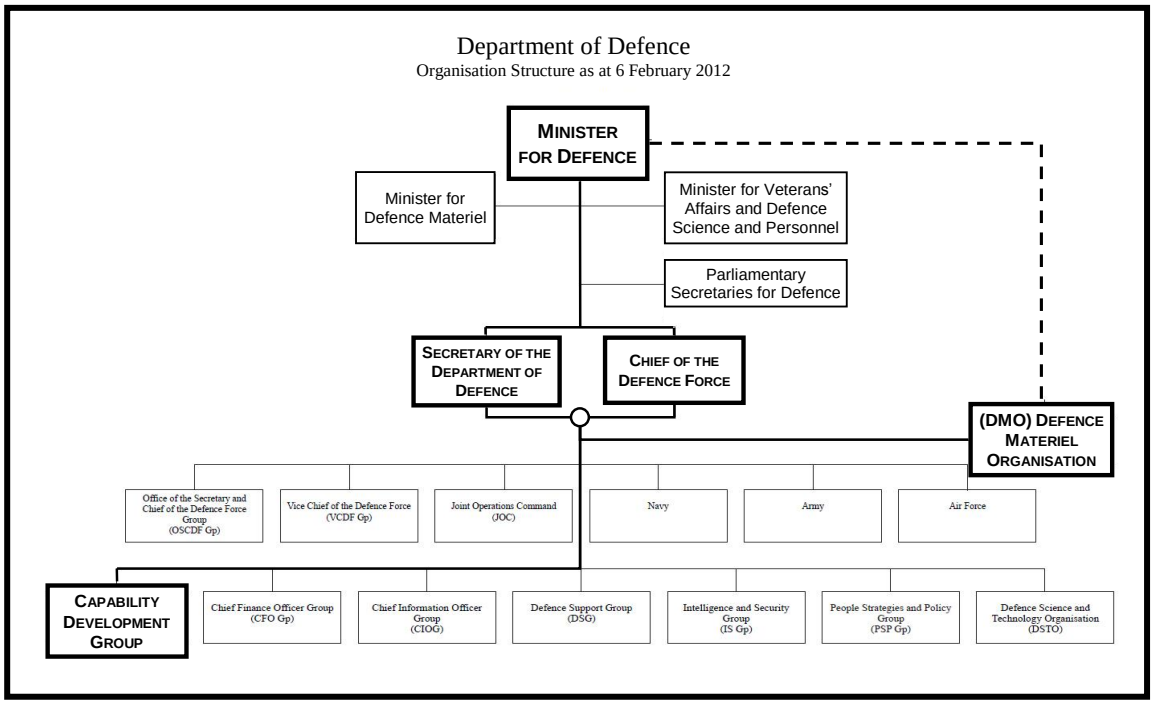

Figure 1.3: The Department of Defence (as at 6 February 2102). Adapted from: http://www.defence.gov.au/publications/s_mgr_cht.pdf (Downloaded 12 February 2012)

In part, this pastiche reflects on the realities of a bifurcated organisation headed by a diarchy. With three superiors, the CEO DMO is the highest paid Australian government officer.

The arguments supporting organisational bifurcation (Figure 1.3 above) are addressed in some detail by Kinnaird (2003) and Mortimer (2008)[42]. The current administrative arrangements implement this policy but there might be residual pressures from the military to revert to the previous monoculture, where each Service procures its own equipment (Bennett, 1990; Cowey & Fogarty, 1980). This policy debate is of immediate importance (National Commission of Audit, February 2014) with a recommendation that the DMO should only provide contract management services.

Thomson (2007, January) provides a historical perspective.

> The governance of Defence presents a unique problem. The three Services [Army, Navy, Air Force] are legislatively constituted institutions rather than subdivisions of a single force, and despite significant progress from the fractious days of the 1980s, a degree of tension remains between military and civilian executives over control and influence.
>
> As a consequence, Defence displays all the characteristics of a federation of disparate groups - each operating with its own distinct culture and, at times, its own agenda. [Counterfactual] contestability has now been lost...

[42] The CEO DMO will give *independent* advice to the government.

The three Service Chiefs (Army, Navy, and Air Force) individually develop powerful political positions in order to secure a greater share of the Defence budget.

There appears to be significant potential for a Service Chief, through their Colonels[43], to destabilise the procurement process for other Service Chiefs. Their well-founded motivations are to provide their war-fighters with the 'largest quantity' of the 'best' equipment. They might seek to amend new equipment specifications during and after the tendering process, or to promote a different acquisition strategy.

In contrast, the DMO might argue for the best outcome for the government within the budget, but subject to adjustments arising from war-like exigencies and other government directives.

Importantly, the DMO's accountability to the Minister for Defence engages the minister directly with the procurement strategy and process. In so doing, this engagement *provides a proximate balance to the Service Chiefs'* influence on the DMO; but there might be additional reasons.

Former defence minister Nelson comments on this positioning:

> "I think it's fair to say that at times the uniformed side of Defence finds it difficult to respond to directives that come from civilians in the form of the government and minister of the day", Dr Nelson told the *Herald*. (Banham & Snow, 2009)[44]

The idea of contextual complexity as a productive resource

Experienced contractors, who seek political alignment, engage with the resource potential of contextual complexity. Being a 'prospector', they recognise the inherent barriers to effective communication arising from the dispositions of a military 'defender' and a political 'reactor'. The 'prospecting' contractor and its retained lobbyist(s), appropriate the roles of both national and international interlocutor and purveyors of value propositions.

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[43] Colloquially referred to as "Iron Colonels" (Dibb & Barker, 2010).

[44] I found this reflection, with its measured tones, surprising given Australia's social stability and democratic institutions. However, in Australia's 226 year history, social instability and nationalist movements have indeed arisen to challenge the government of the day (Clark, 1995).

PROPOSITION #2. Because there is a fundamental difference with commercial project delivery, a Defence tender process needs to describe and explain the defence contractor's modality in terms of information management and ongoing political alignment (political appropriateness); in addition to organising resource allocation.

The issue is not so much about the apparent realignment of functions, but rather, why strategic realignment occurs (perhaps encouraged) and for whose benefit.

From his perspective, Dr Nelson (above) focuses on the government's central concern for its sovereignty and the ongoing imperative for this to be on display.

In addition, the Defence equipment procurement process might have latent industry support functions identified by the National Commission of Audit (February 2014). That is, rather than the government providing direct financial support to selected companies or an industry, the money goes to Defence as a conduit to the companies or industry.

Yule & Woolner (2008) identify other intelligence purposes.

Having established the first two research propositions, the next section considers the tender project's function within the larger Defence equipment delivery project.

The DMO tendering process

The Tendering Phase (tender project) in Figure 1.4 bounds this study.

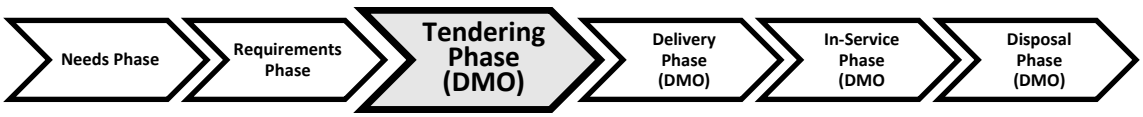

Figure 1.4: The capability life cycle. Adapted from (Australian Parliament Senate Foreign Affairs Defence and Trade References Committee, December 2011, p. 12)

The DMO requires a project manager to report on their project's progressive maturity in accordance with Figure 1.5 (below) (Fitzgibbon, 2009).

Overall, Figure 1.5 displays an accumulating score with a terminal value of 70. Of this maximum score, a 'perfect' tender will achieve a score of 42 on signing a contract for equipment supply: a successful and hence conclusive tender.

Importantly, about 60% of the project's maturity derives from the tendering sub project.

The DMO's Project Maturity Score

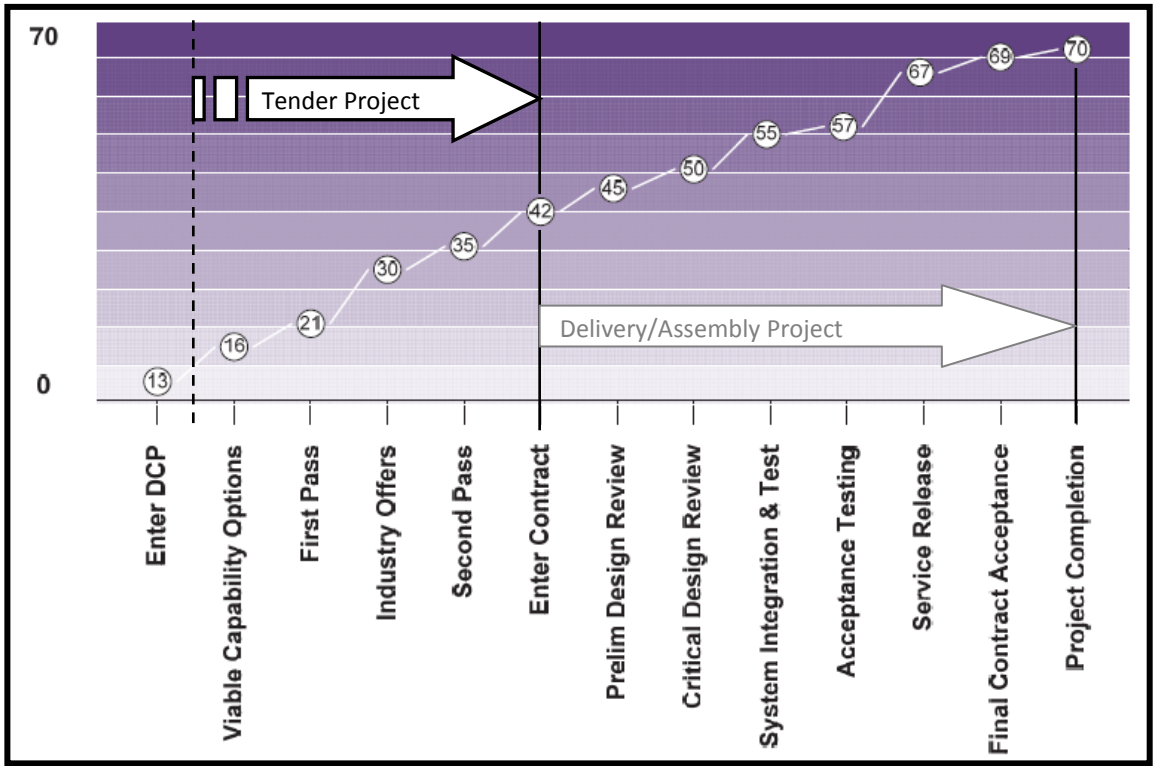

Figure 1.5: Cumulative project maturity score. Adapted from Fitzgibbon (2009, p. 56). DCP=Defence Capability Plan: a rolling list of projects.

Table 1.1 below contains scales for project manager guidance. A first impression suggests that much attention is devoted to the question words of 'what' and 'when'. Incorporating the implications of the 'how' and 'why' of socio-political ambiguity and associated complexity within the attributes in Table 1.1, remains intriguing.

Maturity Score	ATTRIBUTES						
	Cost	Requirement	Technical Understanding	Schedule	Technical Difficulty	Commercial	Operations and Support
	Delivering the Capability (Delivery Performance)						
	How well are the costs tracking project approval?	How well is the requirement being realised?	Defence's understanding of the technical solution to operate and support the capability?	How is the ISD tracking?	How well is the design and its validation coming along?	What is the Contractor's management performance and customer relationship	How prepared is the project to deliver an operating system?
10	Proven	Demonstrated	Fully Understood	Achieved	Proven	All Delivered	Operational
9	Contingency Remains	Tested	Transferred	Confident	Tested	Delivered	Transitioning
8	Confident	Designed	Arranged	Acceptable	Integrated	Delivering	Integrated
7	Within Contingency	Acceptable	Needs Understood	In Tolerance	Designed	Manages Risk	Being Procured
6	Negotiated	Contracted	Provided For	Manageable	Planned	As Contracted	Defined
	Defining the Capability (Process Maturity)						
	What is the quality of the project estimate?	How well have we defined the requirement?	How well do we understand the solutions?	How realistic is the schedule?	How difficult is it to put together?	Can industry deliver the solution?	Impact on the existing operating and support environment?
5	Per Endorsed Capability	Endorsed	Understood	Confirmed	Manageable	Offered	Planned
4	Industry Tested	Documented	Feasible	Understood	Feasible	Industry Proposals	Known
3	Reasonable	Solution Classes	Coalescing	Feasible	Building Blocks	Strategy Developed	Issues Understood
2	Plausible	Scenarios Identified	Patchy	Drivers Known	Conceptual	Possible	Conceivable
1	Speculative	Deficiency Identified	None	Speculative	Unknown	Not yet	Not Identified

Table 1.1: Scales for the assessment of the project Maturity Score. Adapted from Fitzgibbon (2009, p. 56)

In Table 1.1, there are seven performance attributes in the top row (Maturity Score 10). This maturity scores reflects the attribute capabilities that should be in place at the time of equipment delivery. Each column of the seven attributes achieves a maximum maturity score of 10; the project's maximum maturity being 70. At 'Maturity Score' line 6, the seven attributes achieve a maximum project maturity score of 42 (6x7).

Figure 1.5 above indicates that '42' is the best possible outcome for a tender project.

DMO culture and doctrine

Allan Behm, former senior Defence official and Chief-of-Staff to Defence Support minister Combet, considers the potential for bias in the Maturity Score:

> DMO do their performance reporting from the bottom up and of course, nobody ever underperforms. So you get to the top and everything is going fantastically well.[45]

Socio-political complexity appears avoided in Table 1.1. 'Complexity', in a strict technical sense[46], exists within the Helmsman ambit of 'Technical Difficulty', although this might be restricted to 'complicated' known issues that require professional and technical expertise (Snowden & Boone, November 2007). Both Figure 1.5 and Table 1.1 (above) remain the official Defence procurement doctrine, reflecting generally, the ontology and values of an engineering culture.

In a report footnote, The Auditor-General (2009a, p. 17 footnote 2)[47] quotes selectively from the Helmsman report, that:

> Defence projects are more complex than private sector projects; that current levels of complexity are likely to continue and may increase; and that some of the causes for complexity are driven by the Australian Defence Force requirements such as decisions made by Defence, Government policy and sector approaches.

Missing in the Auditor-General's footnote is Helmsman's next paragraph:

> Some of the drivers that are creating the high levels of complexity are in areas that have not traditionally been a focus of Defence Project Management systems. *These issues are mostly related to Soft Systems* versus traditional project management areas such as schedules, engineering and contract management (The Helmsman Institute, 2009, p. Executive Summary s4, emphasis added).

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[45] In general, contractors will not criticise a monopsonistic client. (See Annex A, page 168, start at line 82.)

[46] Often arising from unknown responses to systems integration: the 'unknown unknowns'.

[47] This report, produced by the DMO, incorporates the report from the Auditor-General.

In spite of the Helmsman insights, Defence doctrine appears to treat socio-political complexity[48] with the status of 'ignorance as taboo' (Smithson, 2007). The reasoning might be obtuse.

Together, these issues bring to focus the next proposition for research.

PROPOSITION #3.	During the life of a tender project, the DMO appears not to have an effective means of recognising and monitoring inherent disorder and modalities of behaviour that might indicate a progression towards a successful (conclusive) tender outcome or one that is progressively problematic.

Manifestations of mess

When dealing with the future, some mess is essential otherwise, innovation withers. The mess triggers questions and enables recognisable communications. Mess requires human cognitive capabilities but it cannot be rationalised. The war-fighter recognises this as 'the fog of war' because it is uncontrollable: it emerges. In such a messy context, the 'commander' takes charge with singular authority.

Mess might have many qualities, but two are significant for this inquiry. 'Benign' mess arises from *different* frames of reference. The archetypal junk shop might appear to be messy to a naive observer but, for the owner, everything is in its place.[49] In contrast, 'virulent' mess is deliberative mess, designed initially to interfere with a process and ultimately has a life of its own: the means become the ends. Layers of bureaucracy, committees, and boards of inquiry might generate a virulent mess (Abrahamson, 2002; Abrahamson & Freeman, 2008; Australian Parliament Senate Foreign Affairs Defence and Trade References Committee, December 2011; Hancock, 2010).

Even with the politician in charge, nobody can trust what anybody says because nobody knows the truth. The more astute contractors might perceive an opportunity for injecting myth to bridge information gaps, brokering information and realigning power.

With mess comes confusion

The *realpolitik* of major defence equipment procurement suggests that political decision-making, in contrast to recommendations from the bureaucracy, has little to do

[48] In contrast to technical systems integration complexity.
[49] For the casual observer, mess implies a lack of understanding of the strategy in place: the puzzle.

with substantive rationality or procedural rationality. It appears to be a messy world of desired political 'ends' moulded by political reasoning processes rather than 'means'.

Dealing with mess requires dealing with information

Feedback from the defence minister (reactor), consequential to the information probes of a contractor (prospector), is problematic as patterns of political thought adjust constantly and politicians are generally absorbers of information and transmitters of strategic tender policy.[50]

Each contractor commits in the order of $10m up to $50m per tender on *inter alia*, proxy feedback from national, state, and international political insiders who proffer their insights and advocacy.

As a result, the contractors *and* their retained lobbyists emerge as knowledge brokers of considerable value to both the decision-making ministers of state and the DMO contracting bureaucracy: a canny outsourcing of information acquisition. Over the long-term industrial marketing campaign, and the short-term tender project, each competing contractor seeks to probe, seed, and seek ideas and insights into the changing shape of the meaning of political value propositions. It is a puzzle where the pieces change shape and engagements: a mess.

Messy lessons

Reviews with recurring themes

Since 2000, reviews of Defence procurement have occurred with unusual frequency[51]: 2000 – Defence Governance, Acquisition and Support; 2003 – Kinnaird Review; 2008 – Mortimer Review; 2009 – Pappas Review; 2011 – Black Review.

All reviews, with the marginal exception of the 2000 review, addressed the following themes: Turnover of staff; Chronic and critical shortage of skills; Under estimation of costs together with the over-planning of projects relative to funding availability; Lack of independent scrutiny of proposals; Inadequate technical risk assessment; Costing should relate to whole-of-life costs; Effective information management systems; Rigorous comparison of requirements with off-the-shelf equipment, and The plethora of

[50] A nod of the politician's head might indicate understanding of a message, rather than agreement with the sentiments of the message.
[51] As a general historical reflection, a government requiring major structural reform of an organisation or the functions provided by that organisation directs the frequency of reviews (National Commission of Audit, February 2014).

committees resulting in dissipated accountability and responsibility (National Commission of Audit, February 2014, p. 280).

All reviews occurred against a backdrop of regular reports of DMO performance by The Auditor-General (2009a, 2010). The Auditor-General found recurring equipment delivery delays and budget over-runs. In addition, the Auditor-General found it necessary to qualify DMO's financial and production reports that display the inability of DMO's information systems to focus some performance data on discrete projects.

The Helmsman Report (see The Helmsman Institute, 2009) might not disagree with these recurring themes, but missing in the Auditor-General's reports is Helmsman's identification of social and political complexity.

The Kinnaird Review

The Kinnaird Review into Defence equipment procurement recommends *inter alia* that major procurements should include an 'off-the-shelf' product in the portfolio of options (Kinnaird et al., 2003), the rationale being that it would provide a baseline of performance and cost.

At a practical level, however, the requirement for 'off-the-shelf' equipment is contingent on the government nominating a major technical system, such as a Command, Control and Communication System, congruent with defence alliance obligations. Such direction ensures interoperability with other sovereign states with which Australia has alliance relations, or seeks to establish an alliance by inviting that state to participate in joint military exercises.

The prime contractor might or might not warrant, or be able to warrant, these externally supplied products for the service life of the equipment. It is left to the DMO to consider who must accept the systems integration risks during assembly and then the logistics for perhaps thirty or more years of sustainment (Kelton, 2004).

The more the government becomes involved with the specification of the equipment, the greater becomes their liability, and the less likely an off-the-shelf option is viable or competitive. This outcome pushes back the key recommendation of the Kinnaird Review (an off-the-shelf option for baseline comparison).

Costly games

At times, the government has sought to convince or induce such 'off-the-shelf' suppliers to participate in the tender process[52], which is an aberration of 'normal' free market operations. A contractor sums up the situation: 'Well look, it's pretty obvious that you guys have a process here [the Kinnaird process] and we look like a bolt-on so that you can have something to compare against'. Although the word 'stalking horse'[53] remains unmentioned, that appears to be the implication.

A Defence Advisor in the Political Office of the Minister for Defence recalls a case:

> It was a curious experience because ordinarily people come to you for Defence business, but now we were going to them.
>
> I think the point to note is that the political office had a direct commercial role here because it is about the relationship. *The political office shapes the relationships...*

Midgley's (2000) insights about the energy inputs required to keep an artificial market alive appear poignant.

Buyer risk

Within a complex context, the scope for *moral hazard* is high because of asymmetric information about costs and performance.[54]

As the government purchaser accepts much of the long-term risks associated with the procurement, there is little incentive for the supplier to reduce costs or improve performance, particularly if the bid price is low. Additionally, once production has commenced, replacing a poorly performing prime contractor is difficult and very expensive (The Auditor-General, 2009b). So much of the future is unknown (particularly with shifting diplomatic alliances and emerging technologies) that any contract between the government and the supplier is necessarily incomplete and hence, a generator of cost and schedule overruns (Ergas & Menezes, 2004).

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[52] The lure might be a long-term equipment sustainment contract.

[53] **Stalking horse**: This term is common parlance of defence equipment acquisitions. It refers to the client obtaining a second option and price from which to 'sell' the benefits of their preferred solution. Because of a monopsonist client, contractors can feel obliged to participate even though there might appear to be no chance of winning. The cost of participation can be high with the potential for serious financial consequences, particularly for smaller subcontractors or suppliers. On some occasions there will be a fixed payment offered but not a full reimbursement of expenses.

[54] **Moral Hazard**: Suppliers act in ways which generate a benefit to the supplier which is less than the costs they impose on the buyer. An example is the use of (undetectable) low quality components which will add to the buyer's future costs. It can be an outcome of asymmetric information.

Relationships

The Government – Contractor – Defence: a triumvirate

The government also seeks to establish close relations with industry. Politicians see the contractors as vital sources of intelligence not always forthcoming from the bureaucrats. Former defence minister Nelson recalls:

> Yeah, I've got to say there are more than a few occasions where I had the government relations team tell me something about a particular project we were running where I discovered something I didn't know, that I hadn't been told.

Having identified important characteristics of the structure and culture behind major Defence equipment tenders, attention now shifts to how research might inform this contingent political milieu.

Applying research to complexity and mess

Whetten (1989, pp. 490-495) contributes to the following points:

- To understand why complexity and mess are concepts of 'concern' requires an exposure of the social dynamics [through metodological pluralism].
- To understand how the social dynamics interrelate requires an appreciation of patterns and relationships.
- Sensitivity to context is especially important where data are based on experience and observations that are context bound.
- 'What' is happening (observations of events and outcomes) is unlikely to make a major contribution to knowledge.
- The relationships (a) between concepts, and (b) between constructs of concepts, is significant in terms of understanding the 'how', noting however, that relationships are the domain of theory.
- Surprising findings might be discussed in terms of 'what' and 'how'. *It often needs multiple perspectives from other fields* (abductive logic) to explain 'why'.
- The 'why' is the most fruitful and most difficult avenue of theory development.
- The 'who', 'when' and 'where' do not add to theory, but they do indicate limitations.

- It is preferable to investigate qualitative changes in the boundaries of theory – cases under qualitatively different conditions – rather than mere quantitative expansions. This represents the essential feedback loop from new settings in order to advance theory development. That is, learning something new about the theory by working within different case contexts and conditions.

Whetten (1989) suggests that *patterns and relationships* define the temporal and contextual boundaries to the generalisability of the research findings and theory development. Thiétart & Forgues (1995, pp. 19-31) expand on this vital issue by suggesting that because human action is not predictable, it makes no sense to attempt to define law-like explanations.

As Thorpe & Holt (2008b) suggest, 'The researcher's job is to reflect and attempt to make sense of this; and the task becomes comprehensible when management is understood in terms of its *potential*, rather than as a formally defined field of stable relationships. The potential arises from a *continuing* interest in the idea of how an *awareness* of what we do and say can transform our practices (pp. 2-3). (emphasis added)

This awareness requires a sense of the meaning that individuals translate or infer from observed communications and actions.

Snowden & Boone (November 2007) suggest that within an ever-changing 'complex' socio-political context with emerging *patterns of behaviour*, the leader 'probes' and 'senses' reflected meaning making. With this 'awareness', the leader 'responds' with revised guidelines for behaviour. This is a nexus between (a) an ongoing *awareness of what we do and say* and (b) ongoing active *transformation of practices* (Dervin & Naumer, 2012). As Thorpe & Holt (2008b, pp. 2-3) suggest, this *is* the potential of management in a wicked, complex and messy context.

The feature linking these ideas is Easton's (2010, p. 127) and The Helmsman Institute's (2009) position that reasoning about the idea of organisational complexity requires an engagement with a holistic perspective.

PROPOSITION #4. The focus needs to orient towards a holistic assessment of the project's socio-political complexity as a foundation from which to frame ongoing management thinking and reasoning about tendering.

From an operational perspective, the efficacy of 'probing', 'sense-making' and 'responding' is reliant on the quality of connectivity: social interaction.

PROPOSITION #5.	In a wicked, messy and complex socio-political context, connectivity and the resulting awareness of what we do and say, can transform our prevailing tender practices and refocus their political objectives.

Research aim

In the absence of a substantive process theory engaged with tendering, the aim of this study is to investigate the idea and prospect of theory to describe, explain and inform a tendering process.

Research objective

The objective is to develop a synoptic (holistic) framework for reasoning about the progressive efficacy of a tender project for high-cost politically sensitive Defence equipment.

Theoretical argument

In the first instance, this management problem needs description and explanation. It requires a holistic perspective that draws on complementing paths of reasoning: 'theory for tendering'. Such reasoning considers the contingent arrangements that shape the progressive efficacy of major defence equipment supply competitions.

Importantly, 'complementing paths of reasoning' and 'predictive theory' reflect the contrast between middle-range theory and generalised theory. Middle-range theory is the domain of analytical generalisation; ideas worth replicating in an inquiry, whereas generalised theory is the domain of taken-for-granted predictive relationships.

Middle-range theory, with its heritage of phronesis, is neither inferior to, nor subordinate to general theory. Middle-range theory embraces a changing contingent context, while general theory does not. It might be argued that they represent pre-enlightenment and post enlightenment thinking, but the convenience of such forensic duality pales against the idea of their presence being mutually informative. Hence the complementing paths of reasoning that they offer reflect 'theory for tendering'.

> *General theory is nomothetic. It is divorced from the contexts, logic and validations that guided its development. In contrast, middle-range theory is idiographic. The contingent contexts and the philosophocal tenets guiding the development of middle-range theory stay connected to a research effort.*

Summary of propositions

Given the theoretical argument, the propositions specify the logically deduced implications for research (Whetten, 1989, p. 492).

PROPOSITION #1.

A rationale exists for a paradigm shift in management thinking and a fresh approach to theory as it relates to tendering and project delivery in the Defence context.

PROPOSITION #2.

Because there is a fundamental difference with commercial project delivery, a Defence tender process needs to describe and explain the defence contractor's modality in terms of information management and ongoing political alignment (political appropriateness); in addition to organising resource allocation.

PROPOSITION #3.

During the life of a tender project, the DMO appears not to have an effective means of recognising and monitoring inherent disorder and modalities of behaviour that might indicate a progression towards a successful (conclusive) tender outcome or one that is progressively problematic.

PROPOSITION #4.

The focus needs to orient towards a holistic assessment of the project's socio-political complexity as a foundation from which to frame ongoing management thinking and reasoning about tendering.

PROPOSITION #5.

In a wicked, messy and complex socio-political context, connectivity and the resulting awareness (sense-making) of what we do and say, can transform our prevailing tender practices and refocus their political objectives.

Summary

The research challenge is significant, as it deals with the need for a paradigm shift and a justification for a fresh perspective.

Importantly, a fundamental proposition is that the engineering approach to project monitoring gives way to a synoptic framework for reasoning that guides a holistic perception[55] of the progressive efficacy of a tender project. In so doing, the framework offers multiple paths of reasoning that collectively engage 'theory for tendering'. This approach recognises the absence of an extant tendering theory and therefore, the value of middle-range explanatory theory as a point of departure.

While much attention is devoted to issues of disorder (complexity) and mess (puzzles), these ideas might be positive for some stakeholders. Dealing with complexity and mess, as exploitable resources, appears rational as they occur in a context of political decision-making, rather than problem solving.

A major Defence equipment tender project is but a blip in an ongoing industrial marketing campaign. While overshadowed by the presence of exotic large-scale equipment, the tender project is fundamentally a case of social interaction and information management. In a complex and messy context, every player might claim privileged information and insight. However, the power plays within government, the bureaucracy and the military, result in the contractor and its retained lobbyist, surfacing as central interlocutors.

Research Process (vignette)

Multiple methodologies and multiple paths of reasoning might afford the development of a synoptic framework engaging 'theory for tendering' that contributes to middle-range interpretive/explanatory theory that shuns closure.

Having entered the research field, the CEO DMO nominated polar opposite tender project case studies (successful and problematic) to join the research project. Field data collection, analyses and audits proceeded over a two-year period, followed by an ongoing and current conversation.

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[55] This linguistic idea is based on the work of Wittgenstein (1978) who offers an analogy of layers of transparent plastic sheets where each presents a different image, such a regional plan in which the separate layers represent topology, soil type, rainfall, prevailing winds, and so forth. This synoptic model (V. Brown, 2008) presents interdependent layers of data. The removal of any one layer changes the interpretation and meaning of every other layer, and the synoptic model in general. The synoptic model is a framework for reasoning.

The research outcome proposes a paradigm shift, from a stewardship perspective (a 'being' ontology), to linguistic patterns of communication behaviours with associated relationships and trends (a 'becoming' ontology). This use of language offers a fresh perspective on the idea of a tender and the prospect of understanding the ongoing efficacy of a tender project for high-cost politically sensitive Defence equipment.

As a point of departure, the theories proffered as contributing to 'theory for tendering' reflect (a) *coordinating* process mechanisms, (b) institutional theory focussed on the legitimacy of *collaborating* organisations, and (c) *leader complexity capability* that profiles holistically the situational awareness of the tender project team. Future research should consider additional theories and mechanisms.

At its core, this research project addresses The Helmsman Institute's finding that 'the most difficult projects that the DMO undertakes are so complex that project management methods used on other traditional projects cannot apply' (The Helmsman Institute, 2009).

This study offers a radical proposal for the use of language for situational awareness, in a tender project domain otherwise engaged with engineering models and bureaucratic structures of positional power and ideational power.

Next chapter

The next chapter introduces a literature review reflecting on a meagre domain-specific corpus and an apparent absence of a substantive theory relating to tendering. It describes a progression of logically linked arguments leading to the essence of middle-range interpretive/explanatory theory for tendering.

Chapter 2
Literature Review:
Tendering

The purpose of this chapter is to identify key literatures that in combination provide an overview of the social, economic and political context in which Defence procures major equipment through competitive tendering. Even though the corpus is thin, dominating themes emerge as matters of social complexity and disorder.

I begin by identifying the approach to be used in the review, followed by an exposure of the paucity of extant literature and in lieu, the need to engage with a variety of management perspectives – a bricolage.

It appears that the lineaments of a tender process are well covered in the management literature, while mention of the tendering domain is generally absent.

What follows is a novel synthesis of existing works.

Two chapters comprise the literature review. The first canvasses tenders or defence equipment procurement and ways of thinking about and managing the suggested complexity and disorder. The second chapter considers theoretical perspectives that might contribute to a framework for reasoning about such contextual disorder and thus middle range 'theory *for* tendering'.

The line of argument culminates with the identification of the tender enterprise, and its collaboration of stakeholders as needing to evolve mutually to a position of political appropriateness (legitimacy), in a context where politicians are the decision-makers working with a wicked problem. Price is devolved generally to negotiation particulars.

Approaching the literature review

For guidance, Easterby-Smith's 3rd edition of *Management Research* suggests that:

> The literature review ought to supersede a descriptive re-run of what has been written, and [rather,] incorporate a thread – a train of thought – that progressively builds towards the very research topic for which the review is being conducted. This includes identifying gaps in the extant literature. (Mark Easterby-Smith, Thorpe, & Jackson, 2008, p. 31)

In the 4th edition, he adds:

> ...[and] *interacting conversations in which you would like to take part* (M. Easterby-Smith et al., 2012, p. 102 emphasis added).

Besides recounting gaps in the literature mentioned by other authors, this review identifies the absence of a recognised generic tendering theory. Indeed, is there a place for theory in the pragmatics of tendering processes? If there is, would its potential conformation be in the form of 'tendering theory' or a more nuanced 'theory *of* tendering' or indeed, just a compilation of 'theory *fo*r tendering'?

A suite of scholarly perspectives offers progressively, a locus for a research program that might consider both the idea and prospect of 'theory for tendering'; theories that might find some of their foundations in a *process philosophy* as presented by Wood (2008). This is not to deny the possibilities and potentials of the other tender theory projects.

In addition to the existing theoretical vacuum, there is an apparent paucity of a tendering corpus. This suggests that other literatures including management and organisation science, systems theory, complexity theory, game theory, political science, leadership/negotiation and institutionalism, are mined for an eclectic mix of complementing ideas. Such ideas are then used to frame a discourse around the potential of 'theory for tendering'. However, each discipline of inquiry can offer different perspectives with the prospect of a messy[56] assemblage of ideas.

Wittgenstein (1978) gives consideration to this messy assembly and describes the idea of drawing on a number of existing theories as:

> ...analogous to spinning a thread; we twist fibre on fibre, use on use, and the strength of the thread does not reside in the fact that [not] one fibre runs through its whole length, but in the overlapping of many fibres. The fibres...are varied, some more commonly used than others, and there is nothing outside their continued use to prevent them from being unravelled. (Thorpe & Holt, 2008b, p. 11)

Any framed discourse is necessarily a construction involving people, which leads Whitehead (1929/1978) to reflect on the nature of human inquiry and its influence on

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[56] Messes are puzzles; rather than solving them, we resolve their complexities. Tame problems have straightforward, simple linear causal relationships that have clear beginning and end points. Messes are problems of organised complexity, clusters of interrelated or interdependent problems, or systems of problems - Ackoff (1974) 'system of organisational complexity'. Messes are resolved via systems methods rather than a reductionist approach. Messes demand a commitment to understanding that how and what we are doing here and now will affect what we will be doing in the future. An attempt to link a problem with an individual, means that the mess is mistaken for a tame problem. Blaming one individual makes things worse (Hancock, 2010, pp. 33-36).

human problems; the unique ability of humans to see things in a new light - how the world is and how it might be. Regardless of the field of inquiry, for Whitehead, this is the essence of good science. Rather than a messy, perhaps critical mess of views and methods, Thorpe & Holt suggest that different theoretical perspectives might engage selectively with a particular process according to its *sequential phase* in the [tender] project (Thorpe & Holt, 2008b, p. 3). For example, the final negotiations phase of a tender can be informed by negotiation theory.

As some tenders fail to attract a complying bid, or any bid, it can be argued that a tendering process should be understood in terms of its potential to be conclusive with contract signatures, rather than as a formally defined field of replicable procedures (Thorpe & Holt, 2008b, p. 2). Additionally, Thorpe & Holt (2008b, p. 3) suggest that:

> What defines managerial research activity is *not* the provision of definitive solutions that look to set habitual and seemingly natural limits to what we do and say, but the continuing interest in how an awareness of what we do and say can transform our practices.

For Langley, theory in this instance is likely to be a descriptive and explanatory[57] *process theory* that could indicate likely patterns of behaviour or interpret observed behaviours from within [a tender project] (Gregor, 2006; A. Langley, 1999).

Clearly, the definition of a theoretical framework in which to conduct a research program engaged with theoretical propositions about tendering is challenging. Langley's (2008) process theory and its contrasting variance theory appear to be a reasonable point of departure. As both are used in this research project, some illumination is offered:

- Process research involves an explicit and direct focus on [tendering behavioural] processes as the object of empirical investigations. Its aim is to develop an understanding of how and why phenomena evolve over time. Process research is of particular relevance to learning and implementation – phenomena that, by definition, imply action, change and are temporal.
- Mohr makes a clear distinction between what he calls 'variance theory' and 'process theory'. While variance theories provide explanations of phenomena in terms of relationships among dependent and independent variables, process theories provide explanations in terms of the *pattern of events* leading to an outcome over time (Mohr, 1982; Karl E. Weick, 1995a). [The pattern being illuminated with descriptive statistics (Schwandt, 2007, p. 66).] (emphasis added)

[57] This is likely to be a limited explanatory theory relying on multiple sources of evidence for justifying a claim about explanation (Teddlie & Tashakkori, 2009, p. 71).

- Process theory suggests a completely different, yet complementary causal logic from that used in variance research, one based on narrative sequence [of stories] and ordering rather than correlation. The variance approach tends to either ignore or freeze temporal flows into scaled variables, while the process approach takes these flows (patterns) as its principal object.
- Process research is also associated to a greater or lesser extent with a philosophical tradition and ontological perspective[58] (Robert Chia, 2003) in which the world is viewed as composed first and foremost of fluid 'processes' [an ontology of 'becoming'] in contrast to variance research, which is associated with immutable 'things' [an ontology of 'being'] (Ann Langley, 2008, p. 173).

In general, the literature is in agreement about the need for a framework before a theoretical discourse on processes like tendering can advance.

Tendering-specific literature

In order to elucidate key potential elements of a framework, this review assembles a mélange of theoretical perspectives that appear to be congruent with the various aspects of tendering practice. However, the review begins with an exposure of some extant theoretical propositions and why those ideas have been discounted or abandoned.

Extant tendering theory

In their seminal publication *Tendering theory revisited*, Runeson & Skitmore conclude that they find it difficult to support the idea of a tendering theory informed by the theory of price determination (Runeson & Skitmore, 1999, p. 285). How they reach their conclusion that tendering theory should be released from the paradigm of microeconomic theory is important, as it contributes to the architecture of both this literature review and the research project.

Runeson & Skitmore (1999, p. 287) comment on:

- price theory, which requires market conditions to be stable, predicts that if every competitor applies the same theory then they should, all else being equal, deliver the same tender price
- von Neumann and Morgenstern (2007) who suggest that theoretically, tendering theory is based on Game Theory; a purported theory of individualism "extended" to include social institutions and society at large (Hollis, 2002, pp.

[58] Drawing on the pre-Socratic cosmology of Heraclitus, whose basic principle was the 'everything flows', the process approach puts processes (becoming) before distinct things of substances, the (being) cosmology of Parmenides.

115-141). At its core, the Prisoner's Dilemma (Zupan, 2010, p. 267) illustrates that there are settings in which the pursuit of self-interest leads to longer-term suboptimal outcomes

- the foundational principles of Game Theory in which they limit the argument by framing their analysis around a 'winner-takes-all' (a zero-sum game) game-theoretic approach such as the Prisoner's Dilemma. At its core, the Prisoner's Dilemma illustrates that there are settings in which the pursuit of self-interest leads to longer-term suboptimal outcomes. Underscoring the Prisoner's Dilemma game is that each competitor knows of the options and outcomes available to all competitors. Hence, there is no need to communicate or ask questions of a competitor (Runeson & Skitmore, 1999, p. 288). In reality, tenderers work with incomplete information, both in terms of what their competitors are planning, and ambiguities and omissions in the specifications (Ergas & Menezes, 2004).
- a tendering theory that cannot support the idea of a game theoretic *equilibrium* because equilibrium can only result from repeated tender games and after each round, all suppliers are given each other's prices. After just a few rounds all prices would be the same.
- a tendering theory as seen through a normative lens of *what ought to be done* or the industry's institutional expectations of *what should be done*; a social science
- auctions that provide an explicit model of how prices adjust to demand and supply
  In contrast, a price determination theory suggests a tender as being a combination of *true cost* (in contrast to 'what the market can bear') and a *strategy* for winning.
- the 'bevy' of authors keen to point out that bid prices do vary because of mistakes in assembling the bid; the game of the greater fool or the winner's curse[59]
  They concede that the real challenge for the industry is *uncertainty*; a lack of predictability including market conditions and stakeholder interdependence (Tavistock Institute, 1966) rather than the game of chance as purported by a latent tendering theory (Runeson & Skitmore, 1999, p. 292).

[59] **Winner's Curse**: This can occur when bidding on an ill-defined or poorly understood specification. All bids are likely to be unsatisfactory and the selected bid enjoys 'winner's curse'. That is, a near guarantee of financial loss due to strategic errors.

- the central problem (omission) with purported models of tendering theory, that of no allowance for *continuity*; the idea that a submitted bid is but one instance in a long-term tender campaign between a buyer and seller that spans multiple tendering opportunities.
  Marketing or government relations activities are ongoing and they seek to shape ideas about, inter alia, the economic needs of politicly sensitive electorates and the maintenance of a threshold industry capacity and capability into the future.
- the fundamental failure of a price-determining tender theory and its epistemic logic of *the tender as the unit of analysis*
  Whereas issues of the prevailing market, contextual (political) ambiguity, and possible tender strategies suggest that the *unit of analysis should be the firm* or the tendering organisation within a firm (Runeson & Skitmore, 1999, p. 292).
- further work on tendering should concentrate on the 'development of a suitable theoretical framework' as they could not cite a recognised tendering theory incorporating inter alia, market conditions (Runeson & Skitmore, 1999, p. 294)

> *Runeson & Skitmore amplify the need for a theoretical framework within which to develop theory in the tendering domain. They sought insights from price theory, game theory, and auction theory but found schisms with reality that made theory development untenable.*

A significant and perhaps vital contribution comes from their argument that the unit of analysis is not the tender per se but the (microeconomic) firm undertaking the tender; and more particularly, the firm undertaking a tender instance that punctuates an ongoing tender campaign offering multiple tender opportunities[60]. Here, the authors introduce the idea of a continuity of invitations to tender as a core theme in a theoretical discussion. Of equal significance is their observation that the real challenge for an industry undertaking tenders is that of interdependent stakeholders and consequential uncertainty, rather than the game of chance as might be suggested by a naive tendering theory.

Runeson & Skitmore have moved the theoretical lens on tendering, not necessarily towards a theory of tendering but rather, towards potentially 'theory *for* tendering' (Krippendorff, 2006); design theory for approaching the idea of high-cost politicly-sensitive defence equipment tenders and for prospecting the disordered landscape of an ongoing tender campaign in order to find and shape meaning.

[60] Recent thinking suggests the unit of analysis be the relationship (Erikson, Sep 2013)

As a segue into the next phase of this literature review, Ergas & Menezes (2004) are selected as they concur with (but do not cite) Runeson's & Skitmore's (building/construction industry) propositions that:

- in tender process research, the unit of analysis is the *firm* undertaking tendering activities
- the tendering context is *uncertain*

Defence procurement-specific literature

Ergas & Menezes address contextual uncertainty and posit that to understand it within the Defence equipment procurement domain requires a lens over:

- politicised tender strategies,
- political manipulation of tender processes
- a *mutual simultaneous shaping of meaning-making* between politicians, bureaucrats, tendering contractors, pundits and other key stakeholders.

'Surreptitiously', they have introduced the institutional idea of a *collaboration of stakeholders* (Bass & Bass, 2008; Dervin & Naumer, 2010; Husserl, 1931/1962; C. M. Lawson, 2008, p. 55).

Ergas & Menezes add depth to the foundational ideas offered by Runeson & Skitmore, noting that Runeson & Skitmore use the building/construction industry domain while Ergas & Menezes use the defence industry domain. Together, they reinforce the idea that any theoretical discussion related to tendering might be domain-specific but further research, beyond the current inquiry, is required to evaluate this possibility.

Ergas & Menezes received a funding contribution from the Australian Department of Defence to undertake a critical inquiry into the political economy[61] of major defence equipment acquisitions.[62] Several variants of their paper are available (Ergas, 2003; Ergas & Menezes, 2004). In their 2004 paper's abstract, Ergas & Menezes list their key conclusions.

They are of the opinion that the complex weapons acquisition process - which includes the conveying equipment (the subjects of this research project) such as a plane or a ship,

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[61] Political economy is a social science dealing with the relation between political and economic policies and their influence on social institutions.

[62] Not all defence equipment is sourced through competitive tenders. The highest strategic level of Australian defence equipment is sole-sourced from the USA (Kelton, 2004). Second and subsequent strategic levels of equipment are sourced from other countries but integrated technologies are generally sourced from the USA. The challenge for Australian Defence policy is who and where should such equipment be serviced (sustained) given the intellectual property interests of the supplier.

otherwise known as a 'platform' - is afflicted by all of the pathologies that prevent efficient outcomes:

- information asymmetry
- conflicting goals
- non-commensurable objectives
- lack of credible commitments
- within-government incentive problems
- a high degree of technical complexity and [politicly-induced] contextual uncertainty.

From their perspective, the acquisition of complex weapons systems is in a category of its own, in terms of the challenges it imposes given the nature and extent of uncertainties; that is, challenges not usually found in private sector commercial projects (The Helmsman Institute, 2009).

The authors introduce their reasoning by cataloguing key characteristics of the realpolitik of defence equipment tenders:

- The government is the only buyer - a monopsonist[63].
- There are several within-government incentive issues where disparate departments might have different frames of reference, such as a finance department seeking to limit expenditures and a military command wanting the best equipment for their soldiers' protection.
- The oligopolistic market structure of the defence industry comprises a handful of generally transnational suppliers with varying degrees of sovereign ownership. Mergers, acquisitions and de-mergers occur periodically.
- The cost to each supplier for participating in one tender competition can vary between about A$10M to about A$50M. The fact that the winning tenderer might be the one that is most optimistic about costs, timeliness and quality adds a dimension of 'winner's curse' to the outcomes of the artificial competition.
- The complexity of technical systems integration gives rise to 'internal uncertainty'. 'External (contextual) uncertainty' arises within the context of very long lead times (often 10-15 years) and rapid changes in demand resulting from geopolitical and parochial political exigencies.

[63] **Monopsonist**: A sole purchaser in the market.

Ergas & Menezes expand on issues giving rise to uncertainty in the defence equipment procurement domain:

- Most weapons systems are 'experience' rather than 'search' goods (commodities). With experience goods, their attributes only become fully known in use, which could be five, ten or twenty years hence.
- Governments are not unitary actors. Rather, the governmental process involves a range of stakeholders, from the armed services through to finance and treasury departments, the parliament and foreign governments, whose views and interests will differ, and whose relative power might vary substantially over time.
- The bureaucracy-military relationship, in which the tendering process is embedded, involves all the complexities of principal-agent[64] interaction, with extensive game playing, whose outcomes are often difficult to predict, as circumstances change.
- *Unlike a private firm, there is no straightforward objective measure of the bureaucracy's performance in managing a tender*.[65]
- Sellers are constantly exposed to the monopsonistic power of the government buyer acting opportunistically.

Therefore, given that information gaps are inherent in the very nature of defence equipment tender specifications, the ultimate contract between the buyer and the seller is necessarily incomplete as further and better particulars are provided after the contract is signed. In practice, contract instability is accentuated by:

- the inability of the buyer to enter into fully credible commitments with respect to its future conduct because of an incomplete scope of work
- the buyer's difficulties in verifying contract performance by the seller because of ongoing changes to the scope of work

Ergas & Menezes describe the modalities of behaviour:

- Bureaucrats might under estimate costs in order to secure the project within the government's budget process.

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[64] In political science and economics, the problem of motivating a party to act on behalf of another is known as 'the principal-agent problem'. The principal-agent problem arises when a principal compensates an agent for performing certain acts that are useful to the principal and costly to the agent, and where there are elements of the performance that are costly to observe. This is the case to some extent for all contracts that are written in a world of information asymmetry, uncertainty and risk. Here, principals do not know enough about whether (or to what extent) a contract has been satisfied. (Downloaded on 9 October 2009 from: http://en.wikipedia.org/wiki/Principal-agent_problem)

[65] An objective for this research project.

- Suppliers might under-price tenders based on their knowledge that many of the undefined items in the specification will later be defined and perhaps redefined after contract agreement. This affords the supplier an opportunity for super-normal profits and consequential cost overruns for the project.

Ergas & Menezes explain how this politicly-constructed artificial market ensures an absence of real competition between supply oligarchs who shun public scrutiny (Australian Parliament Senate Foreign Affairs Defence and Trade References Committee, December 2011). Midgley (2000) reasons that, 'It is difficult to predict the entropy of a constructed market or the effort required to gain and preserve its stability, but significant government intervention is required'. A long-term tendering round robin of convenience might be conjectured (White, 16 June 2011).

While Runeson & Skitmore identify contextual uncertainty, Ergas & Menezes operationalise uncertainty by focussing on:

- *trust* as the 'reserve currency' in defence equipment procurement contracts
- the reframing of the tender context to a culture in which all stakeholders seek to actively shape meaning-making and understanding in an otherwise uncertain context in which symbolism will fill gaps in knowledge
- the objective to cultivate a social context for the procurement relationships and to minimise distortions in meaning-making and understanding; an alignment of political possibilities

In so doing, Ergas & Menezes suggest a subtle shift in the unit of analysis from the firm to the *organisation* managing the tender project. Agents within the organisation might represent a subordinate unit of analysis.

> *By recognising the active shaping of ideas and meaning-making, Ergas & Menezes have identified the idea of contextual uncertainty as a productive resource in the service of meaning-making, and the political alignment of stakeholders. That is, contextual uncertainty prompts human communication behaviours, actual or symbolic, in the quest for stakeholder alignment; in particular, an alignment with the decision-making politicians.*

Contextual uncertainty will never have the same constitution. This prompts Ergas & Menezes to offer the following advice to government:

> The [bureaucratic] 'one-size-fits-all' approach to procuring complex weapons systems are designed to fail and, instead, the 'right' hybrid contract has to be designed on a case-by-case basis [a tender-by-tender basis].

That is, the strategic design of a tender should not follow a prescription in the Defence Procurement Manual (DMO, 1 July 2009) but should be designed specifically for each tender instance; a setting of the *initial conditions* and a reference to organisation complexity theory (Snowden & Boone, November 2007). However, the authors do not discuss the strategic political design of a tender or the operational design of the tender program.

The work of Ergas & Menezes is notable for exposing the realpolitik of defence equipment tendering. Other authors such as Bennett (1990), Cowey, D. R. O. and T. Fogarty (1980), and Yule, P. and D. Woolner (2008) offer complementary insights and intriguingly, they expose independently, a common theme. That is, in the presence of technical and political uncertainty, the project can degenerate into organisational dysfunction or alternatively, progress to completion through the dogged determination of just one committed agent (often an engineer) or a very small group of like-minded people whose employment tenure becomes problematic.

Tender 'success'[66], in the form of contract signatures, can come at significant personal cost to the bid managers of both the buyer and seller (Bennett, 1990). Importantly, Bennett was the senior government bureaucrat responsible for all defence equipment tenders and procurement. His monograph has a timeless quality as it reflects the institutionalisation of an otherwise discontinuous process undertaken by periodically assigned 'amateur managers' as indicated in his book's title. Yule, P. and D. Woolner (2008) use the word 'spies' in their title. Tendering can be a dysfunctional and murky world (Hughes, 2004).

In considering the respective contributions of Runeson & Skitmore, and Ergas & Menezes to the evolution of a potential framework for the development of theory within a tendering domain, the following issues appear salient:

- Both recognise the idea of stakeholder interdependence-based uncertainty.
- Runeson & Skitmore identify the firm as the unit of analysis for inquiry into tendering.
- Ergas & Menezes suggest that this be moderated to an organisation within the firm as the unit of analysis.
- Runeson & Skitmore recognise the idea of continuity in the form of discrete tender opportunities punctuating an ongoing tender-campaign.

[66] a conclusive tender project.

- Runeson & Skitmore suggest that there is a need for a theoretical framework to guide the development of theory with respect to tendering.
- Ergas & Menezes, conclude that there is no available method for objectively measuring the performance of organisations managing bid production.
- Ergas & Menezes introduce the reality of political manipulation of the tender process, the uncertainties that this produces and the resulting need to cultivate a social context for the tender process in order to shape meaning-making, and to progress to an alignment of understanding and values amongst the collaboration of stakeholders (including politicians).
    - As such, they see the uncertainty of disorder as a resource; an idea to prompt and empower stakeholders to participate in the shaping of meaning-making and understanding, not the least being the meaning-making and understanding of the supplier-selecting politicians.

There appears to be a clear nexus between political interventions and contextual uncertainty. This political locus is, according to Radford (July 2004), where much of the tendering uncertainty is generated. Radford delves into the realpolitik of tendering, the realities of the so called 'political factors' where politicians (as stakeholders) juggle a 'wicked problem' context comprised of competing political certitudes. While much has been written about the conceptual idea of wicked problems (Australian Public Service Commission, 2007; V. Brown, 2010a; Finegan, 2010; Hancock, 2010; Horn & Weber, 2007; Hulme, 2009b; Rayner, 2006; Ritchey; Rittel & Webber, 1984; Whelton & Ballard, 2002), Ford offers a succinct explanation:

> ...the challenges of managing situations characterised by resolutely nonlinear dynamics, complicated positive and negative feedback loops, and a mind-bogglingly intricate interconnection of a myriad of variables. No one department can be responsible; it is a whole of government responsibility (Ford, 2011).

Before Rittel and Webber (1984) characterised the term 'wicked problem', Ackoff described it as:

> A complex issue which is not well formulated or defined. You don't know for sure what the problem is. All different aspects must be treated together and dealt with as a whole (Ackoff, 1974).

Radford (July 2004) identifies two themes within defence equipment tenders that contribute to the wicked problem:

- industrial-economic
- technological-diplomatic

Industrial-economic interests represent those government activities seeking to leverage proposed defence equipment purchases by incorporating, in the political decision-making machinations (not necessarily described in the tender documents), considerations of macroeconomic effects and election outcomes. These might include potential employment growth in economically depressed regions and industrial capacity for commercial or security reasons.

Technological-diplomatic considerations take account of the perceived current and future needs of military interoperability both within and between nation states, plus the issue of state-controlled access to the required technologies both now and into the future.

Radford highlights three issues:

- the depth of political intervention in the design and engineering of defence equipment and the consequential future sustainment difficulties over the subsequent 30-50 years resulting from these bespoke modifications
- the desire of Australian State Governments to have the equipment assembly and sustainment operations in their jurisdiction and the premiums they are prepared to pay a supplier to advance this mission
  It becomes an auction between State Governments.
- Perhaps the most important issue, is that Defence as a contracting organisation, needs to preserve its bargaining strength through the course of the tender process. With pervasive politicly-induced uncertainty, premature commitments to any stakeholder can become problematic, particularly when political priorities change.

While the 'industrial-economic' factors tend to be a political compromise of wider economic, strategic and political interests, the issues of access to technology are resolved through a process of diplomatic bargaining.

The distinction between the platform (example: ship or aircraft) and the weapons systems carried by that platform is critical because of the difference in procurement methods. The procurement of the platform (defence equipment tendered by a supplier) will raise debates over cost and the desire or otherwise to have a local production and sustainment capacity. Essentially, this is a nation-state/supplier bargaining process.

In contrast, the weapons systems technology (such as a missile) engages with a diplomatic trade-off between the nation state's perceived defence capability needs and the supply constraints imposed by the technology-owning states. This is the realm of nation-state to nation-state negotiations, which are ongoing and at its extreme, can

result in delays or bans on exports, even after money has been exchanged. This is but one element of the ongoing tender-campaign.

Radford offers the following insights:

- All tender preferences have to be translated into political choices at the highest level.
- Diplomatic influences might override all other issues.
- Such diplomatic arrangements might shield the tendering process from the level of audit and scrutiny constitutionally required of the Australian Government.

The problem for the Australian Government is to understand where the balance of advantage or liability might be at a point in time, a problem compounded by its Defence bureaucracy, which, in the words of the Australian Senate inquiry is, "...choked with unsurmountable layers of administration and bureaucracy" (Australian Parliament Senate Foreign Affairs Defence and Trade References Committee, December 2011, p. 89). It would appear that there might never be one right answer - a wicked problem.

> *Accepting the organisation as the unit of analysis, how might agents of the organisation perceive and understand the idea of this politicly-manipulated disorder (Ergas & Menezes, 2004) and how might the disordered landscape be prospected for its 'resources'?*

Ambiguity, complexity and disorder

The works of Thiétart & Forgues (1995), Marion (1999), (Snowden & Boone, November 2007), Burnes (2008), Hulme (2009b), and Ford (2011) will combine to progress an exposure of the dynamic and complex nature of disorder surrounding a tender project and how the idea of disorder can become a linguistic and rhetorical resource for understanding the temporal efficacy of a tendering process.

> *Herein lies a transition from a theoretical frame engaged with price determination theory (Runeson & Skitmore, 1999), to a frame engaged with language (Monk, 2005; Wittgenstein, 1978).*

While Hulme argues from a perspective of understanding the rhetoric of 'climate change' his disorder logic can be appropriated by any linguistic environment. Hulme suggests that humanity has always existed in a state of uncertainty, that disorder is the natural way of things and that order might be desired for security and efficiency reasons but it doesn't come naturally. (Perhaps the Ten Commandments are a case in point.)

Human energy is required to ameliorate or balance, but never eliminate, the naturally occurring disorder. Certainty is the anomalous condition for humanity, not uncertainty (Hulme, 2009b, p. 104); it takes effort to keep a bureaucracy consistent.

For Hulme, disorder, whether natural or man-made, is central to our understanding of both science and society. That is, disorder is both a cultural idea subject to ideological appropriations and a measurable physical phenomenon; it exists in the human mind as much as it exists in observable states (Hulme, 2009b, p. 28). As it exists in the human mind, it can, according to Hulme, be observed in the different culturally-framed (memetic[67]) stories and explanations, and is amenable to rhetorically analysis. Critically, *ideas can be used for understanding, not for problem solving* (Hulme, 2009b, p. 33, emphasis added).

Uncertainty as a state of mind, arising in part from anthropogenic disorder, appears to be the same notion of uncertainty identified by Runeson & Skitmore, Ergas & Menezes, and Radford; the disorder introduced potentially from political interference with the tender design and tender processes (Tebbutt, 6 December 2011), the interdependence of stakeholders (Tavistock Institute, 1966), incomplete contracts (Ergas & Menezes, 2004) and diplomatic protocols (Radford, July 2004).

What then might be the relationships between contextual disorder and the tender managing organisation? The following exposure draws on concepts offered by social complexity theory. In particular, Snowden and Boone (November 2007) offer a typology of organisation domains dealing with complexity:

- **Order**
    - *Simple organisation domain*: organisations are amenable to command and control leadership. Everything is known (known knowns) with certainty. Best practice is defined by past practice. A leader needs to sense, categorise, and respond.
    - *Complicated organisation domain*: organisations comprised of professionals where the relation between cause and effect might take time to analyse options, particularly as value systems, such as the value of a soldier's life, might be under consideration. Unknowns are known in terms of risks and remedies; policy options can be researched. Professional standards reflect good practice. A leader needs to sense, analyse, and respond.

[67] Cultural customs passed on through time.

- **Unorder**
  - *Complex organisation domain*: the patterns of behaviour within an organisation emerge and reveal themselves and there are no right answers. This is the realm of unknown unknowns (V. Brown, 2010a, p. 69). Any desired future social/political effect cannot be predetermined, but might be ascertained retrospectively. A leader needs to *probe*, sense and respond.
  - *Chaotic organisation domain*: there is no relation between cause and effect and no observable behavioural patterns in organisations, only turbulence. Initial conditions *must* be set (such as the politicians initiating or changing the tender strategy). A leader needs to *act first* and then sense where stability is present and absent and then reinforce politicly the nascent stability (Snowden & Boone, November 2007, pp. 74-75). Hence a suggested need for the ongoing involvement of politicians in a tender project.

- **Disorder**
  - For Snowden & Boone, disorder is quite different to the Hulme definition. For Snowden & Boone, disorder is an organisational state of not being able to comprehend the mechanisms driving personal actions; how political advice might have been confected. Under such circumstances responsible decision-makers tend to withdraw to their own (possibly memetic) comfort zone (Swidler, 2012, p. 310).
    - Within this research project, the following case-based extract from an informant's story relates directly to the Australian Prime Minister's selection of a supplier. It was offered by a Defence Advisor to defence minister Robert Hill in the Howard Coalition Government:

> In all of this, I had an important lesson. I remember briefing a Cabinet Secretary about a key decision point on one of these matters the day before it went up to Committee, and I will never forget him saying, on the back of me explaining why we should tick the box on one recommendation and not another, that's all very good and well [personal name], but *who do we pick up the phone to when it all goes wrong*? If this goes sour, the best thing we have is our ambassador to a country with whom we had a fairly weak relationship, versus almost a direct line into the administrations of foreign countries where the other companies were based or indeed, are sovereign owned.

Complex organisations

Snowden & Boone (November 2007, pp. 74-75) suggest the following leader initiatives:

- focus on interactive communication
- impose limits on behaviours and allow self-regulating behaviours within this envelope
- facilitate 'attractors'; the phenomena that arise when ideas resonate with people and these ideas take on their own power by attracting followers to the proponents
- manage initial conditions and monitor emergent behaviours
  Emergent 'unsettling' behaviours need to be contained and emergent 'settling' behaviours reinforced. The meaning, understanding and reaction to settling and unsettling behaviours are not fixed as they depend on an individual's values frame.

As such, Snowden & Boone are describing an organisation in the complex domain being buffeted by inclinations of order and inclinations of chaos. Importantly, the organisation domains identified by Snowden & Boone do not exist in isolation. Any one organisation can display a temporal regime of behaviours with varying inclinations to all domains.

The language of complexity theories and the apparent lack of standard definitions, such as Hulme and Snowden & Boone's different understandings of 'disorder', are addressed by Burnes (2008, p. 47); noting that the term 'complexity theories' serves as an umbrella label for a number of theories, ideas and social research programmes that are derived from scientific disciplines. Burns offers the following established linguistics:

- *Chaos and order*: From the complexity perspective, chaos describes a complex, unpredictable and *orderly disorder* in which patterns of behaviour unfold in irregular but similar forms; example snowflakes with 6 sides.
- *Edge of Chaos*: This is the condition where systems are constantly poised at the edge between order and chaos. It is argued that creativity, growth and useful self-organisation are at their optimal when a complex system operates at the edge of chaos.
    - For organisations, as for natural systems, the key to survival is to develop rules which are capable of keeping an organisation operating 'on the edge of chaos'. If organisations are too stable (too bureaucratised),

nothing changes and the system dies; if too chaotic, the system will be overwhelmed by change. In both situations, an organisation can only survive and prosper if a new, more appropriate set of order-generating rules is established.

- *Order-generating Rules*: Systems are maintained at the edge of chaos through the operation of a limited number of simple order-generating rules, which permit limited chaos providing relative order (orderly disorder).
- *Organisations*: Organisations are dynamic non-linear systems where the outcomes of behaviours are unpredictable but, like turbulence in gases and liquids, are governed by a set of simple order-generating rules.
- *The Idea of Organisation Complexity*: Complexity, of itself, does not offer organisations a concrete picture of 'what is' or 'what will be', but instead offers a way of thinking of 'what might be'. In achieving effective change (needed by managers to bring their organisation to the edge of chaos), self-actioned order-generating rules have the potential to overcome the limitations of rational, linear, top-down, strategy-driven approaches to change (Burnes, 2005).

Snowden and Boone, along with Marion (1999) and Ford (2011) add the nuance of human unpredictability and intellect (Snowden & Boone, November 2007, p. 71):

- Humans have multiple identities and can fluidly switch between them without conscious thought.
- Humans make decision based on past patterns of success or failure, rather than on logical, definable rules.
- In certain circumstances, humans can purposefully change the system in which they operate, to equilibrium states (a weighted balance of settling and unsettling communication behaviours) in order to create predictable outcomes. That is, unsettling behaviours can be 'turned on' by a leader's decree; a potent force in both the bureaucracy and commerce.

While complexity theories originated with interdependent physical and logical systems, Snowden & Boone conclude that in man-made complex organisational contexts, a deep understanding of *context* is vital (Snowden & Boone, November 2007, p. 76). The tendering organisation, the collaborations of stakeholders, the economic, diplomatic and prevailing political regimes are symbiotic.

Hulme (2009b, p. 26) offers the pithy observation that: *Politics has a natural propensity to be disordered.*

But a pervasive perception of disorder brings with it a capacity for its appropriation by a wide range of ideological projects. These enable the value propositions engaging with a tender campaign or a tender instance to be *framed* and moulded in many different ways (Hulme, 2009b, p. xxvii).

In practice, value frames select and emphasise certain facets of an issue and must therefore de-select and de-emphasise others. When every stakeholder has their own and potentially changing value-frame encapsulating their changing ideologies, and norms such as risk preferences or *audience preferences*, the result is ambiguity and consequential cognitive uncertainty. That is, *value-framing is a precursor to the contextually disordered human behaviour* arising from ambiguity in meaning-making and uncertainty in understanding (Hulme, 2009b, p. 227). Thorpe & Holt concur that ambiguity is part of meaning: 'It invites curiosity' (2008b, p. 11).

Language and disorder

Hulme then takes what he believes to be a small step in logic, but for this research project, it is a step-wise jump in the evolution of a potential framework for encapsulating 'theory for tendering'. He draws on the nexus between cultural value frames and "linguistic repertoires". (These are the organisation-specific linguistics that greets a stranger entering into a new socio-cultural situation.) A repertoire might include a distinctive vocabulary, a set of stylistic features, certain metaphors, idioms or images (Hulme, 2009b, p. 230).

Rather than trying to 'solve' a wicked problem, Hulme returns to his thesis that disorder is not a problem but rather an imaginative *idea* to be mobilised and 'mined' using language (Hulme, 2009b, p. 334); Ergas & Menezes would no doubt agree. The immediate question arises as to what 'minerals' are in this 'mine' and what are the methods of 'extraction and processing'.

Hulme considers that the metaphorical minerals are the stories and narratives about the prevailing disorder. That is, how the idea of anthropogenic disorder serves our human needs through storytelling expressing basic human instincts. Critically, these stories are about the changing manifestations of disorder and the changing ways in which stakeholders *approach the idea* and then *prospect* the disordered landscape in order to construct their locus of meaning-making (Hulme, 2009b, p. 112).

Hulme then addresses the 'methods of mineral extraction and processing'. He introduces the term 'myth' in the very specific anthropological and non-pejorative sense of revealing meanings and assumed truths. Rooted in our human instincts are many enduring myths; the more common ones being nostalgia, fear, pride/hubris, and justice

(Hulme, 2009b, p. 340). In addition to the enduring myths are the man-made (anthropogenic) myths, sometimes presenting as urban myths and sometimes as 'in-words' or demeanours unique to an organisation, project, tender and so forth.

> *Myths in this non-pejorative sense become powerful shared narratives (structured stories) of human experience, which might bind together otherwise quite different cultural perspectives and people. While complexity theory has its roots in the interdependence of physical and logical systems, in a social context, complexity becomes a carrier of socially-constructed ideology.*

The myths within the linguistic repertoire can meld social and cultural value frames as a response to the ambiguities of a disordered context. Humans *can* do this; systems cannot. Burnes (2005) appears not to extend his natural science based thesis of organisational complexity to this end. Locked in a variance philosophy (Ann Langley, 2008, p. 173), he concludes that, "Complexity-based prescriptions for managing and changing organisations are not, as yet, based on any hard evidence that they actually work."

The role of organisational myths is influential in the work of Alvesson (1993). He proposes that through rhetoric, knowledge is more a case of institutionalised myth and a surrogate for rationality (replacing knowledge gaps), than a technical (rational) solution to organisational problems; the focus of Burnes' attention. As commentators, organisational members actively construct perceptions (myths) of reputation, prestige, and expertise in a discipline in order to make sense of knowledge gaps (Dervin, 2003b, p. 63) and then to move on physically or cognitively across the gap.

To be effective, these constructed knowledge gap-filling myths become institutionalised into knowledge in their own right within and across organisational boundaries (S. E. Green & Li, 2011, p. 1665).

> *Alvesson points to the central role of rhetoric in institutional myths, organisations and institutional sustainment. He suggests that rhetoric is the core of organising* (Alvesson & Kärreman, 2000).

Myths and metaphor

With each enduring myth comes a metaphor to emphasise the evocative and constructed nature of these storylines. In the Western tradition: Nostalgia is described metaphorically as 'Lamenting Eden'; Fear as 'Presaging Apocalypse'; Pride/Hubris as 'Constructing Babel'; Justice as 'Celebrating Jubilee'. Within the Australian

Department of Defence equipment procurement organisation (DMO), a linguistic repertoire sampler of metaphors comprises: ‘Beauty Contest’; Winner’s Curse’; ‘Buyer’s Lament’; ‘The Snake’; ‘The Scorpion’; ‘Little Hitler’, and ‘Iron Colonel’. Such metaphorical characterisations are denotive artefacts; tokens of ideal types (S. E. Green & Li, 2011, p. 6667) (Some sixty-five ideal type metaphors are identified in this research project.)

Following this theme, Cornelissen (2008, p. 128) suggests that metaphors provide a cognitively fundamental way of structuring our understanding of organisations. Additionally, metaphors are cognitively fundamental in their own right and most if not all of our knowledge and understanding of management and organisations, theoretically and practically, is constituted through metaphors.

And Weick concurs:

> Management and organisation researchers need to recognise the pervasive role of metaphor in theory construction, and to use the logic of metaphor in theorising and research in a much more deliberate and informed way. This will provide the researcher with vocabularies and images to represent and express managerial and organisational phenomena that are often complex and abstract (Karl E. Weick, 1989).

Using Hulme’s analogy, the disordered ‘landscape’ (the tendering context) can be ‘mined’ for metaphoric myths that are identified in the storylines of organisational actors. It might be possible, as a research exercise, to identify instances of nostalgia, fear, and so forth; but from whose value perspective? Also, this would deny the human creativity of metaphor-making as a means of understanding and sharing ideas about the disordered landscape and its knowledge gaps.

Hulme argues that it is the stories and narratives behind the idea of disorder and not complexity per se, that has become the *new locus of the social and cultural entanglements*; the cognitive states of uncertainty expressed by Runeson & Skitmore and Ergas & Menezes. This locus requires an understanding of the ways in which we talk about disorder, the variety of myths we construct about disorder and through these catalysts and their transformations, the temporal meanings of disorder might be revealed for a given situation.

> *The telling of myth-laden stories and narratives reconnects individuals with social complexity’s disorder. In this way, the meaning of the temporal changes in complexity can be found within the changing storylines, rather than in attempts to measure complexity* (The Helmsman Institute, 2009) *with its requirement to provide value-neutral explanations* (Burnes, 2008; Hulme, 2009b, p. 355).

Perhaps as a concluding salvo, Hulme suggests that ‘solving’ disorder is akin to solving the idea of human rights or liberal democracy. It is not about stopping disorder but rather, it is about recognising disorder as a resource that generates stories, and narratives that reflect the deep emotions of stakeholders as they navigate contemporaneously through a wicked context. These stories and narratives of disorder might reveal the matrix of power relationships, cultural discourses, competing values and sense of identity and purpose, all couched in the tender-specific myths and their vernacular metaphors (Hulme, 2009b, pp. 361-364).

Summary

The objective of this part of the literature review is to locate theoretical lineaments for a potential framework that offers ways of reasoning about tendering and its context. An existing theoretical paradigm located within price determining theory appears to be dormant or abandoned.

The Defence equipment-specific literature suggests that high-cost politicly-sensitive tenders occur in an ambiguous context where complexity is generated mostly by political factors as politicians and their supporting bureaucrats and advisors confront a wicked problem with diplomatic overtones. In such circumstances, ‘trust’ becomes the reserve currency.

Multiple authors concur that the idea of contextual uncertainty (disorder) should be perceived as a resource in the service of meaning-making and political alignment.

This resource is characterised as a linguistic environment in which the temporal efficacy of a tender project can be understood. A tender represents a complex social environment with gaps in information and human cognitive limitations. This is the realm of anthropogenic myths deployed as gap-bridging symbols, and the source of these myths is in the stories about the tendering process, organisation and the collaboration of stakeholders.

The next chapter considers theoretical perspectives that might contribute to this framework for reasoning and thus, encapsulates ‘theory for tendering’.

Chapter 3
Literature Review:
Prospecting for Theory

The significant idea emanating from the previous chapter is that the efficacy of a tendering process might reside in the stories and narratives provided by the participating stakeholders. These constructed myth-laden stories reflect the ways that individuals cope with disorder as they deal with each other's political and material pursuits ('vested interests').

Against this background, this chapter identifies complementing themes that might contribute to a framework of reasoning: a holistic framework that engages 'theory for tendering'.

In the context of society as an open system, issues of stability and instability are important in a discussion overshadowed by matters of socio-political disorder. From this point of departure, the chapter traces these complementing themes – ways of reasoning – culminating with holistic perceptions of institutional and organisational legitimacy.

Perceptions are important as politicians make the final decision regarding the winning contractor. The contractor's political alignment needs to appear satisfactory and superior. How an organisation might 'manoeuvre' towards this objective is treated theoretically in this chapter.

Multiple theories and ideas contribute to an ever-enlarging framework for reasoning: 'theory for tendering'. Such a framework is essential for middle-range explanatory theory.

With the contextual disorder described in the previous chapter and illuminated in Chapter 1 and Annexure A, comes overwhelming mess and complexity. There is no fixed view or doctrine, but the insights of a number of scholars provide a robust foundation for approaching the manifestations of disorder, and matters of organisational stability and instability so vital for contextual survival. These are ideas about a socially constructed reality, not reality itself.

Stability and instability

Snowden & Boone (November 2007, pp. 74-75) emphasise the need for the interactive communication of ideas. For Hulme (2009b, p. 245), the communication of ideas becomes a mechanism for ordering the anthropogenic disorder: *a simple order-generating rule*. Snowden & Boone consider the disposition of these order-generating rules and suggest that there should be a leader-imposed limit to communication behaviours but within these limits, allow self-regulating behaviours (Snowden & Boone, November 2007) as storylines that reflect a mix of settling and unsettling communication behaviours.

Overall, Hulme considers that organisation stability appears to be valued as a public good in the case of a government agency, and for holders of equities in companies. He posits that settling communications are stronger than the unsettling communications (Hulme, 2009b, p. 245) but this too might be a value judgement.[68] Alvesson (1993) also consider this duality.

> The difference is between *credible* stories about the world, that serve to obscure uncertainty, counter reflection, and provide reassurance and comfort to clients versus *credible* stories about the world that highlight ambiguity and generate uncertainty (S. E. Green & Li, 2011, p. 1665).

This is a powerful idea as it suggests that human agency is active in both missions: settling and unsettling. These scholars share the idea that the communication forces of ordering and disordering are *concurrent*. Green and Li (2011, p. 1668) propose that forces of 'unconscious material motion', as found in Snowden and Boone's (November 2007) simple (ordered & bureaucratic) domain, and 'symbolic action', as found in Snowden and Boone's complex (disordered and myth projecting) domain, reciprocate like a see-saw. Thiétart & Forgues (1995) have a bet each way.

Thiétart & Forgues (1995, p. 22) argue that the cause of instability (perturbations) lies in forces *outside* the organisation and that organisations can insulate themselves from the environment by controlling the external resources it provides. (This research project identifies unsettling forces both inside and outside of the organisation but concurs with the isolation theme and the vector of external forces.)

> Thiétart & Forgues add *that it is this [external stakeholder] environment that* ***acts in selecting the organisation*** *best fitted [for tender selection by the politicians]*.
> Indeed, this is a key proposition of this research project, that of legitimacy

[68] From the data analyses, this research concurs generally with Hulme's contention.

> being **conferred** by stakeholders on a tendering organisation, be it a buying or a selling organisation.[69]

In contrast to Burnes (2008), Thiétart & Forgues conclude that while chaos theory in the natural sciences is probably difficult to apply to such management conditions, 'the qualitative properties of chaos theory have an explanatory and integrative power that organisation theories could use' (Thiétart & Forgues, 1995, p. 22). These qualitative properties reflect the coupling of (co-occuring and possibly interdependent) stabilising and destabilising forces that 'can lead to a highly complex situation: a chaotic organisation' (Thiétart & Forgues, 1995, p. 23). However, unlike physical and logical systems, organisational actors have the power to change the relative importance of these dynamic forces (Thiétart & Forgues, 1995, p. 25).

The appearance of order

Order is necessary for decision-making and for quarantining excessive complexity engulfing a cognitive-limited mind. Cognitive dissonance occurs when decision-makers are confronted with a problem that they know intuitively to be impossible to solve (Thiétart & Forgues, 1995, p. 24); just too many variables, insufficient knowledge and insufficient time.

Thiétart & Forgues posit that to other (external) stakeholders, an organisation can appear regular (ordered) in its public presence; recognisable in terms of patterns of structures and process, even though internal process might be otherwise. While predictability is low, the organisation constitutes an 'envelope' of observable feasible behaviour and in so doing, presents to its public, order rather than disorder: perception management.

For example, if history suggests that *unsettling* communication behaviours are more pervasive than settling communication behaviours at a particular point in time or phase of a tendering process then, from an experienced observer's perspective, the situation is ordered. Thiétart & Forgues suggest that 'empirical research now needs to be done in order to explore in detail the implications of what has been proposed' (1995, p. 28).

From Thiétart's & Forgues' perspective, chaotic organisations are driven by forces of change and stability. The question can then be posed as to what seeds and nurtures the

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[69] It is not uncommon for a contractor group representative to advise the defence minister that they cannot confer legitimacy on the buyer's project organisation; the expressions used are likely to be vernacular. After consultation, the minister withdraws the tender 'off-the-street' and places it on his 'projects-of-concern' list: the 'naughty corner', which contractors seek to avoid.

forces of change and the forces of stability. The authors offer the following thesis embodying two contradictions (1995, p. 28):

- Even though formal approaches help in making the organisational system more predictable and provide a foundation for purposeful action, over time however, organisation actors tend to increase their resistance to potential change and react with uncharacteristic behaviours to perturbations. Meanwhile, external organisations with routine communications, need to find relevant individuals, in lieu of the recipient's organisational system acting as an efficient router. This requires additional energy.
    - No longer do the actors know how to behave and their communication behaviours become unpredictable; otherwise expressed in the venacular of 'not singing from the same sheet'.
    - No one recognises what is going on and everyone is generally reacting indepedently of each other and occasionally in concert. The organisation quickly becomes highly complex; hence, *order might lead to chaos*.
    - This might also be the case when the forces of stability display different patterns of communication behaviours and these patterns are irregularly interdependent (coupled). An example might be a leader projecting erratic and short-term orders to 'play by the rules', a seemingly settling objective but projected and perceived in an unsettling modality.
- On the other hand, the forces of change, paradoxically, enable the emergence of new forms of order with its own locus of stability. Given that the environment is changing and unpredictable, the experimentation and panache afforded by a chaotic organisation can find new organisational equilibrium with the emerging needs of the new reality.
    - *Chaos contains the seeds for new stability*.
    - Thiétart & Forgues (1995, p. 28) also suggest that the ability of institutions to both constrain and enable the agency of individuals is variable.[70]

This ability of organisations to both constrain and enable an individual's agency is also considered by Green & Li (2011).

[70] The empirical data analysis from this research project suggests that leaders have substantial powers to stop the projection and observation of such communication behaviours.

Individual agency within organisations

Further, Green and Li consider that:

> Agency institutionalists argue that actors are institutional entrepreneurs who create or change institutions when they have sufficient [political] resources to imagine and realise interests [ideas] that they value highly. Like-minded organisation actors, in an otherwise chaotic environment, might gravitate to these 'attractors'.
>
> A key observation is that actors vary in their ability to respond to or ignore institutional pressures. This variation allows some actors to deviate and engage in institutional entrepreneurship. (S. E. Green & Li, 2011, p. 1669).

While individual agency might be conferred and accepted, the resulting actions of an individual are moderated by structural constrains, and the net outcome is expressed in communication behaviours. Hulme searches for *linguistic repertoires*, the myths within the storylines and narratives, as organisation agents act as commentators on disorder (Hulme, 2009b, p. 230).

Green and Li, drawing on the work of Alvesson (1993), combine two perspectives into a theoretical concept of 'rhetorical institutionalism': (1) the *deployment of linguistic approaches* (storylines) in general and (2) *rhetorical insights* (settling and unsettling communication behaviours) in particular. Together, they support an explanation of how institutions/organisations use symbolic practices (the communication of anthropogenic myths) strategically, to both enable and constrain the agency of individuals. That is, the ability to both witness and project settling and unsettling communication behaviours (S. E. Green & Li, 2011, p. 1662). Inter alia, Green and Li call for further research on how agency is constrained and enabled within the context of Institutional Theory; using myth-based rhetoric to navigate the inherent ambiguity and contingency (variability dependent on context) (S. E. Green & Li, 2011, p. 1666).

The edge of chaos and agency

The institutional constraints on agency, as described by Green and Li, affect the ability of an organisation to manoeuvre towards the *edge of chaos*. At play is a bipolar 'buffeting' where social systems seek to avoid debilitating *order* by adapting and consolidating. Equally, they seek to avoid *chaotic* environments by congregating around the ideas of perhaps messianic or autocratic ideologues (attractors). To achieve this 'middle ground' with its potential for predictable stability – the edge of chaos – is, according to Marion (1999), the mission of complex adaptive social system and a leader's organising objective.

As a precursor to the next logical element of a potential conceptual framework for 'theory for tendering', Russ Marion provides a restatement on the idea of the edge of chaos within its prevailing paradigm:

> The middle ground, potentially offering predictable stability, is characterised as the Edge of Chaos: the domain of complex adaptive (social) systems. In this state, organisations exhibit both panache and stability "sufficient to serve life" as they continually adapt to an uncertain world *but they can only do so if their agents have sufficient and timely agency* (Marion, 1999, p. xiv). (emphasis added)

Along with Hulme, Marion also considers the function of organisational myths. He contemplates their genesis and their propensity to appear suddenly. Here Marion provides a link that appears to be missing in Hulme's work on climate change.

Marion concurs with the idea that social behaviour can be described metaphorically with anthropogenic myths but adds that these behaviour and atmospheric myths *are* the 'attractors', not the purported messianic or autocratic ideologues, but the sense-giving and sense-making ideas and atmospherics projected by people. Ideas that can arise in a generally chaotic state (Marion, 1999, p. 9).

> *Myths might be characterised as analogous to antibiotics or inoculation. By having the (knowledge gap-filling) symbolism provided by organisational myths, the organisation avoids (but does not eliminate) debilitating chaos arising from ambiguity*.[71]

Connectivity, coupling, coalitions and FITS

Marion then turns his attention to the role of connectivity in society (the tender project's networked collaboration of stakeholders) and considers whether these networks do more than just provide resources; and additionally, to what extent they might shape thinking (Berger & Luckmann, 1966). This is the realm of *open systems theory* which considers that organisation theories are not just intra-organisational; rather, a holistic approach is required that accounts for the contextual issues (Easton, 2010; Sayer, 2004).

Interdependent networked organisations are characterised as being 'tightly coupled', conversely, organisations operating relatively independently are characterised as being 'loosely coupled'. At the edge of chaos exists 'FIT' systems, being neither loosely coupled nor tightly coupled (Marion, 1999, p. 154; Orton & Weick, 1990).

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[71] One tender project manager addressed the problem of frequent changes in political strategy and the ensuing ambiguity, by advising his staff and anyone else who would listen, that he has 'a plan-du-jour'. The objective of this myth-based symbolism is to quell disquiet in the absence of information.

A FIT organisation, according to Marion (1999), maintains itself at the point where its coupling is sufficiently tight to allow the emergence of stable structures (important for organisational legitimacy) but sufficiently loose to allow flexibility and change. If coupled at this edge of chaos, it risks dramatic cascading damage, but reaps the benefit of maximum fitness in taking that risk.

Within its operational, commercial and political networks, the ongoing coupling adjustments of an organisation would seem to be a significant task for leaders, particularly as they are searching for the organisation's edge of chaos as well as participating in bringing the tender project's collaboration of organisations (the network[72] or enterprise) to its own 'edge of chaos' (Marion, 1999).

Leaders might seek to keep their organisations in this 'sweet spot' of 'maximally-adaptive middle-range coupling'. However, Ford is waiting for organisation theorists to provide insights into how this optimum balance might be achieved (Ford, 2011, p. 3). He proffers the political influence of the networked collaboration of stakeholders as a point of departure. In the meantime, he concludes that with such mess, the capacity of leaders to predict the results of policy choices over time, is problematic (Ford, 2011, p. 1).

Meaning-making frameworks and coupling

> *Ford then offers another logical element in a potential framework for reasoning about 'theory for tendering'. He suggests an approach to policymaking that focuses on shaping the meaning-making* ***frameworks*** *that guide and channel* ***human communication behaviours*** *within complex adaptive social systems.*

His reasoning is that humans (in contrast to non-social complex systems) are susceptible to tying communication behaviours back to cultural and social reference frames for meaning making. That is, there is a constraint on the ideas that people have within their own socio-cultural frames of reference and this can constrain (and enable) human agency (Ford, 2011, p. 1). Here, Ford is using the socio-culturally framed *ideas* of individuals as a resource, just as Hulme (2009b, p. 112) is using the *idea* of disorder as a resource.

Importantly for Ford, understanding the socio-cultural frame can lead to *predictable* communication behaviours; an element of order in otherwise disorder. At play is the

[72] Lawson (2008) offers a typology of some alternate configurations of a network's lateral alignment. Although his work considers power and influence, its sole focus is on group decision-making.

concept of ‘memetics’; the cultural customs passed on through time. However, these same customs also reflect the prevailing socio-cultural reference frame. Change in the demeanour of communication behaviours of actors would necessarily require a change in the ideas shaping their reference frames. In so doing, Ford suggests that a new frame of ideas will generate a new balance of settling and unsettling communication behaviours (Ford, 2011, p. 2).

Previously, Russ Marion introduced to this discussion the idea of an organisation’s need to find its ‘balance’; to operate at the edge of chaos; a managed tension, of success in hovering at some indefinable and perhaps shifting ‘sweet spot’ of dynamic balance between ‘tight’ and ‘loose’ organisational coupling (Ford, 2011, p. 3; Marion, 1999).

Ford explains that:

- When organisation coupling is sufficiently loose:
    - The inherently adaptable and possibly over-resourced staff can dissipate much of the impact of unwelcome or dangerous perturbations, because each member (without direction) can absorb and thereby neutralise small pieces of perturbation: bottom-up management (Ford, 2011, p. 3).
    - The actors can address unexpected situations without disturbing significantly the normal flow of activities.
- When organisation coupling is too tight:
    - The organisation, as an entity, can also adapt to change as *directed* by leaders; top-down management (Ford, 2011, p. 3). (In contrast, Snowden & Boone (November 2007) suggest that in the presence of any perturbation, the inflexibility of a tightly coupled organisation might result in brittleness.)

Ford then enjoins his observations of the nexus between tightly coupled organisations and leadership effectiveness with Marion’s (1999) emphasis on the relevance of network connections.

Network connections and coupling

Marion underlines the relevance of network connections. A complex adaptive (social) system is an adaptive and interactive network of actors. This appears to makes sense in terms of the organisation and its *productive* mission versus the network and its *political* mission in terms of access to power, influence and resources (J. Pfeffer & Salancik, 1978).

If a network of organisations operating at its own collegiate 'edge of chaos' is able to provide contextual political stability to a member organisation, then that organisation might be able to adapt readily under conditions of tight internal coupling. This combination might offer a potent force in an otherwise disordered context. *The vital ingredient is the communication (connectivity) between the network and the tendering organisation*.

A deliberately isolated organisation is potentially bereft of its extra political resources and this lack of network communications might distinguish a conclusive tender and a problematic tender that is withdrawn from the market.[73]

Ford cautions that if internal coupling is too tight – too rigid – it can cause the organisation to disintegrate in the face of perturbations: particularly if the external network of stakeholders is absent. In such instances, there is no structure, precedent or political capacity for dealing with unexpected perturbations (Ford, 2011, p. 3). Where Ford and Snowden & Boone appear to differ is the recognition of the resource potential of the tender project's *collaboration of stakeholders*.

Patterns of behaviour

Ford (2011, p. 23) also reflects on 'acknowledged patterns [envelopes] of behaviour' within which acceptable deviations caused by perturbations can be absorbed. Additionally, Ford characterises the envelope of behaviour as a 'ballet of dynamical answers'. The Australian Defence Force characterises this ballet as the 'battle rhythm'. However, the case-based empirical data analyses from this study suggest that the buyer and seller have different envelopes of temporal behaviours with distinct periods displaying dominance, maximum separation, and concurrence. As Ford (2011, p. 4) predicts, leader direction is salient.

According to Perrow (1972), the topology of the envelopes of the co-occurring settling and unsettling purposive variables at the edge of chaos is:

a) a function of the periodicity patterns

b) a function of the co-variation (tight/loose coupling) of the shaping variables.

(However, Perrow would appear to offer a general thesis. From the case-based empirical data of this research project, the dominance of 'settling' over 'unsettling' purposive behaviours is evident. The delta reflects a leader's approach to risk management: a contractor might be more risk sensitive that a bureaucrat. Perrow's

[73] A reflection from this study's data analysis.

observation of the periodicity pattern is important, but in ways that might not concur with his perspective. This inquiry suggests that 'settling' patterns of behaviour that present as high intensity with high levels of 'discontinuity of persistence' appear to be unsettling in disposition.)

Conceptual behavioural metaphors and purposive gerundive constructs

Ford and Hulme give the epistemic impression that data analyses of behavioural patterns might be at the level of the ***conceptual*** communication behaviour: the metaphoric myths (S. E. Green & Li, 2011, p. 6667). However, Perrow (1972) adds clarification by identifying additional *researcher-**constructed*** 'shaping' or *purposive* variables, as unique congregations of the (myth-based) *conceptual* metaphors of communication behaviours (see Dervin (2003d) for details). Discussions about these transpositions or redefinitions of the data occur in detail in the Methodology and Methods chapters.

Institutional logics – the simple self-policing ordering rules

Because of human involvement, complex social systems appear to have a way of policing such settling and unsettling ideas in order to maintain a degree of stability 'as they dance at the Edge of Chaos' (Ford, 2011, p. 10).

Institutional logics (also frameworks for reasoning) describe and prescribe what actions are appropriate and desirable for actors and thus limit the range of legitimate options available to them. For Green & Li, conceptualising *motives* as the building blocks of institutional logics provides us with specific frames of reasoning and action.

Institutional logics are the motives or symbolic actions that establish the rules or reasons for who gets to do what, for what purpose, in which way, and in what settings. At any given time there might be several competing or cooperating logics or 'orders of worth' within a field (S. E. Green & Li, 2011, p. 1676).

For a specific tender instance, there would appear to be an imperative for *collaborating* logics between the tender project's stakeholder-enterprise of organisations, so that they can evolve mutually and politicly towards a conclusive tender.

'Evolvability'

An important theoretical element in framing 'theory for tendering' is provided by Ford where he proposes that for organisations 'dancing' at the edge of chaos, survival is more about the idea of '*evolvability*' rather than stability (Ford, 2011, pp. 21-22).

If the human storylines and narratives are to be germane to sense-giving and sense-making (Dervin & Naumer, 2010), then what are the characteristics of this managed tension, and to what end are they evolving?

A buyer and a seller might have their respective modes of organisational sustainment; their respective dances of the 'evolvability' ballet or battle rhythm. In Gelfand & Brett's *Handbook of Negotiation and Culture*, the title of Weingart & Olekalns' chapter is *Communication Processes in Negotiation: Frequencies, Sequences, and Phases* (Weingart & Olekalns, 2004). These are patterns of behavioural concepts and constructs resulting in an implicit 'pattern language' within an open system (Alexander, Ishkawa, & Silverstein, 1977; Schuler, 2008).

For a tendering instance, a buyer and seller might share in common, the discrete *phases* of the tendering process, noting however, that Weingart & Olekalns concede that research on phases is relatively sparse (Weingart & Olekalns, 2004, pp. 153-154). Each phase might have its own pattern language. For example, the pattern language associated with a tender pricing phase might be different to a negotiations phase.

Gioia & Chittipeddi believe that to progress knowledge about these discrete phases, the dispositions of *sense-making* communication behaviours (understanding/cognition) and *sense-giving* communication behaviours (influencing/action) should be a focus of research (Dennis A. Gioia & Chittipeddi, 1991, p. 439); as it is for this research project.

These sense-making and sense-giving communication behaviours operate at the individual (human) level, and are subject to human cognitive limits in terms of how much comprehension and retention of information occur simultaneously.

Interim summary

- Communications are the vital outcome of a disordered context in which tendering organisations seek survival.
- Forces of stability and instability impact on individuals and their capacity to participate, influence, and make sense of what is happening. At hand is the stabilising political network representing the coalition of organisations comprising the tender project.
- Both the individual organisation and the coalition network, seek to evolve to their respective 'edge-of-chaos', somewhere between a conducive state that allows the emergence of stable structures and sufficient flexibility for change.

- In this process of evolution, characteristic patterns of communication behaviours might be present, particularly as the collaborating organisations in a tender project seek to evolve mutually.

Cognitive limits, myths (tropes) and rhetoric

As symbol-using cognitively limited actors (Bar-Yam, 2002) in an ever changing problematic world, humans use language (such as tropes, stories, narratives, discourse, and frames) to persuade themselves and others about reality (Thiétart & Forgues, 1995, p. 24). As with Hulme (2009b), language is the means to traverse this problematic world. Cognitive limits dictate that sometimes, actors take-for-granted provided meanings, and these meanings appear fixed and unitary as in habit and unquestioned *unconscious material motion*. At other times, meanings appear changing and fluid as in *conscious symbolic action*.

The cognitive limits of an actor results in personal interpretive schemes and sense-making frameworks that must foreground some parts of the environment and background others (S. E. Green & Li, 2011, p. 1686). With every actor having a different personal interpretive scheme and sense-making framework, how can a leader address the necessary changes to the organisation's dispositions towards unconscious material motion and conscious symbolic action (S. E. Green & Li, 2011)? This, according to Green & Li can be a role for rhetoric within language.

Rhetoric's focus on persuasion can be described in terms of the 'classical' rhetoric of changing the audience mind, and the process of 'new' rhetoric in which the audience becomes identified with the speaker's ideas (attractors) through a conversation (S. E. Green & Li, 2011, p. 1689). How these two co-existing forms of rhetoric transition between conscious symbolic action and unconscious material motion depend on:

- understanding how cognitive limits shape language use
    - A core idea in the process of tropological manoeuvring is that effective tropes (metaphoric myths) reduce uncertainty and increase a sense of objectivity in the eyes of stakeholders. Tropes are literary devices or figures of speech that shape thought and as such, constitute and establish 'objects' to fill knowledge gaps (S. E. Green & Li, 2011, p. 1682).
- the production of conscious symbolic action and the deconstruction of taken-for-grantedness

- By framing social reality in one way or another, actors can disrupt established social structures and mobilise collective action to change taken-for-granted institutional logics (S. E. Green & Li, 2011, p. 1686).

Tropes[74] (anthropogenic mythic metaphors in this case), cultural frames and rhetoric become the linguistic tools in managing the balance between the ever-present unconscious material motion (settling communication behaviours) and conscious symbolic action (unsettling communication behaviours)

Culture and cultural frames

Both Marion (1999) and Ford (2011) reflect on memetic cultural frames, and Swindler draws on this idea when considering the actions of individuals, who, in the absence of any other cultural frame, begin with some pre-fabricated (memetic) links (Swidler, 2012, p. 310). For Swidler, culture influences the way these pre-fabricated links are connected, which in turn influences action; culture is not the determining factor.

Culture is a resource pool from which skilled users can construct lines of action; that is, actions acceptable to the prevailing culture.

While Swindler (2012) does not explicitly mention the earlier work of Green and Li, she characterises 'unconscious material motion' as 'settled cultural periods' or 'settled lives' and 'conscious symbolic action' as 'unsettled cultural periods' or 'unsettled lives'.

Some key features of Swidler's cultural influences:

- **Settled lives:**
  - Culture accounts for continuities; it sustains existing strategies of action.
  - Culture is integrated intimately with action and anchoring patterns of action.

[74] Tropes [figure of speech or turn of speech] are inextricably linked with cognition and therefore, individual cognitive limits. They can be conceptualised as enabling/facilitating/transforming imagination and understanding; as constructing parts of an otherwise unknown world or unrecognised world to make some parts significant and meaningful and other parts as insignificant.

There are many tropes but scholars suggest four (6) master tropes (figures of speech): (1) Metaphor (a figure of speech in which a term or phrase is applied to something it is not literally applicable, in order to suggest a resemblance); (2) Metonymy (the use of the name of one thing for that of another to which it has some logical relation – 'when is stumps'?); (3) Synecdoche (a figure of speech by which a part is put for the whole or the whole for a part); (4) Irony (a figure of speech or literary device in which the literal meaning is the opposite of that intended); (5) Analogy (a likeness, correspondence, partial similarity); (6) Aphorism (short, pithy, instructive, terse, instruction or remark) (S. E. Green & Li, 2011, p. 1682).

- Culture and structure seem to reinforce each other.
- Ideas are proffered about loose coupling between culture and action but follow-through might be problematic.
- Action is constrained by providing a limited set of resources out of which individuals and groups construct strategies of action.
- The cost of cultural retooling is high.
- Values fine-tune the regulation of action within established life.

Unsettled lives:

- Social transformation occurs in the presence of different ideologies (highly organised meaning systems).
- New rituals change and reorganise taken-for-granted habits and modes of experience.
- Values are unlikely to be good predictors of actions, or indeed of future value.
- Cultural meanings are more highly articulated and explicit, because they model patterns of action that do not come naturally.

Swindler contends that in neither the settled nor the unsettled case, is it cultural end-values that shape the actions of individuals in the long run. She suggests that *a culture has enduring effects on those who hold it, not by shaping the ends they pursue, but by providing the characteristic* [linguistic] *repertoire from which they build lines of action*.

She identifies several gaps in current knowledge:

- how to develop more sophisticated ways of thinking about how culture shapes and constrains action (agency)
- what aspects of a cultural heritage have enduring effects on action
- how culture *interacts* with social structure across time and historical context *That is, the idea that structure (position power)and culture have separate existences is problematic* (Hollis, 2002, p. 6, emphasis added) .

Her inquiry focuses on the *strategies of action*. Knowing the strategies for action (Dervin, 2003d; Dervin & Naumer, 2010) is a precursor to cultural meaning-making (Swidler, 2012, pp. 321-322). To this end, Weick (1969/1979) emphasises the use of *gerunds* and verbs, as opposed to nouns (‘organising’ instead of ‘organisation’), in order to view reality as ever changing (Dennis A. Gioia, 2006, p. 1711). Dervin, who

uses the mangled grammatical construction ‘verbing’, extends this ‘Weickian’ idea to include a suite of generic purposes, such as ‘finding direction’, ‘finding connections’, ‘influencing’ and so forth to characterise strategic purposes (Dervin, 2003d). Her catalogue of purposive gerundive verbs is vital for the empirical data analyses of this research project.

Evolving towards political legitimacy: an open systems perspective

In the context of Open Systems theories, Suchman (2012) presents a perspective that brings together the themes offered by Marion (1999), Hulme (2009b), (Ford, 2011), (S. E. Green & Li, 2011) and Swidler (2012):

> *Open System theories* have reconceptualised organisational boundaries as porous and problematic, and institutional theories have stressed that many dynamics in the organisational environment stem not from technological imperatives, but rather from cultural norms, symbols, beliefs, and rituals. At the core of this intellectual transformation lies the concept of Organisational Legitimacy (M. C. Suchman, 2012, p. 3, emphasis added).

As a precursor, the lineaments of Open Systems, as mentioned by Suchman (2012), are précised with some incidental comments:

- Nature is an open system in contrast to a laboratory experiment: a closed system.
- Open systems exchange energy (interact) with their environment: the stakeholders in the tender context. Pfeffer describes the operations and decisions of organisations are inextricably bound up with the conditions of their environment (J. Pfeffer & Salancik, 1978): an essential feature of middle-range explanatory theory.
- Sayer considers that the consequence of organisations being an open social system is that they *evolve* rather than approach ‘equilibrium’. A positivistic approach to social science seeks to find ‘rough regularities’, or even laws, to describe social systems. Sayer believes this to be “a pipe dream”. He is equally committed to the idea that *explanation* should be encouraged (Sayer, 2000, p. 5).
- Ford agrees. For organisations ‘dancing” at the edge of chaos’, survival is more about *‘evolvability’* rather than stability in the sense of a managed tension with stakeholders rather than an equilibrium (Ford, 2011, pp. 21-22).
    - Krippendorff prefers ‘viability’ (Krippendorff, 2006, p. 25) but the end objective is the same.

- This type of institutionalisation process, suggests that organisation structure evolves over time through an adaptive, largely unplanned, historically dependent process. Organisations come to mirror or replicate salient aspects of environmental differentiation in their own structures; a quasi mimetic imperative (W. Richard Scott, 2012a, pp. 115-116).

Green & Li's (2011, p. 1669) 'rhetorical institutionalism' and their focus on an actor's agency might now be reassessed with Suchman's understanding of the 'idea of legitimacy':

> Legitimacy has become an anchor-point of a vastly expanded theoretical apparatus addressing the normative and cognitive forces that constrain, construct, and empower organisational actors [their agency] (M. C. Suchman, 2012, p. 3).

If ongoing 'evolvability' towards legitimacy, rather than 'equilibrium', is the desired outcome of the 'dance at the edge of chaos', then is the (tendering) organisation:

1. seeking to evolve its legitimacy by mimicking its network/coalition of stakeholders
2. awaiting for the its network/coalition of stakeholders to strategically construct and tactically interpenetrate the organisation and 'make it legitimate'
3. a bit of both

The first two questions reflect the existing parallel legitimacy literatures, offering different approaches to agency, and cultural interpenetration, and are represented respectively by Pfeffer & Salancik (1978) and DiMaggio & Powell (2012). Each offers a different perspectives on legitimacy grounded in:

- a *pragmatic* assessment of stakeholder relations
- legitimacy grounded in *normative* evaluations of moral propriety
- legitimacy grounded in *cognitive* definitions of 'appropriateness' and 'interpretability'.

Contrasting perspectives on organisational legitimacy (the third question above)

The contrasting philosophical approaches of Pfeffer & Salancik (1978) and DiMaggio & Powell (2012) are presented below.

Pfeffer & Salancik suggest that a legitimate organisation should concurrently:

- adopt a managerial perspective and emphasise the ways in which the organisation instrumentally manipulates and deploys evocative symbols in order to garner stakeholder support
- seek high cultural conformity rather than over self-justification
  In this view, legitimacy connotes congruence between the social values associated with or implied by organisational activities and the norms of acceptable behaviour in the larger stakeholder system
  In this sense, organisations are legitimate when they are *understandable*, rather than when they are *desirable*.
- understand that continuity and credibility are usually mutually reinforcing
  In most organisational settings, shared understandings are likely to emerge to rationalise the patterns of behaviour that develop, and in the absence of such rationalisation and meaning creation, the structured patterns of behaviour are likely to be less stable and persistent (J. Pfeffer & Salancik, 1978, p. 14).

DiMaggio & Powell:

- adopt a more detached stance and emphasises the ways in which stakeholder institutions (such as a lobbyist[75] in the form of an industry association) generate pressures and provide political capital that transcends any single organisation's purposive control
- depict legitimacy not as an operational resource but as a set of *constitutive beliefs*
  Organisations do not simply extract legitimacy from the environment (a mining analogy); rather, (external) *stakeholders construct and interpenetrate* the organisation in every respect, with the objective of securing the organisation's legitimacy as a precursor for the legitimacy of the stakeholder's collaboration. *Within this tradition, legitimacy and institutionalisation are virtually synonymous*.

Suchman combines both perspectives as their theoretical approaches survive and reflect a reality. In aggregate, they empower organisations to seem natural and meaningful,

[75] A Lobbyist provides connections between actors in the field (such as a contractor and a politician). The lobbyist is an activating entity and an actor with influence on the likely routes through which ideas travel and the rate of diffusion. In contrast, an Advocate reports on what is going on in various places, but is itself neither an activating entity nor an actor with influence (Sahlin & Wedlin, 2011, p. 228).

while access to vital resources (including political) is largely a by-product of the ensuing legitimacy (M. C. Suchman, 2012, p. 8).

Suchman's moderated perspective on organisational legitimacy

Some key lineaments of organisational legitimacy from Suchman's (aggregated) perspective[76]:

- There are two streams of rhetoric through which theorists have invoked the concept of legitimacy.
  One is 'strategic' (resource-dependent bias) where the *essence* of the organisation is perceived as desirable, proper and appropriate.
  The other is 'processual' (procedural bias) where the *operation* of the organisation is perceived as desirable, proper and appropriate (M. C. Suchman, 2012, p. 5).
- By enjoining these streams into a dyad of *resource-dependent strategic bias* and *procedural bias*, elements of pragmatic, moral, and cognitive organisational legitimacy might be assigned. Each element involves a generalised perception or assumption that such organisational activities are desirable, proper, or appropriate within some society/stakeholder-constructed system of norms, values, beliefs, and definitions.
    - Suchman expands on this schema to produce a method for assessing the conformation of organisation legitimacy inherent in any one organisation (M. C. Suchman, 2012, p. 9). (This research project translates this schema into an empirical method for comparative organisation legitimacy analysis.)
- The multifaceted character of legitimacy implies that it will operate differently in different contexts[77], and how it works might depend on the nature of the strategic tender design (M. C. Suchman, 2012, p. 5).
- Legitimacy is a holistic *perception* or *assumption* in that it represents a reaction of observers to the organisation as they see it (M. C. Suchman, 2012, p. 6).
- Legitimacy is possessed objectively, yet created subjectively (M. C. Suchman, 2012, p. 6).

[76] The detail is explored in the Methodology chapters and operationalised in the Methods chapter.
[77] such as a tender project for a small number of high-cost equipment units or a tender project for a large number of low-cost equipment units

- Legitimacy is dependent on a collective audience, yet *independent* of particular observers. When a certain pattern of behaviour possesses legitimacy, it means that some group of observers accepts or supports collectively the thrust of perceptions, even in the face of some dissent (M. C. Suchman, 2012, p. 6).
- Legitimacy leads to persistence because stakeholders are more likely to supply resources to organisations that appear desirable, proper, or appropriate. Collaboration in support of procedural activities is built into the structure of everyday life; only iron-caged organisations pose a prisoner's dilemma[78] (Seale, Arend, & Phelan, 2006; M. C. Suchman, 2012, p. 7).
- Does the organisation seek active support from stakeholders or merely offers passive acquiescence to their political demands? To mobilise affirmative stakeholder commitments, the organisation must also present substantive political/network capital; particularly as an insurance against competitors or other threatened stakeholders seeking to undermine the organisation's credibility (M. C. Suchman, 2012, p. 7).
- Strategic-legitimacy is an operational resource that organisations extract – often competitively – from their cultural environments and then use it in pursuit of their goals. This instrumental view generally assumes a high level of managerial control over the legitimating process.
    - Strategic theorists adopt the viewpoint of organisational managers *looking out* [outward looking], whereas institutional theorists adopt the viewpoint of stakeholders *looking in* [backward looking] (M. C. Suchman, 2012).
- Because real-world organisations face both a) strategic operational challenges and b) procedural constitutive pressures, it is important to incorporate this duality as it highlights *both* the ways in which legitimacy acts like an unsettling *manipulable resource* and the ways in which it acts like a settling *taken-for-granted belief system* (M. C. Suchman, 2012, p. 9). This proposition is akin to Green & Li's (2011) *conscious symbolic action* and *unconscious material motion*, except that their reciprocating schema might become subordinated to Suchman's *contemporaneous* schema.

Suchman (2012), together with the underpinnings provided by the other authors, brings this literature review to a conclusive state by supporting the contention that a theoretical framework for reasoning

78 An absence of communication between the players.

engaging 'theory for tendering' might be guided by Open Systems theories and operationalised with theories of organisation legitimacy.

Summary and conclusions

This chapter presents a structured suite of themes designed to encapsulate theoretical perspectives, ideas and their prospects that might contribute to a 'framework of reasoning' that explicates 'theory for tendering'. Importantly, an objective of this research project is to describe a framework in which many theories might contribute to complementing paths of reasoning about the efficacy of a major Defence equipment tender project.

To progress this objective, the research follows an inductive approach by linking logically, themes that consider such fundamental ideas as stability and instability, order and unorder (disorder), individual agency and the edge of chaos, the productive mission of organisations and the political mission of networks, and the shaping of meaning making frameworks.

Themes that have particular resonance with the sociology of tender practice include patterns of behaviour and pattern languages, the distinction between a state of 'balance' at the edge of chaos and the idea of 'evolving' towards a state of political legitimacy, and the use of sense-giving and sense-making communication behaviours to progress understanding.

Culture and cultural frames of reference play an important role as resources for dealing with unfathomable mess and the cognitive limits of an individual. Culture provides a linguistic repertoire with which to construct strategies of action. In the context of an open system, such cultural norms, beliefs and rituals lead to the concept of organisational legitimacy. Multiple cultures affect a tender project. The political culture of the politicians might not necessarily reflect high culture, but it is the culture of the decision-makers. Their cultural frame of reference guides perceptions of organisational legitimacy, and for them, perceptions are be reality.

Organisational legitimacy presents holistically in the concurrent dispositions of resource-dependence bias and procedural bias. Appreciations of such holistic organisational legitimacy occur externally by the coalition of stakeholder organisations that comprise the tender project, noting that the decision-making politicians are members of this collaboration. An organisation receives conferred political legitimacy if it is of sufficient political value at the decision-making time.

These theoretical lineaments combine to provide a framework for reasoning – 'theory for tendering'.

Next chapter

Having described a framework for reasoning based on the literature, the next chapter addresses epistemology conforming methodological pluralism necessary to operationalise the research project. Importantly, the interdependence of individuals and organisations that results in uncertainty imbues the idea of management research. Further, such case-specific idiographic research has low generalisability as findings derived from contingent experiences replicate rarely.

Fortunately, certain philosophies and their supporting methodologies accept this as the norm.

Chapter 4
Epistemology:
A Sociological Approach

In 1956, Talbot Parsons presents an essay in the first issue of Administrative Science Quarterly, *Suggestions for a Sociological Approach to the Theory of Organizations* (Parsons, 1956). Against prevailing ideas, Parsons draws a contrast between the *internal* activities within the organisation and *external* institutional control:

- **internally**, work gets done at the firm's technical level;
- it is coordinated at the managerial level, and
- **externally**, laws and regulations are created outside the firm's boundaries – at the institutional level – and enforced in the markets and the external environments in which organisations operate.

Hirsch (2011, p. 783) refers to Parsons' institutional level as encompassing a political world in which lobbyists, trade/industry associations, and other stakeholders meet with authorities to negotiate. This is the institutional reality for major Defence tenders; and hence, 'organisational institutionalism' evolves as each side mutually influences the other. Political discourse shapes and is shaped by the way in which such public problems are framed.

Advocates and lobbyists can tap into these frames in order to project value-propositions. Political actors do not force these agents to act in particular ways; rather, they are 'marshalled' into politicly-appropriate frames-of-reasoning: see Shdaimah & Stahl (2012, p. 127). Overall, the contribution of external social institutions to the constitution of society and its social systems is a reflection of institutional power and influence.

From this position, the chapter progresses the argument for methodological pluralism.

Middle range theory and methodological pluralism

For Parsons, the central phenomenon of organisation is the mobilisation of this power for the satisfaction of organisational goals (see also Lawrence, 2011).

Although an institutionally recognised value-system legitimises the organisation's goals, it is only through political power that the achievement of such goals can be made effective (R. E. Meyer, 2011, p. 524; Parsons, 1956, p. 73).

Further, accepting that the idea that the legitimising value-system of a tender project is socially constructed, van den Ende & van Marrewijk's (2015, p. 168) argue that the *theorisation* of this contextual culture is also socially constructed (see also Galvin (2014)). That is, the mid-range theory building is also socially constructed.

Overall, the tender-project enterprise presents as a multi-organisation proto-institutional field (Lawrence, Hardy, & Phillips, 2002; Washington, Boal, & Davis, 2011, p. 728). In theorising on this social pathology, Roberts (2011, p. 564) suggests that 'the integration of the perspectives of institutional theory and organisational economics[79]' would be 'a satisfying theoretical interpretation', which contrasts with Runeson's & Skitmore's (1999, p. 294) view that schisms with reality make tendering theory development untenable; a reflection on realpolitik and process philosophy (Wood, 2008, p. 171).

A reversion back to Parsons' *Suggestions for a Sociological Approach to the Theory of Organizations*, begins with Douglas (1986, p. 41) who questions *institutionalism* as being a theory[80] with definitions of its subject, a set of axioms and logically connected statements (see also Palmer et al., 2011, p. 740). As the argument stands, *institutional theory is not a theory* at all, but *a framework*, a vocabulary, a way of thinking about social life, which may take many paths. This interpretive theoretical perspective suggests mid-range theory with its ideas and propositions that can manifest as a framework-for-reasoning; while always alert to the presence of better explanations.

Since social scientists will never be able to construct a completely closed system, such theory choice must be decided by interpretive power, rather than empirical prediction; but, a pithy comment from Berger & Luckmann (1966) suggests that it is *the bigger stick and not the better argument* that imposes the definition of reality – a hint of a politicised context.

Meanwhile, a politicised predisposition to empirical prediction[81] has, according to Haveman & David (2011, p. 582), not produced an accumulated knowledge about organisational institutionalism, because, as they proffer, institutionalists have eschewed

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[79] More recently I've come to learn a little bit more about economics and I realise it is very largely (and I don't mean this in a sarcastic way, it's just a statement), it is largely faith-based. It doesn't have much in the way of testable hypotheses and things. It does have things in the way of simple models but they tend to be grounded on beliefs, and the discussions they have would have been more familiar in Socrates' Athens than in today's scientific colloquium (Lord May of Oxford, 2011, December 24).

[80] A comprehensive theory needs to operate at all units of analysis. It must develop a micro-logical orientation that shows the emergence of meaning, its development into inter-subjectively agreed-upon classifications, definitions, and values, and the development of structures that emerge from these understandings (Palmer, Biggart, & Dick, 2011, p. 749).

[81] The 'gold standard' of the G.W. Bush Administration (Denzin & Lincoln, 2011b, p. 1; M. Easterby-Smith et al., 2012, p. 88; Teddlie & Tashakkori, 2009, p. 76).

'theories of the mid range'. Further, Phillips & Malhotra (2011, p. 714) conclude that 'there has been little attention toward unpacking processes of how institutions are socially constructed'.

The gaps in knowledge, the contradictory opinions, the positions taken, and the influences of political power, combine, in this research instance, to translate Parson's 'suggestions' into, *Suggestions for a Sociological Approach to Theory-Building for the Tender Enterprises*; to which a Defence contractor might add his phronetic[82] 'Greek chorus':

> But politically, I could almost imagine that if you could spin the roulette wheel now then you might get a totally different answer than you did a year ago because *the politics are different*. (emphasis added)

How, from a social research perspective, to approach this variously messy and complex world of tendering enterprises? Politics ensures multiple temporal perspectives from a variety of representations of political reality. Against this reasoning, what is a viable locus of epistemology and supporting methodologies? The answer to these questions is likely to be a research conclusion, but two issues are clear: middle-range theory-building[83] and methodological pluralism (Midgley, 2000, p. 6).

Fundamental issues and possibilities are canvassed in this chapter, so that an atlas, rather than a tool box, of methodologies is available to the research. In contrast to a panorama, the chapter presents a window or 'borders' on the maps. With the atlas analogy, key 'geographical features' are related and enlarged in later chapters. From these connected 'features', multiple methods of data collection and analysis follow.

Perceptions and perspectives

At its simplest, epistemology provides a philosophical grounding for deciding what kinds of knowledge are possible; a quest to understand *what it means to know*; how we know what we know. Epistemology deals with the nature of knowledge, its possibility,

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[82] (S. Schram, 2012; S. F. Schram & Caterino, 2006)

[83] For Broadbent & Laughlin (2008, p. 130) middle range thinking requires empirical detail to develop a complete understanding of any situation. They argue that it is a distinct research approach with assumptions on ontology, theory use, methodology and method. Its focus is on how to generate understanding. The idea of 'change' is not excluded, nor is it necessary. What is necessary is the consideration as to whether change *should* occur in the phenomena under investigation; and it is this imperative that begs understanding. In so doing, the middle range theoretical approach is a framework for analysing organisational change process: the Morphogenetic Approach (M. Archer, 1995); (see also Laughlin, 1991). Middle range thinking is reliant on a qualitative skeletal theory that informs the nature of the data narrative. The research approach is interactive, allowing and encouraging theoretical surprises. Middle range thinking provides meaningful theories of management, while recognising the unique aspects of actual situations.

scope and general bias: its status. Ontology (particular ways of understanding the reality of the human world and social life) together with epistemology (what we think can be known about this assumed reality), offer ways of a) viewing the world and b) making sense of it; and in combination, they offer 'theoretical perspectives' (Crotty, 1998, p. 5). Further, Ackroyd (2004, p. 144) makes the point that, 'Without understanding how people conceive their situation, there is no possibility of understanding their actions and hence community [political] actions'.

At the level of research, the basic problems for social science are concerned with adequate description, explanation, and the development of adequate theory with its theory-building precursors. In this instance, the quest is for potential middle-level (theory-building) tendering theory that would require a field engagement with the phenomena of human experiences engaged with tendering campaigns and their episodic tender projects.

Reality push-back

Over the past thirty years, social inquiry has faced successive waves of theorising about human life and society. These waves have been categorised as 'turns', and a sample includes the interpretive turn, the linguistic turn, the constructionist turn, the rhetorical turn, the narrative turn, and more. I prefer the term 'wave' as energy from the last wave (in the ocean) combines with energy of the next wave: a historical legacy. 'Turn' could conjure the impression of letting-go of the past. This need for a progression of 'turns' might suggest much ongoing uncertainty about social inquiry; but according to Preissle (2011, p. 692), this reflects the nature of life as ambiguous and uncertain, contingent and contradictory.

According to Easterby-Smith et al. (2012, p. 23):

> [T]he task of the social scientist should not be to gather facts and measure how often certain patterns occur, but to appreciate different constructions and meanings that people place on their experience.

The case for methodological pluralism to inform the epistemology of social constructionism

Crotty (1998, p. 42) on constructionism:

> Constructionism is the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of *interaction* between human beings and their world; and developed and transmitted within an essentially social context.

By way of contrast, a (positivist) social theory would say that behaviour like 'aggression' can be *explained* by social variables. On the other hand, social constructionism says that 'aggression' itself is a social construct of meaning (anonymous, 25 February 2015). Both approaches suggest different methodologies.

Further, Holstein & Gubrium (2011, p. 341) argue that constructionism by itself resists a single portrait and is better understood as a mosaic or research efforts, with diverse (but also shared) philosophical, theoretical, methodological, and empirical underpinnings.

From a constructionist position, Easterby-Smith et al.(2012, pp. 21, 26, 61) advise that:

> [T]he assumption is that there may be many different realities at play, and hence the researcher needs to gather multiple perspectives through a mixture of qualitative and quantitative methods and to gather the view and experiences of diverse individuals and observers.
>
> For social scientists, the focus has been on the respective merits of two contrasting views: positivism [objectivism] and social constructionism. However, there is no single philosopher who ascribes to all aspects of one particular view. Combining methods from both traditions is common in management and social science research.
>
> Those in favour argue that by using a range of different methods within the same study the researcher will increase the validity and generalisability of results and the potential theoretical contribution. The sceptics point to possible contradictions between the paradigms underlying different methods.

Lincoln, Lynham, & Guber (2011, pp. 116, 717) address the issue of paradigmatic incommensurability under the heading of *Accommodation, Commensurability, and Cumulation*. The authors argue that:

> At the paradigmatic or philosophical level, commensurability [between different worldviews] is not possible, but that within each paradigm, mixed methodologies may make perfectly good sense.
>
> *However, elements of one paradigm can be blended into another, provided they share axiomatic elements that are similar or that resonate strongly; an example being interpretivist/postmodern, critical theory, constructivist, and participative inquiry fit comfortably together*. (emphasis added)
>
> Until such time as the paradigmatic issues are resolved, however, we welcome the ongoing debate and trust that the new mixed methods journal (*Journal of Mixed Methods Research*) will contribute clarity and strength to the conversation.

Crotty (1998, p. 12) takes a pragmatic approach to methods:

> Normal social intercourse is replete with instances of measuring and counting. That is, both qualitative and quantitative *methods* serve our purposes, either separately or in combination without being in any way problematic. (emphasis added)

And Preissle (2011, p. 692) proposes a 'justification' for methodological pluralism with the combination of two metaphors to represent qualitative research:

- **Confederation of qualitative methodology communities:** Various qualitative methodological approaches form a confederation of methods and methodologies. The idea is based on the belief that we are made up of networked communities. Most of us are members of several communities where the groups are fluid and highly permeable as they have overlapping membership. The qualitative methodology confederation is made of such groups as field study practitioners, phenomenological practitioners, constructivist-constructionist scholars, and so forth.
- **The tapestry of practice:** Frameworks, and purposes

This chapter presents the case for a 'locus of methodological pluralism' that enjoins complementing 'ways of reaching' a world inhabited by industrial marketing campaigns[84] and their episodic tender opportunities[85]; together with ways of making sense of this world. Such 'ways of reaching' and sense-making are 'like crystalline prisms that grow, change and alter; that reflect colours, patterns and arrays that cast off in different directions; the same tale from different points of view' (Denzin & Lincoln, 2011b, p. 5).

In so doing, this methodological pluralism provides strategic guidance for a reflective analytical 'framework-for-reasoning' (St.Pierre, 2011, p. 614).

The constrained context ensures that the grounding of theoretical claims is local and specific; middle-range theory 'for a world that is part of the social, which is inscribed with the materiality of words, and the indeterminacy of co-constituted meaning' (S. R. Clegg, Flyvbjerg, & Haugaard, 2014, p. 15, citing Clegg and Hardy (1996, p. 701)).

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[84] Neo-institutionalists describe the constitution of fields [such as the Defence equipment supply industry and its political clients] and the socialisation of a single organisation as an open and ongoing process. While some organisations may experience their field context as immune to organisation control, others may be in a position that allows for an institutional engineering of fields. Political contingency factors determine the opportunity structures for successful intervention (Hasse & Krücken, 2011, pp. 543-544).

[85] Laughlin's (1991) literature review finds that the idea of an ongoing process that is punctuated periodically, is variously described as a 'disturbance', 'jolt', 'environmental impetus', kick', or 'noise'.

A depth 'knowing' within experience

Rather than 'knowledge being a product that the knower comes to possess about *lived* experience' (Schwandt, 2007, p. 101); Archer (1995) together with Gadamer (1989) and Crotty (1998, pp. 100-104) embrace the idea that this empirical view fails to reflect on the 'historicity of experience'. While historicity considers the processual and dynamic character of change[86] that is anticipatory and open – a 'knowing *within* experience' (conforming and conformed), Gadamer explores a deeper appreciation of experience with two forms reflected in the German words ***erlebnis*** and ***erfahrung*** respectively (see Schwandt, 2007, p. 102).

- ***Erlebnis*** denotes experience as something one *has*; a 'being' ontology (Robert Chia, 2003, pp. 1-18). An event or adventure connected with the experience, and is accessible for anyone to *replicate*.
- ***Erfahrung*** refers to experience as something one *undergoes* – a temporal 'becoming' ontology – so that subjectivity is drawn into an 'event of meaning' and, when understood as such, is integrative, unfolding, dynamic, and never to be repeated, like a river at a particular point: forever *transforming* (perpetual change). As a tender project manager advised wryly, 'I had a *plan du jour*'.

In the Aristotelian idea of practical knowledge (*praxis*), one form is '*phronesis*' (Bent Flyvbjerg, Landman, & Schram, 2012b). This is neither a technical nor cognitive capacity. Rather, it reflects the kind of person that one is becoming. Life-based practical reasoning is the medium in which understanding takes place. This requires a continual understanding/interpretation of language in gestures of speech, and without the reliable background of such understanding, *praxis* would be impossible. Indeed, in the event of understanding itself, there is already an element of *praxis* (Schwandt, 2007, pp. 240-244).

Antecedents to the Morphogenetic Approach

Both *erlebnis* and *erfahrung* provide antecedents to the 'reproductive' and 'transformative' dimensions of the Morphogenetic Approach (M. Archer, 1995).

Further antecedents to the Morphogenetic Approach can be found in the work of Wittgenstein (1978), who argued that the meaning and truth of theories are matters decided within a particular conceptual scheme or 'language game'; a particular habit of construing evidence according to some logic of inquiry that we have adopted, and in

[86] In companion, the 'diachronic' approach looks at the historical transformations of society and its social concepts (M. Archer, 16 June 2014, image 13; David M. Boje, 2008, p. 76).

turn, answers our *own* ideas of what is good in the way of belief (see Schwandt, 2007, p. 258). Words and sentences acquire their meanings because they are used in some rule-governed, self-contained practice, just as in a game; hence, a 'language game' (with rules).

Two examples include a) giving orders and obeying them, and b) social lexicons pertinent to just two people, or special interest groups of any size. Further, Cottone (2012) suggests that people construct understanding of experience together, not alone, but in communities of understanding.

Importantly, language is not being used to designate an activity, but rather, the meaning relative to the potential outcome of an activity: divination.[87] Peter Winch (1958) links this idea to the notion of ***Verstehen***, the logic that *understanding* the meaning of language and action is possible only if there is understanding of the different language games-at-play or social practices in which language and human activity take place.

Human actions are intentional and meaningful. They cannot be *explained* nomologically by laws of science (***Erklärung***), however, human action can be *interpreted*. In so doing, 'understanding', 'explaining', and 'interpreting' are delimited.

Interpretation, meaning and understanding

Institutions play a pivotal role in our capacity to interpret such meaningful, intentional human action.

Crotty (1998, p. 52) suggests the need to:

> ...entertain the social origin of meaning and the social character with which it is inevitably stamped. As a publicly available system of intelligibility (a given system of significant symbols) our institutions are a source of the interpretive strategies with which we construct meaning. We depend on culture to direct our behaviour and organise our experience. Culture is best seen as the source rather than the result of human thought and behaviour.

Krippendorff (2006, p. 23) adds a caveat:

> ...meaning is human-centred, not a natural quality [that can be explained]. The attempt to routinely or mindlessly objectify [epistemological 'objectivism'] such human-centred conceptions is a fundamental epistemological mistake. The 'linguistic turn'[88] resists such

[87] the politicians' vaunted use of the watchword 'value-for-money'

[88] The 'linguistic turn' is an attempt to locate the known worlds in the dialogues or language games in which they arise (Krippendorff, 2006, p. 23). The 'semantic turn' replaces the causal models of the natural sciences with social or linguistic models of meaningful interfaces with observed behaviours (Krippendorff, 2006, p. 262). St.Pierre (2011, p. 611) provides an extensive list of other 'turns'.

> objectifications. It is an attempt to locate the known worlds in the dialogues or language games in which they arise.

In contrast, Holt (2008a, p. 148) reflects on the work of Mulhall (2001, p. 85), who considers that the purpose of, and sense of involvement with language games are *not* conveyed by rules (see also Hänfling, 2000, p. 34); and further, disputes about meaning are *not* about the violation of rules, rather, *disputes arise when there is a lack of integration between a practice and an individual's identity, group interests or wider environmental conditions*.[89] By way of example, consider the extreme case of a native hunter-gatherer trans-migrated into an industrial society.

'Explaining' social phenomena is problematic. In the Open System that is society, *explanations* – why something happened systematically – can rarely, if ever, relate to some 'causal' influence emanating from language games. In contrast, *Verstehen* seeks *understanding*, and that distinguishes the reflexive and interpreting human from the objects of natural science (M. Archer, 1995, p. 327).

Between prediction and understanding: retrodiction

Archer explores the 'space' between *prediction* (where knowledge becomes a product that the knower comes to possess about lived experience) and *understanding* (as reflected in the language games-at-play of *Verstehen*). Between *prediction* and *understanding* lies a vast tract of social phenomena that are amenable to *explanation* through *retrodiction*. In contrast to prediction, retrodiction's explanatory format provides analytical *histories of emergence*[90]; the *narrative account*[91] of their processual and dynamic character (see M. Archer, 1995, p. 327; Holstein & Gubrium, 2011, p. 20).

The ontological relativism of narratives

Such narratives are contextual accounts. Standards for rationally evaluating beliefs might be completely dependent on a particular theoretical perspective, language game, conceptual scheme, routine social practices, culture, or form of life in which those beliefs arise; any or all of which might contribute to a framework-for-reasoning. This is the *relativist* (ontological) position that assumes different accommodations (inclusive of

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[89] State-owned (monopolistic) defence equipment suppliers might experience a 'cultural disconnect' when immersed in a *competitive* bid.

[90] **Emergence**: the realm of generative effects and causal 'mechanisms' (influences) (M. Archer, 1995, p. 178).

[91] Narrative inquiry is a particular type of qualitative inquiry that is a field in the making. Rather than narrative focussing on retrospective meaning making, narrative is now seen as meaning making through the shaping and ordering of experience. Narratives are socially constrained forms of action, socially situated ways of acting in and making sense of the world (Denzin & Lincoln, 2011c, p. 415).

the 'native hunter-gatherer') as the interests of different groups interact[92] with their gradual accumulation and acceptance of evidence (M. Easterby-Smith et al., 2012, p. 19): an emergent enculturation. Importantly though, for a *relativist ontology*, there is no single reality that can somehow be discovered; reality itself is determined by language or conceptual schema (Schwandt, 2007, p. 261). There are however, many [cultural] *perspectives* on an issue (M. Easterby-Smith et al., 2012, p. 20).

Culture

Culture reflects a process of continuous learning, of inventing new linguistic artefacts that in turn, change the conceptions of the world of which they have become a part (Krippendorff, 2006, p. 227). This linguistic relativistic argument claims that objectivity is impossible, because the language of a culture determines the reality that members of the culture will perceive (Hunt, 2008, p. 181).[93]

Variations on this relativistic idea that linguistic practices shape social reality are foundational to pragmatist, phenomenological, constructionist, hermeneutic, and poststructuralist theories (Schwandt, 2007, p. 176), all of which, from their own perspective, contribute to social constructions of meaning-making.

The Social Constructionism of Meaning

In contrast to the idea of 'justification' in the natural sciences being based on verifiable data, Clegg, Flyvbjerg, & Haugaard (2014, p. 26) explain that within a social context, the 'justification argument is based on our consensus, and there is no objective "better argument" outside this consensus that may be used to justify'.

This perspective is essential for a Morphogenetic Approach to reasoning (M. Archer, 1995, pp. 195, 264-265), and it is complemented by Anderson (2008, p. 183), who considers that research supported by a social constructionist epistemology is likely to focus on *language as the mediating influence* in the creation of meaning, or as Alvesson & Svensson (2008, p. 118) suggest, *language as a medium of meaning*. The contrast is between language as a *facilitator* of meaning creation and language as the *carrier* of meaning. Arguable, both have *veritas*.

Burgess (2015) sees the need to avoid any notion suggesting that something is purely and freely constructed; in reality, individuals are bound up with social processes,

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[92] These social interactions are, according to Archer, the sole mechanism (influence) governing social stability and social change: Morphogenesis (M. Archer, 1995, pp. 195, 264-265).

[93] For example, the evolution of astronomy has taken visible objects and their relationships as the object of interest. Australian aboriginal astronomy takes the outline of black spaces as an object of interest.

constraints and enablers, and therefore cannot simply construct things at will. This idea of *enablers* and *constraints* is essential to the Morphogenetic Approach (M. Archer, 1995, p. 196).

Seddon (2013, p. 349) elaborates this point when he considers the legal environment in which, 'This array of public law potential remedies should be seen as tools for the enforcement of legitimate expectations in the tendering process; all of which are social constructions subject to interpretation'.

In contrast to nomological systematic explanations of the kind found in the natural sciences – generality, universality, and atemporality – *meaning* is not discovered but *constructed*. Meaning is *not* bound within the object, merely waiting for someone to come and open it. Indeed, while the object itself might have potential meaning, meaning actually emerges only when (human) consciousness engages with the object.[94]

The selected lineaments of methodological pluralism

With this background, the strategic direction for conducting this research is based on the following:

1. the meta-theory and 'practical social theory' of the Morphogenetic Approach, (see M. Archer, 1995, pp. 192, 254; Porpora, 2013, p. 25)
2. ontological (and epistemological) Relativism and ontological Realism (Schwandt, 2007, pp. 261-262)
3. epistemological Social Constructionism (Crotty, 1998, p. 42)

Ontological Pluralism

In order to illuminate a potential tendering sociology, how might this endeavour conceive of, study and represent the 'lived human experience' of tendering campaigns and their episodic tender projects?[95]

Some recognised generic options are offered by Schwandt (2007, p. 103)
(***** below indicates perceived relevance):

- as a natural world of objects, events, experiences, meanings etc., existing in and of themselves; capable of being faithfully – not necessarily literally – rendered

[94] This idea of meaning is kernel to the explication of the concept 'value-for-money'; the purported 'methodology' applied to the political selection of bids for major Defence equipment. In fact, being 'ideally real', value-for-money (an idea) is a mode of ontological realism.
[95] See Aaltonen (2009) for arguments in support of ontological pluralism for social inquiry.

and represented by the fallible inquirer (***ethnographic naturalism* / *(anti) naturalistic inquiry* / *constructivism*** (Guba & Lincoln, 1989; Lincoln & Guba, 1985; Schwandt, 2007, pp. 100-101, 206-207))[96] (***)

- as textually[97] [verbal, behavioural and written] mediated reality in which the focus is on the constitution of experience in language – how participants conduct or accomplish outcomes in language (conversation analysis, discourse analysis, ethnomethodology) (**)
- as a structurally [power] mediated reality in which internal and external forces influence/cause human action (**)
- as a cinematic field neither geographically, emotionally, nor discursively anchored but constituted with images of the 'real' that mediate all experience (cinematic society; hyperreality). (Something is 'real' if it has causal efficacy; being able to change behaviour or make a difference (a propaganda movie by way of example) (Mingers, Mutch, & Willcocks, 2013))
- as a psycho-dynamically constituted reality in which human actions are understood as intentional action schemes; a biographically composed and defended reality
- as a lived practice: a pragmatic intersubjective accomplishment of meaning-making on a day-to-day, moment-to-moment basis (**)

I find empathy with all these options as they deal with the social world from different theoretical perspectives. However, constrained by available research resources, those options indicated by (**), more closely reflect the research context. Moreover, ethnographic naturalism / (anti) naturalistic inquiry / constructivism indicated by (***) reflects the grounded[98] nature of this inquiry engaged with marketing campaigns and tender projects.

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[96] 'Ethnographic naturalism' and 'naturalistic inquiry' appear the equivalent or very similar. Schwandt (2007, p. 207) explains why 'naturalistic inquiry' is actually 'anti-naturalistic'. In 1989, Guba and Lincoln change 'naturalistic inquiry' to 'constructivism'. All are committed to studying human action in some setting that is not constrained, manipulated or fashioned by the inquirer (Schwandt, 2007, pp. 206-207).

[97] 'Text' is a linguistic term used to refer to various forms of meaningful interaction. Texts are texts because they can be interpreted and their form ranges across written texts, spoken words, pictures, symbols, artefacts, etc. (Nelson Phillips & Malhotra, 2011).

[98] Ethnographic methods (and Case method) are, according to Schwandt (2007, p. 93), 'methods for generating and analysing qualitative data that are **grounded** in a commitment to firsthand experience and examination of some particular social or cultural phenomena'.

Ways of reaching a world of ongoing industrial marketing campaigns and their episodic tender projects

> Constructionist research designs are linked [*inter alia*] to the relativist and nominalist ontologies. They start from the assumption that there is no absolute truth, and that the job of the researcher should be to illuminate different truths and to establish how various claims for truth and reality become constructed in everyday life. Hence it is not surprising that there is a wide range of methodologies which fit within the constructionist paradigm (M. Easterby-Smith et al., 2012, p. 48).

Ethnographic perspective:

From the perspective of *ethnographic naturalism* (and its equivalent perspectives), authentic experience is sought from the accounts of participants. With 'appropriate methods', the inquirer can reveal, describe, and map the lived experience of others (their interactions, intentions, the meanings they attach to their actions etc.), and subsequently present it as it was actually lived or undergone by particular actors in particular circumstances. In this way of thinking [a framework-for-reasoning], experience is distinguishable from its representation.

Inquirers are capable of accomplishing this feat because they learn to operate on the border between lived experience and its representation [hence, the notions of inquirer as marginal native and participant observer]. The inquirer's own lived experience functions as a means of access to the experience of others.

Often the inquirer's own experience becomes part of the recounting or representation of the experience of others in, for example, what Van Maanen (1988) has called confessional and impressionist tales[99] (Schwandt, 2007, pp. 100-101).

Powell & Colyvas (2011, pp. 280, 293-294) illuminate 'appropriate methods':

> In ethnomethodological studies, categories and classifications [ontological nominalism] become interpretive schema that members of organisations draw on. Over time, these schemas become a repository of organisational knowledge. As particular schemas become routinised through repeated application and use, they develop a habitual, taken-for-granted character. In so doing, their contingent origins are obscured.
>
> Classifications and categorisations are invoked on the fly by skilled actors. Rather than struggling with or coping with uncertainty ... metaphors provide

[99] A transactional/subjectivist epistemology: that is, the researcher and the participant are fused into a single entity. Findings are literally the creation of the process of interaction between the two. It is based on the philosophical belief that people construct their own understanding of reality and construct meaning based on personal interactions with their surroundings.

> a means of shaping the understanding of a new experience by defining one domain in terms of another. The ubiquity of metaphors renders them taken-for-granted – in many respects invisible, yet very salient in terms of generating and transmitting meaning. Metaphors shape perceptions of situations, problems, and analogues for solving them.

In this two paragraph compendium above, Schwandt, and Powell & Colyvas, describe *one side* of an essential methodological approach that supports the theoretical perspectives of this inquiry. The *other side* entertains 'social poetics'.[100]

Social Poetics or the Poetics of Place[101]

Erickson (2011, p. 56) talks of the 'stubborn poetics of everyday social life: its rhyming, the non-literal, unstable or lapsable meanings inherent in social action, the unexpected twists and turns that belie prediction and control'.

In introducing her essay on Social Poetics, Cunliffe (2002; 2008b, pp. 202-203) expresses the view that:

> Language is not all there is, nor is it entirely within our gift to conventionally decide upon the meaning constructed through the words and grammar of language. In every meaning there is a potential for it being upset, *including the knowledge emerging from social constructionist approaches*. (emphasis added)

Whereas many discourse-based research methods assume language is representational (representations of experience (Denzin & Lincoln, 2011c, p. 417)), Social Poetics explores how we create meaning between us (researchers and informants[102]) in our everyday conversations within particular social contexts, and emphasises a kind of practical understanding that consists of 'seeing connections' between aspects of our surrounding circumstances, between ourselves and others, and between our sense of situation [time and place] and action. This idea of 'seeing connections' is also found in the work of Wittgenstein (1978).[103]

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[100] Institutions and organisations are more than 'rules and resources', for they have features independent of such 'structural properties' and thus an existence and influence which cannot be conceptualised in terms of social practice (M. Archer, 1995, p. 115).

[101] It may well be that social science will at last give up on its perennially failing attempts to assume that history actually repeats itself and therefore can be studied as if it did (Erickson, 2011, p. 56).

[102] Cooperative inquiry is an action oriented approach in which all involved act as both co-researchers and co-subjects that inquire together into issues of their practice (Denzin & Lincoln, 2011c, p. 416; Ospina & Sorenson, 2006, p. 197).

[103] Consider a stack of transparent photographs of family members. Common facial characteristics should be identifiable: the 'connections'.

These connections often consist of gestures and other poetic aspects of our dialogue that might create 'arresting moments', in which we are struck, oriented or moved in the way we respond to our surroundings in different ways (Ann L. Cunliffe, 2008b, p. 203).

The theoretical implications are that:

- **Language-as-ontology** assumes researchers cannot separate themselves from the process of creating meaning; our feelings, reactions, sensing, words, gestures, touch, movements, etc.

  Language is:

  - **creative** – social realities unfold and take on images from language itself as we speak, write, read, and listen; that is, we improvise meaning;
  - **metaphorical** – meaning is grounded in root metaphors and through the use of metaphors;
  - **allusive** – meanings emerge in indirect ways as we grasp a responsive sense of situations through imaginative forms of talk, including metaphors, storytelling, irony and gestures.
- **Language-as-epistemology** focuses on codifying or thematising talk with an emphasis on a practical, embodied, involved understanding from within the moment of conversation. It assumes that meaning is relatively fixed – domain specific – and lies in individual words. It has essence that can be captured.

Reprise

Fleetwood (2005, pp. 197-222) reflects on organisation studies that embrace a) culture, b) linguistics and c) a socially constructed[104] *ontology*; the way we think the world is.

As such, ontology influences:

- what we think can be known about the world (epistemology)
- how we think it can be investigated (epistemology)
- the kinds of theories we think can be constructed about it (epistemology)
- the political and policy stances we are prepared to take (axiology and phronesis) (Lincoln et al., 2011, p. 116; S. F. Schram & Caterino, 2006)

By bracketing ontology with epistemology, Crotty (1998) explores the idea of a 'theoretical perspective' (ways of viewing the world and making sense of it). In turn,

[104] in contrast to epistemological constructionism

the different ways of viewing the world, shape different ways of reaching and identifying that world: methodological pluralism.

Knowledge and Identification

Fleetwood (2005, pp. 197-222) prefers the term 'identification' to the term 'knowledge' because it encompasses the latter and refers to a wider range of activities. Saying that an entity can exist independently of its identification, implies it can exist without someone observing, knowing, and constructing it. This is an intransitive 'mode' or 'dimension' of reality (Zachariadis, Scott, & Barrett, 2013, p. 859).

Ontological Realism: Modes of reality

An entity is 'real' if it has *causal efficacy*; has an effect on behaviour and makes a difference (Harrison & Easton, 2004). For example, even if unobserved directly, the *idea* of God makes a difference to some people's actions. By this definition, 'God' becomes a 'real' entity; belief is sufficient.

- The term '**ideally real**' (idea lly) refers to *conceptual* entities like discourse, language, genres, tropes, signs, symbols and *semiotised* entities like ideas, beliefs, meanings, understandings, explanations, opinions, concepts, representations, models, theories and so forth. Discourses such as financial audits, quality control and risk management are 'generative mechanisms' (capable of influencing ideas) with 'performative potential' (capable of enactment).
- The term '**socially real**' refers to practices and states-of-affairs, and entities such as social structures (relations) that constitute organisation in general; noting that the Morphogenetic Approach applies '**social structure**' as a covering term for configurations of causal mechanisms (influences) such as rules, resources, relations, powers, positions and practices (Porpora, 1998, 2013).
- The term '**materially/physically real**' refers to entities such as oceans, weather, and the moon. They can exist independently of what individuals or communities think or say. If they are identified, they then become 'conceptually mediated material entities'.
- The term '**artefactually real**' is a synthesis of material, social and ideal entities. Computers are 'artefactually real' and so too is a tender project. The identification and application of these entities are conceptually *mediated*. At a

particular time and place, only specific interpretations will be socially/politically acceptable or understood.

- **'Magically real'** entities reference the creative arts and **'lucid dreaming'** references clarity of images or ideas present in the mind during sleep.

Conceptual mediation of ideally and socially real entities

According to Archer (1995, pp. 152, 195), there is no unmediated access to the world; access is always *mediated* and such access is rarely unconstrained. Whenever we reflect on an entity (or a state-of-affairs), our sense data is always mediated by a pre-existing stock of conceptual resources (that often includes discursive resources), which we then use to:

a) interpret

b) make sense of

c) understand what it is and its potential

d) consider what appropriate actions might be possible

Organisation theorists are primarily interested in 'socially real' phenomena, which imply 'socially real' entities.

However, to say that socially real entities are dependent on human activity tells us nothing about:

- which humans are involved or not involved
- when they are involved
- what kind of human activity is involved; so essential for the analytical historicity of retrodiction

All we know is that identification – observing, knowing, and constructing – is involved.

Which activities?

The tacit rules of the workplace do not require the activity of identification in order to be reproduced or transformed. Gender biases do not require identification for them to be operational. They would however, require other forms of activity in order to be reproduced or transformed.

Explicit rules of the workplace, such as legislative requirements, do require the activity of identification in order to be reproduced or transformed, because individuals have to recognise them and then choose to be constrained and/or enabled by them.

Where appropriate, entities can and do exist independently of our identification, but that does not mean that they exist independent of human activity. It merely means that they are not dependent on the specific activities involved with identification. For example, an aerofoil achieves lift in flight whether or not such physics is identified by a passenger.

Which humans?

The 'our' in the phrase 'entities exist independently of *our* identification' often leads to confusion because there is a difference between 'us' as social analysts and 'us' as those studied: the human actors[105]. That is, a) entities can exist independent of the actor's identification, and b) actors (physically real) can exist independent of the social analyst's identification.

Further, the 'reproductive' and 'transformative' activities of the social world require organisational agents[106] to have some idea and conception about what they are doing. There is no implication that they have the correct conception, or complete knowledge of what they are doing or why they are doing it; just some idea to reflect the *purposive* (enabling/constraining) nature of agency (see Fleetwood, 2005, pp. 197-222): a foot-soldier, for example.

Which temporal location?

Archer (1998, p. 376) expands on the analysis of the purposive nature of agency (an innate or conferred power by others) in the absence of complete knowledge:

> Whatever happens, however agents and structures [social relations] interact, it is important to be clear about one point: action is a continuous, cyclical flow over time: there are no empty spaces where nothing happens and things do not just begin and end. The starting point for an analysis of any cyclical process is always arbitrary: we have to break into the cycle at some

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[105] Actors not only reproduce roles but they have the reflexive capacity to redefine roles. That is, personal identity becomes linked to a role and in so doing, personal characteristics conform the role. The Actor follows rules and a normative expectation associated with the role, and additionally, shapes the necessary conduct. 'Actor' - variously, individual person, national states, and the organisations created by persons and states (J. W. Meyer, 2011, p. 791).

[106] Agents are directed to functional positions relative to each other. As Agents are defined as 'collectivities' (plural) they cannot have a strict identity (M. Archer, 1995, p. 256).

> point and impose an analytical starting point. The starting point here [for a Morphogenetic cycle] is some prior cycle [that provides a cultural, structural and agential inheritance for the present].

Transformation of the world into a world 'for us'

Extra-discursive entities (existents like a stone) are said to exist, but they achieve the status of 'being' or 'beings' when they are given meaning through language. The *classification* does not come first and the entity second. Classification expresses an extra-discursive state-of-affairs (a 'teacher' can be classified as such only when a pupil enters the relationship, while an autopsy will not usually reveal the occupation of a deceased teacher).

Implications for Methodology: Labour Process Theory, Agency and Structure

1. Importantly, dualistic terms like 'Agency'[107] and 'Structure'[108] are acceptable as analytical distinctions or heuristic devices. They are unlikely to be empirical metrics of reality. Fleetwood (2005, pp. 197-222) draws attention to the postmodernist concern about social analysts who (do not) create a separation between representations and what they purport to represent; that is, the concern relates to conceptual representations of reality being treated unproblematically as (actually) ***related*** to 'objects' to which they only purport to ***represent*** in the form of a human concept or construct.
2. O'Docherty & Willmott (2001, p. 464) reflect on 'labour process theory' and the *indeterminacy of human agency* (Braverman, 1974). As a consequence of such indeterminacy, O'Docherty & Willmott conclude that, 'what is needed is a self-critical and multidisciplinary exploration of the complex political, economic, psychological and existential processes that inter-articulate and combine in the practices of the labour process' (V. Brown, 2010b).
3. The distinction between *representation* of something (perhaps by analogy or metaphor) and *reality*, combined with the indeterminate nature of agency in labour process theory, reflect the epistemological challenge of 'how we can know about the world', and in this particular case, the world of high-cost and politically sensitive Defence equipment tenders and their associated industrial marketing campaigns.

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[107] powers accorded to agents
[108] positional power structures and ideational power structures

Summary points:

- The research objective is to provide a theoretical foundation (middle-range theory-building) for a framework-for-reasoning about tendering sociology.
- A field engagement with the phenomena of human experiences during industrial marketing campaigns and their episodic tender projects requires methodological pluralism: a locus of methodology that also enjoins an ethnographic perspective and social poetics.
- Meaning can be expressed through language games and through the congruence or incongruence of practice with an individual's identity.
- Social Constructionism as an epistemology – what we think can be known within the framework of an assumed reality – considers that all knowledge and therefore all meaningful reality as such, reflects human practices, and is constructed in and out of social *interaction* between human beings and their world.
- The broad aim of the Social Constructionist approach is to move attention away from the *causes* of *objective social conditions* (but assertions made about such conditions remain important) and on to the *processes* by which members of a society define those conditions as problems in the presence of potential solutions.
- A viable theoretical perspective enjoins the epistemology of Constructionism with ontological Realism, Relativism and Nominalism.
- The Morphogenetic Approach offers an approach to reasoning about such social interaction and underlying motivations of power. Its focus on social interaction implies that meaning is not discovered but constructed. Such constructions might be available through 'retrodiction' – analytical histories of emergence: the *narrative account* of their processual and dynamic character

Next chapter

While broadly social constructionist in direction, the next chapter focuses progressively on the essential 'phenomenological intentionality' of a tender enterprise within overarching process philosophy. That is, aside from a tender's technical requirements, process research can guide an inquiry into what equivocal politicians 'really want', even they might not be able to articulate it themselves.

Chapter 5
Epistemology:
Social Constructionism

The previous chapter embraced methodological pluralism as essential for inquiring into the social world. For example, in Common Law countries, a judicial hearing is usually presented with at least two reconstructed understandings; and methodological pluralism might be required to appreciate such different perspectives (St.Pierre, 2011, p. 611).

Easterby-Smith et al.(2012, p. 38) illustrate the idea of methodological pluralism:

> Sherlock Holmes relies on detailed observation of physical evidence, and a process of logical deduction about the circumstances of the crime.
> Miss Marple acts as an insider to the scene of the crime and makes use of the intuitive feel about the characters involved.
>
> Sherlock Holmes therefore represents the *positivist side*, and
> Miss Marple represents the *constructionist*[109]*side*.

Scholars and observers of social research design will recognise the intentions of the above authors. Indeed Lincoln, et al. (2011, pp. 102-115) in their *The Sage Handbook of Qualitative Research*, place *positivism* and *constructivism* as 'alternative inquiry paradigms'. Further, they advise that researchers might apply realist 'hard science' (positivism) in their social inquiries; alternatively, they might seek to gain understanding by interpreting informants' perceptions (constructivism). The authors characterise 'constructivism' and 'interpretivism'[110] as synonyms.

The literature can be both inconsistent and nuanced with respect to the respective social research design statements above; and this can impact on deciding what kinds of knowledge are possible. Miss Marple 'represents the *constructionist* side'[111] while '*constructivism*' is an alternative inquiry paradigm.

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[109] her construction of social reality

[110] **Interpretivism**: Those approaches that accord with *Vestehen* as a method of the human sciences that assumes that the meaning of human action is inherent in that action and that the task of the inquirer is to unearth that meaning (Schwandt, 2007, p. 160). **Interpretive Phenomenological Analysis**: Ways particular individuals experience the world in their particular contexts. It deals with individuals' personal perceptions or accounts of phenomena (Dunworth, 2008, p. 115).

[111] the community of like-minded researchers.

The purpose of this chapter is to provide clarity to terminology and ideas that are foundational for exploring the social construction of institutional theory (with a phenomenological constitution). Additionally, the chapter provides a theoretical framework for later chapters reflecting on the nature of change[112] in organisational institutionalism.

Terminology explained

Concepts

At the simplest level, there are theoretical ideas or more simply, concepts that function as analytical tools. Concepts point the inquirer in a general direction but do not give a very specific set of instructions for what to see (Schwandt, 2007, p. 292).

Paradigms

A paradigm is a basic set of beliefs that guide action. Paradigms deal with first principles or ultimates. They are human constructions. They define the worldview of the researcher-as-interpretive bricoleur[113]. These beliefs can never be established in terms of their ultimate truthfulness (Denzin & Lincoln, 2011d, p. 91). The established paradigms are educative, not prescriptive (Crotty, 1998, p. 216).

According to (Creswell, 2010, p. 55), besides defining a worldview, paradigms can:

- be seen as epistemologies incorporating ideas from the philosophy of science such as ontology, methodology, and epistemology; with some overlap with 'theoretical perspective' as described below,
- be viewed as typical solutions to problems, and
- represent shared beliefs within a research field (community)

(Theoretical) Perspectives, Frameworks or Orientations

Perspectives, in contrast, are not as solidified nor as well unified as paradigms, although a perspective may share many elements with a paradigm, for example, a common set of methodological assumptions or a particular epistemology. The perspective offers a

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[112] the Morphogenetic Approach to change (M. Archer, 2013)

[113] **Bricoleur**: Qualitative inquiry comprises a variety of methodological and philosophical ideas drawn from traditions of interpretivism, phenomenology, hermeneutics, ethnomethodology, ethnography, semiotics, cultural studies, and so forth. Given this diversity in intellectual origins, strategies, methods, and practices, it becomes difficult to define in any precise way who the qualitative inquirer is and what it is that such an inquirer does; hence the use of the term *bricolage* to reflect the multiple methodologies used in a qualitative inquiry (Schwandt, 2007, pp. 24-26).

way(s) of viewing the world and making sense of it. The different ways of viewing the world, shape different ways of reaching that world (Denzin & Lincoln, 2011d, p. 91).

'Theoretical perspective' is taken to mean the philosophical stance lying behind a methodology. The theoretical perspective provides a context for the research process involved and a basis for its logic and its criteria (Crotty, 1998, p. 66).

Perspectives – a theoretical framework – are social theories that explain the distinguishing features of social and cultural life, and thus, they serve as approaches to identifying, framing, and solving problems, and understanding and explaining social reality (Schwandt, 2007, p. 292).

Ackroyd explains why a theoretical perspective might contain multiple ontological positions (2004, p. 161), (see also: Aaltonen, 2009).

> As constructionists and relativists[114] stress, it is impossible for us to gain access to the world in a way that is not mediated by our conceptions.

Substantive Theories

Against 'theoretical perspectives', substantive theories are about some specific social or behavioural phenomenon – for example, a social constructionist theory of leadership with respect to perceived ambiguity within a tender project. Substantive theories can develop into formal theories; the difference is one of the comprehensiveness or scope of their explanation. Substantive theories hover low over the data (Schwandt, 2007, p. 292).

Realism

Realism is based on the belief that a reality exists that is independent of human thoughts and beliefs. In the social sciences, this can be seen as indicating that there are large-scale social forces and (institutional) processes that affect people without them necessarily being aware of the existence of such influences on their interpretations and behaviours.

Social objects or phenomena, that are external to or independent of individuals, will affect the way in which these people perceive their world.

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[114] **Relativistic ontology**: Realities exist in the form of multiple mental constructions, socially and experientially based, local and specific, dependent for their form and content on the persons who hold them. It is founded on individual personal reality - the way we think life is and the part we play in it. It is a metaphysics that embraces relativity. It assumes that reality as we know it is constructed intersubjectively through the meanings and understandings developed socially and experientially (Denzin & Lincoln, 2011d, p. 92).

While realism shares some philosophical aspects with positivism that is related to the external objective nature of some aspects of society, it also recognises that people themselves are not objects to be studied in the style of natural science. Realism, as applied to the study of human subjects, recognises the importance of understanding people's socially constructed interpretations and meanings (or subjective reality) within the context of seeking to understand broader social forces (structures or processes) that influence, and perhaps constrain, the nature of people's views and behaviours (Saunders, Lewis, & Thornhill, 2003, p. 84).

Analytical Realism

Analytic realism is aligned with philosophical realism; the idea that there is a real world within which we act and interact, that individuals and groups create meaning in this world, and that while our theories, concepts, and perspectives may approach some kind of valid understanding, they cannot and do not exhaust the phenomena of our interest.

All theories, concepts, and findings are grounded in values and perspectives; all knowledge is contextual and partial; and other conceptual schemas and perspectives are always possible. Analytic realism is based on the view that the social world is an interpreted world, not a literal world, always under symbolic construction. We can apply this perspective to understand how situations in everyday life are informed by social contexts and uses of evidence (Altheide & Johnson, 2011, p. 581).

Analytic realism along with other variants of realism share certain basic ideas: that human social life is meaningful, and that it is essential to take these meanings into account in our explanations, concepts, and theories; furthermore, to grasp the importance of the values, emotions, beliefs, and other meanings of cultural members, it is imperative to embrace an interpretivist approach in our scientific and theoretical work (Altheide & Johnson, 2011, p. 582).

Interpretive Practice

The idea of interpretive practice considers both the 'hows' and the 'whats' of social reality. Its empirical interest relates to both how people methodically construct their experiences and their worlds (constructivism), and what are the contextual configurations of meaning and institutional life that inform and shape this reality-constituting activity (constructionism): a grounded perspective (Galvin, 2014; Holstein & Gubrium, 2011, p. 342).

Meaning

The generation of meaning is always a social, rather than an individual process, because to engage in meaning-making, people draw from meanings offered by their culture, which is embedded in historically-grounded social structures (Ospina & Sorenson, 2006, p. 189).

People not only interact with their environment; they also seek to make sense of it through their interpretations of events and the meanings that they draw from them. In turn, their own actions may be seen as being meaningful in the context of these socially constructed interpretations and meanings.

The interpretivist seeks to understand the subjective reality of those they study, in order to make sense of and understand their motives, actions and intensions in a way that is meaningful for the research participants (Saunders et al., 2003, p. 84).

Constructivism

Although a somewhat elusive term, constructivism has a different meaning in different discourses. Its broad philosophical heritage traces back to the Greek philosopher Heraclitus (everything flows) (Wikipedia, 2014). Conceptually, constructivism suggests that we do not 'discover knowledge' (Sherlock Holmes), but rather, we make it (Miss Marple).

Largely as a reaction to the application of positivism to the social sciences, Lincoln & Guba (1985) published *Naturalistic Inquiry*. In 1989, they renamed their approach *Constructivist* (Schwandt, 2007, p. 206).

- **Constructivism** focuses on meaning-making of the social and psychological worlds through individual cognitive processes; how people methodically construct their (own) experiences and their worlds (Young & Collin, 2004).
- In contrast, **constructionism** emphasises that the social and psychological worlds are *made real* (constructed) through social processes and interaction; the *contextual* configurations of meaning and institutional life that inform and shape reality-constituting activity. The focus is on the 'hows' and the 'whats' of the social construction process; a view of how they operate on the ground (Young & Collin, 2004).

Socially constructed meaning

Lineaments of constructivism

Two strands are relevant for this and later discussions on institutionalism.

- **Constructivism(s)**[115]**:** We invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience (Schwandt, 2007, p. 37). Meaning is constructed in a social, historical, and cultural context, through joint action and discourse in which we form relationships and community (Young & Collin, 2004).
    - **Discourse:** reflects the way we talk, think and act. Organisational and institutional fields (communities of practice) are characterised by their dominant discourses; comprising, *inter alia*, a disposition discourse, a contextualising discourse, a discourse of subjectivity and narrative, and a process discourse (Young & Collin, 2004).
    - **(Psychological) constructivism**: focuses a) on the individual and acts of *cognition*, and b) on human knowledge and meaning-making that cannot relate to matters beyond personal experience (Andrews, 1 June 2012; Crotty, 1998, p. 58; Holstein & Gubrium, 2011, p. 342).
      Importantly, it engages with how people interpret or construct some issue in specific linguistic, social, and historical contexts (Schwandt, 2007, p. 39).
    - **(Social) constructivism**: focuses on an individual's learning [perceptions of behaviour] that takes place because of their interactions in a group.
    - **(Cultural) constructivism**: asserts that in combination, knowledge and reality are products of their cultural context. This means that two independent cultures will likely form different observational methodologies. Some cultures rely on objects for scientific descriptions while others rely on events for scientific descriptions. These are two distinct ways of constructing reality based on external artefacts.
    - **(Social) constructionism (still evolving)**: The 'social' in social constructionism is about the mode of meaning generation and not about

[115] From the outset, potential confusion exists as 'constructivism' is both a major term and a minor term in the above ontology. Further, Spender (2008, p. 56) suggests that, 'The literature variable refers to social constructivism and social constructionism'.

the kind of object that has meaning. Our culture teaches us how to see something, and in some cases, whether to see it; that is, culture has a hold on us.

- Social constructionism focuses on social *processes* and social interaction. The mission is to understand *how* social actors recognise, produce, and reproduce social actions and share an understanding of specific life circumstances (Schwandt, 2007, p. 39).
    - The focus is on the *collective* generation and transmission of meaning (Crotty, 1998, p. 58). In concert with history, culture, and other broad factors, individuals acting together in large and small groups jointly construct the world in which they participate (Young & Collin, 2004).
    - The negotiation of meaning is constructed through language in context. That is, meaning construction is a social process taking place through joint action.
    - Constructionism involves the creation of a product to show learning. Truth, or meaning, and therefore meaningful reality, comes into existence in and out of our engagement with the realities in our world and its institutions.
    - This is the same social interaction central to the Morphogenetic Approach (M. Archer, 1995, pp. 90-91, 193, 305, 309, 323).
- According to constructionism, we do not create meaning, but we construct meaning. We work with objects in the ever-present world. It is important to distinguish theory consistent with experienced reality from theory that is not. Objectivity and subjectivity need to be present concurrently. Construction does precisely this.
- However, people may place different interpretation on the situations in which they find themselves. These different interpretations are likely to affect their actions and the nature of their social interaction with others (Saunders et al., 2003, p. 84).

- Social constructionism supports the idea that people can indeed be *agents* of change (Burr, 2015). It is also concerned with how the person, in constructing self, also constructs society; the same idea being reflected in morphogenetic agential and social elaboration (M. Archer, 1995, pp. 248, 294-344).
    - People are likely to share interpretations of their socially constructed environment. This may point to the existence of commonly experienced stimuli in terms of generating a shared interpretation. Such stimuli may or may not be explicitly evident to those in a given context. Nevertheless, these stimuli will exert an influence on people as they socially construct their world (Saunders et al., 2003, p. 84).
    - Central to constructionism is that there is no true or valid interpretation. There are useful interpretations. In contrast, subjectivism[116] conjures up a series of meanings and *just imposes them*. Constructivism is no more than meaning.
    - Constructionism is not subjectivism. Constructionism is curiosity, not conceit.
- Social constructionism supplies the *contextual* configurations of meaning and institutional life that inform and shape reality-constituting activity. The focus is on the 'hows' and the 'whats' of the social construction process; a grounded view of process (Holstein & Gubrium, 2011, p. 342).

Constructivists and constructivism

Denzin & Lincoln (2011d, p. 92) indicate that:

- constructiv*ists* value transactional knowledge[117]
    - constructivism builds on anti-foundational arguments[118]

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[116] **Subjectivism**: (1) a doctrine that holds that all judgments (claims, interpretations, and so forth) are nothing but reports of an individual's feelings, attitudes, beliefs, etc., which is comparable to **relativism** where any interpretation is as good as any other; (2) a doctrine that holds that subjectivity is the ultimate reality (Schwandt, 2007, p. 279).

[117] In the context of Morphogenesis, actors deal creatively with transactional knowledge (M. Archer, 1995, p. 186).

- constructivism encourages experiments and multi-voiced texts
- constructivism connects action to praxis[119]

Phenomenology reflected in Constructivism and Constructionism

Crotty (1998, p. 79) introduces the role of phenomenology in contrasting the difference between constructivism and constructionism.

- **Phenomenology** requires us to engage with phenomena in our world and make sense of them directly and immediately. Phenomenology, Crotty explains, requires us to 'bracket-off', set-aside or excise the enculturated meaning, and let the experience of phenomena speak to us at first hand.[120] That is, the direct experience of the objects before we start thinking about them, interpreting them or attributing any meaning to them. In so doing, *social constructionism has a phenomenological component*.
  Understanding and interpretation of the meaning of phenomena is obtained from the *joint* [social] construction/reconstruction of meaning of lived experience (Lincoln et al., 2011, p. 106).
- **Constructivism (individual cognition)** describes the individual cognitively engaged with objects in the world and making sense of them.
- **Social Constructionism (social process)** denies the constructivist view that describes the individual's cognitive engagement with objects in the world and making sense of them. That is not what actually happens, at least in the first instance. Instead, an individual is introduced directly to a whole world of meaning. This mélange of cultures and sub-cultures into which we are born provides us with meanings. These meanings are taught and we learn in a complex and subtle process of enculturation (socialisation), that by and large shape our thinking and behaviour. Our cultural heritage can therefore be seen as pre-empting the task of meaning-making so that, for the most part, we simply do not do what constructivism describes us as doing; that is, engage with objects in the world and make sense of them (Crotty, 1998, p. 79).

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[118] Epistemologies that do not assume the possibility and necessity of the ultimate grounding of knowledge claims (Schwandt, 2007, p. 120).

[119] **Praxis**: A form of activity that has to do with the conduct of one's life and affairs as a member of society. It is about doing the right thing and doing it well in interactions with fellow humans (Bernstein, 1983; Bent Flyvbjerg et al., 2012b; Schwandt, 2007, p. 242).

[120] A good working example is the impressions gained during the first week in a new job, after which this 'new' reality morphs into a taken-for-granted character.

Knowledge and meaning are historically and culturally constructed through social processes and action (Young & Collin, 2004). Meaning is not discovered in the world, but it is constructed from it (Ospina & Sorenson, 2006, p. 189).

- **The social construction of phenomena against social constructionism**
    - **Social constructionism (a process)**: As human beings, we do not respond to physical objects and events themselves, but to their meaning. That is why the approach is called 'social constructionism' because it aims to account for the ways in which *phenomena* are socially constructed. Such constructions or representations include: perceptions; thoughts; language; beliefs; desires, and artefacts (anonymous, 25 February 2015).
    - **Social construction (a product of social constructionism)**: The essence of social construction is to:
        - identify and understand particular economic, social, political and cultural influences,
        - identify the role of actors in 'promoting order': a *structuring of influences*; an idea dominant in the Morphogenetic Approach with its analytical dualism of positional and ideational power structures (M. Archer, 1995, p. 62).
        - '[Social] construction is a view that people construct their own history – not under circumstances chosen by them, but under circumstances they have the *power* to change [agency]. Opportunity, ultimately, is what people make of it.' (Goodwin & Jasper, 2003) (emphasis added)
            - Clegg et al.(2014, p. 15) add that the nature of things or their social construction is nothing other than what skilled actors do with the agency accorded to them via [inter alia] social networks of power relations. No context stands outside of power; power itself has agency.
        - There is no doubt that the physical character of the object in question (the presence of a warship for example) does play a role in shaping understanding and potential responses; in parallel however, there is sociology of people and their social structures (power relations).

- Intellectual *construction* is perhaps easiest grasped and least contentious, in a field such as literature where the world is described imaginatively, and words 'construct' images and senses of things: a magical reality (Spender, 2008, p. 56) in its own right. Perhaps less easily grasped is the idea that social phenomena also have a reality – the *ideally real* entities[121] – especially the social (relational) structures (*socially real entities*) that constitute organisations. These socially real entities do involve actual people who are the subject of category classification (see Fleetwood, 2005).

- Social construction does not mean the construction of social reality, but rather, the social construction of reality (Crotty, 1998, p. 54). We tend to take the sense we make of things to be the way things are; from our own opinions we create our own facts. These facts are supplemented with progressive layers of theoretical interpretation. In this way, we become increasingly removed from realties and the resulting sedimentation of cultural meanings means that we live on top of a culture that has already become synthetic (Crotty, 1998, p. 58).

- *Ideally real* (idea lly real) entities, such as discourses (dominant or incidental) during a tendering campaign and its incidental tender project, are very much about perceptions of risk. Even the idea of a 'dominating discourse' is a means of managing (containing) the ambit of risk. Such perceptions are not 'given' or systematic; and because they are dealing with the future (divination), the ideas are synthesised (constructed) in the minds of individuals and influenced by *social interaction*; an essential element of the Morphogenetic Approach (see M. Archer, 1998). The tendering campaign and the instance of a tender project are manifestly social in character.
- The notion of 'ideas' and even 'things' in our social world as being 'socially constructed' is also available to frames-of-

[121] An entity (or state-of-affairs) is real if it has 'causal efficacy' by making a difference. It can shape ideas and behaviours (Fleetwood, 2005).

reference or frameworks-for-reasoning; particularly in sociology and especially in the case of tendering sociology (see Nelkin, 1989). That is, reality itself is a function of a particular conceptual scheme or framework that might include culture, language game, paradigm, and so forth.

- The distinct possibility exists for different conceptual schemes to deliver incommensurable understandings of experience and reality of a phenomenon (Schwandt, 2007, p. 40).

A Phenomenological Sociology

Robin Holt (2008b, pp. 152-153) offers an accessible insight into the idea and prospect of phenomenology. By way of example, he considers a researcher's hypothetical inquiry into the human *intentional*[122] interest in the idea (research object) of 'warmth' in winter.

This would, the researcher suggests, require the identification of sources of domestic heating, followed by generalisations concerning the properties and classification of these sources.

While the researcher's awareness is rooted in 'intentional acts of interest', such acts are framed by established modes of understanding. Using Western sensibilities of a market economy, the need for energy to provide warmth might be considered in terms of a commodity rather than, for example, an emblem of divine power. In so doing, specific actions related to the object of 'warmth' are likely to involve: researching options; purchasing insulation; heating appliances; fittings; fixtures and forms of heat generation (if appropriate).

The researcher is imbued in this narrative, both spatially and temporally with experience about the project at hand. At no stage is the researcher a phenomenological (distinct) entity capable of excising all such experience.

Intentionality ('reaching out')

While the economics and technology (and marketing) of heating 'flows' ('reaches out') to the researcher, the researcher 'reaches out' (back) on to the world, eschewing in this case, heating floor vents for the aesthetics of a log fire. In turn, the world responds

[122] ...an action can be informed not so much by factors present in the source from which it issues, as by the [social] context into which it is directed (M. Archer, 1995, p. 128; Galvin, 2014)

(hopefully) with a less commoditised and more personalised relationship dealing with needs and wants. Several cycles of bilateral 'reaching out' might be entertained; otherwise characterised as negotiating.

This phenomenological approach offers a more basic appreciation of what can be meaningfully felt, or intuited; to trace the rhythms of how the world opens itself out to people and how people open out to the world.

In short, phenomenology is a method of explaining meaning devoid of abstract constructs, legacies or influences (power); rather its focus is on people who are experiencing phenomena with direct unmediated awareness.

According to Holt (2008b, p. 152) any adequate theory of meaning, including that of science itself, has to account for the nature of consciousness. It is only by such consciousness – *intentional acts* of 'reaching out' – that a world is brought into life amidst the hurly-burly of experience.

Constructionism as a mirror of the phenomenological concept of 'conscious intentionality' (reaching out)

The basic message of intentionality[123] is that when the mind becomes conscious of something, when it 'knows' something, it reaches out to, and into that object. That is, subject (researcher) and object (warmth), distinguishable as they are, are always united. This interaction gives rise to meaning and making sense of reality (Crotty, 1998, p. 44).

Matters of consciousness experience

In addressing this *intentional act*, Husserl (1931/1962) argues that to fully understand meaning requires restoration of the original influence on a person; the influence of the above researcher's desire for a wood fire aesthetic. It is this condition of intentionality that is addressed by phenomenology, regardless of whether, for example, the heating installation actually occurred.

Therefore, meaning is the meaning given to objects (heating) by those (the researcher) whose intentional states are associated with that object in what Husserl calls 'meaning acts'. For example, this research project focuses on a collaboration of organisations that form a tender enterprise; a proto-organisation undergoing institutionalisation in order to engender necessary political legitimacy and appropriateness[124] ('warmth' is also engendered).

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[123] **Intentionality**: preferentiality, relatedness, directedness

[124] The action/intension is 'appropriate' to its circumstances.

Later chapters will discuss how the evolving institutional legitimacy of this proto-organisation is experienced externally by key stakeholders through specific episodes of thinking, perceiving, believing, and so forth (B. Smith & Smith, 1995; K. Smith & Hancock, 1995). Each of these stakeholders conduct their 'intentional acts' of meaning making (reaching out) with their different ways of suppressing ('bracket-off') their portfolio of personal experiences. The outcome is a personal sense-giving consciousness. Importantly, what has meaning arises from the *complicity of people* (for example, the researcher, and the lifeworld). In so doing, phenomenologists focus on the careful description of ordinary conscious experience of everyday life (the lifeworld).

After Husserl (above), Schutz (1967) sought to explain how the lifeworld is actually produced and experienced by individuals, given the acceptance of the existence of the taken-for-granted everyday world and its intersubjective social character. Schutz was influenced by the social constructionist views of Berger & Luckmann's (1966), *The Social Construction of Reality*, as well as the development of *ethnomethodology* (Schwandt, 2007, p. 226).

Further, according to Schwandt (2007, p. 226), phenomenology in the context of qualitative research, aims to identify and describe the subjective experiences of respondents from their point of view. However, there are two variants:

- **Hermeneutic phenomenology (Gadamer, 1989)**: a focus on the collective or intersubjective features of moral-political life in the context of language and the disposition of communication
- **Existential phenomenology**: the lifeworld as per Schutz and Husserl above

Matters of Ontology and Epistemology

Realism[125] is about matters of ontology.

Epistemology is concerned with providing a philosophical grounding for deciding what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate (Young & Collin, 2004).

[125] **Metaphysical realism**: the doctrine that the world exists independently of consciousness. It is related to the epistemological doctrine of *meaning realism* that holds that meaning exists in objects, including human actions, events, etc., independent of whether we as agents are aware of such objects (Schwandt, 2007, p. 257). The prospects for realist perspectives in management and organisation studies are inextricably bound with the presence of 'trust' in the context of shared knowledge (Hunt, 2008, p. 183).

Social Constructionism, as described by Berger & Luckmann (1966), makes no ontological claims; confining itself to the social construction of knowledge and making *epistemological* claims.

Constructionism in epistemology is perfectly compatible with realism in ontology (Crotty, 1998, p. 63).

Social constructionism accepts that there is an objective reality. With this perspective, it is concerned with how knowledge is constructed and understood: epistemology.

Andrews (1 June 2012), citing Burningham & Cooper (May 1999), makes the point that social constructionism accepts the existence of ontological reality but maintains that the meaning of reality is socially constructed (epistemology).

However, social construction is at once realist and relativist[126] – the doctrine that knowledge is relative and not absolute. What is 'taken-for-granted' is just the sense we make of those ideas. These ideas reflect historically and culturally effected interpretations, rather than eternal truths of some kind. At different times and in different places, there have been, and are, divergent interpretations of the same phenomena (Crotty, 1998, p. 63).

Objectivist ontology

Epistemological constructionism rejects the objectivist (positivist) view of reality. An objectivist epistemology holds that meaning, and therefore meaningful reality, exists as such apart from the operation of any human consciousness. A constructionist epistemology invokes the idea that there is no truth awaiting our discovery (objectivism). Rather, truth (meaning and power) comes into existence in and out of our engagement with the realities of our world. There is no meaning without a mind. Meaning is not discovered, but constructed. Different people might construct meaning in different ways, even in relation to the same phenomenon.

Without an *objectivist* epistemology, *positivism* (a theoretical perspective) would not be positivism. So too, *constructionism* and *phenomenology* are tightly intertwined; the distinction being at the level of methods (Crotty, 1998, p. 12).

Sherlock Holmes and Miss Marple revisited

In bringing these threads together, I return to Sherlock Holmes and Miss Marple as presented by Easterby-Smith et al.(2012, p. 38).

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[126] The multi-ontology sense-making of Aaltonen (2009)

> Sherlock Holmes therefore represents the *positivist side*, and
> Miss Marple represents the *constructionist side* (emphasis added).

According to Burgoyne (2008, p. 65), positivism and constructivism / constructionism take their positions from epistemology. Arguably, this statement is correct.

- **For positivism,** the world can be understood on the basis of the observation of factual data: Sherlock Holmes
- **For constructivism/constructionism,** the world can be understood through the meanings attributed to it and generated within it: Miss Marple.

While the sleuths above may be on opposite sides, they are *not* of the same metaphysical character.

- Positivism is a theoretical perspective ('what is' and 'what it means to know')
- Constructionism is epistemology (what we think can be known about the world and how such knowledge might be obtained)

The real distinction is between the *theoretical perspectives* of:

- **Positivism**: comprising ontology of Naïve Realism and epistemology of Objectivism, and
- **Interpretivism** comprising ontological Realism and Relativism and epistemological Constructionism.

The **interpretivist approach** looks for culturally derived and historically situated interpretations of the social life-world. The difference between positivism and interpretivism is between *explanation* based on causality (*Erklären*) and *understanding* needed in the human and social sciences (*Verstehen*). *Verstehen* is a method of the human sciences that assumes the meaning of human action is inherent in that action, and the task of the inquirer is to unearth that meaning (Schwandt, 2007, p. 160).

Matters of methodology

Interpretive approaches rely heavily on [anti] naturalistic methods. These methods ensure an adequate dialogue between the researchers and those with whom they interact in order to collaboratively construct a meaningful reality (Lincoln et al., 2011, p. 105).

Crotty (1998, p. 71) explains that the *Verstehen* or *interpretivist* approach useful to human inquiry can be found in three historical streams: hermeneutics; phenomenology, and symbolic interactionism. Symbolic interactionism and phenomenology contrast in their attitude towards culture as our inherited meaning system.

- **Symbolic interactionism** explores cultural understandings as *the meaningful matrix that guides our lives*.
- **Phenomenology** treats culture with caution and suspicion (and so does Archer's Morphogenetic Approach (M. Archer, 1995, pp. 169, 193, 309, 323)). Our culture may be enabling but, paradoxically, it is also crippling.

Of vital importance for this research project, Crotty (1998, p. 44) adds further insight by advising that:

> Constructionism mirrors the phenomenological concept of *intentionality*; about 'reaching out' for a human response. (emphasis added)

Crotty (1998, p. 151) explains that the 'intentionality of consciousness' means that consciousness is never a mere reflection of material reality, but is a reflection *on* material reality. Consciousness is already an active intervention (reaching out) into reality (Freire, 1972, p. 99).

Interpretive Phenomenological Analysis (IPA): a technique for exploring the intentionality of consciousness

Dunworth (2008, pp. 115-116) explains that IPA deals with individual personal perceptions or accounts of phenomena rather than striving to arrive at objective statements regarding these phenomena. It is an interpretive endeavour during which the researcher attempts to get close to the participant's personal world: an insider perspective. At the same time, the researcher's own perceptions and concepts come into play in making sense of other peoples' accounts of their experience. The concern is with the 'how' rather than the 'why' of experience. It is a particularly useful approach when examining process and change - of direct relevance for the Morphogenetic Approach and progressive organisational institutionalism. The emphasis is on recalled participant accounts that, at best can, lead to middle-range theory and its theory-building purpose (Gregor, 2006, p. 616).

Research methodology: a multidimensional approach

Niglas (2010) argues that instead of classifying research methodology into a small number of clearly separate paradigms or movements [theoretical perspectives], it is more appropriate and helpful to conceptualise methodology as a multidimensional set of continua.

'In the real world, the philosophical positions of most investigators can be most appropriately represented by a number of philosophical continua' (Niglas (2010, p. 219) citing Teddlie & Tashakkori (2009, p. 94)).

Process Philosophy and Process Research

Process Philosophy

Process Philosophy emphasises the changing and developmental nature of *managing* as a process in contrast to the idea of management (Dervin, 2003d; Weber & Glynn, 2006; K.E. Weick, 1969/1979) . The concrete reality of 'things' is actually characterised by processes of change, movement and transformation. What is real is change (a process) itself. This is the ontology of Heraclitus, whose basic principle was that 'everything flows'. In opposition is the Parmenidian view that the nature of existence is one of permanence and reproduction (Robert Chia, 2003). Each step of sense-making engages with the past presentation of a phenomenon, its transformed disposition, and its prospects (Wood, 2008, p. 171). The methodology of the Morphogenetic Approach guides the retrospective modelling of such processes (M. Archer, 1995).

Process Research

The aim of process research is to develop an understanding of 'how' and 'why' phenomena evolve over time. Process theories provide explanations in terms of patterns of events leading to an outcome over time (M. Archer, 16 June 2014). Process data tend to be eclectic, drawing in less concrete phenomena, such as changing relationships, thoughts, feelings and interpretations (Ann Langley, 2008, p. 174).

Research question

It is now possible to compose a research question in the context of the supporting theoretical perspectives above:

> *While conscious of the need to secure political legitimacy and appropriateness, how does a tender*[127] *enterprise reach out (signalling intentionality) and engage with its world of entangled states in order to attract politicly-valued institutional standing?*

[127] In contrast to competitive tendering, the Australian Department of Defence has introduced 'Commercial Evaluation' that offers greater political control (Pittaway, December 5, 2015, quoting Dunk).

A digest of social constructionism in context

This chapter has canvassed a range of philosophical positions, together with ontological and epistemological perspectives essential for institutional theory-building. The rationale (discussed later) comes from the need for a tender enterprise of collaborating organisations to morph into a proto-organisation that undergoes proto-institutionalisation from a political perspective. That is, the proto-organisation seeks political assent as appropriate and legitimate. There are no absolutes, but there are tendencies in organisational institutionalism that have a greater or lesser temporal political value. All parties are plying their social constructions and this chapter explores the theoretical lineaments of social constructionism from high level philosophical positions to the elements of multiple methods. A sequence of illustrations is preceded by explanatory text.

Philosophical positions that underlie the designs of management research

The origins of Figure 5.1 (following) come from (Niglas, 2004; 2010, p. 225) and (Teddlie & Tashakkori, 2009, p. 79). Based on this heroic undertaking, the current research inquiry has added some explanatory notes together with overlays that locate this research inquiry. Ideally, this would be an *n*-dimensional model. The theoretical perspectives of 'positivism' and 'interpretivism' are proximate to their informing epistemologies.

The 'guiding prism' in Figure 5.1 is based on 'pragmatism'; not a philosophical position among others, but a set of philosophical tools that can be used to address problems – not the least being problems created by other philosophical positions. According to (Teddlie & Tashakkori (2010, pp. 15-16), engagement in philosophical activity should be done in order to address problems; not to build systems.

Brandi & Elkjaer (2008, p. 169) explain that in pragmatism, there are no *a priori* propositions or categories and no universal cognitive structures or mental models that shape knowledge. Any meaning derives from ongoing lived experience in which humans are at work with their environments. Rather than delimit theory and action, pragmatism regards theories: a) as tools or instruments in the human endeavour to cope with situations and events in life, and b) necessary to construct meaning by applying concepts in an experimental way.
Pragmatism emphasises a fallibilistic epistemology (awaiting a better explanation) in which experience develops through action and thinking in the process of inquiry.

In Part A of this 'locus of epistemology', Lincoln, Lynham, & Guber (2011, pp. 116, 717) address the issue of paradigmatic incommensurability under the heading of *Accommodation, Commensurability, and Cumulation*. The authors argue that:

> At the paradigmatic or philosophical level, commensurability between positivist and constructionist worldviews is not possible, but that within each paradigm, mixed methodologies may make perfectly good sense.

The idea of mixed methodologies is clearly well supported, and the containing thick broken lines (with implied fuzzy edges) in Figure 5.1, indicate the breadth of options for this research project.

Table 5.1: Assumptions underlying an interpretivist approach

To the research question, 'What is going here?' or 'What is the game?', the answer in this instance appears to be characterised as 'phenomenological intentionality' (see Figure 5.1). In terms of social/management research, how might the case-specific lineaments of phenomenological intentionality be investigated and given 'theoretical character'? Whatever happens, the theoretical character is an outcome of the epistemological position taken; and when this is combined with an ontological perspective, an overarching 'theoretical perspective' guides, focuses or contains the research process. In turn, a proposed investigative technique must find its purpose underwritten by this theoretical perspective.

However, there is a bilateral process at play. Given the availability of research resources – time, access, researcher capability, funds, and so forth – only particular methods and techniques come to the research. In turn, only specific aspects of selected methodologies will be invoked. The resulting advancement of epistemology will be partial and tentative. In so doing, any truth claims (ontology) must be equally circumspect. This is the theory-building domain of middle-range theory and the caveat on constructionist research designs.

Table 5.2: Constructionist research designs linked to ontological realism, relativism and nominalism

Aaltonen (2007b, 2007d, 2009) explores the case for multi-ontology sense-making and a framework for strategic reasoning. Epistemological constructionism enjoins ontological realism and relativism (Crotty, 1998, p. 11). However, in all aspects of life, phenomena are identified with socially constructed tropes of terminology or characterisation (Czarniawska, 2011, pp. 773, citing Latour & Woolgar, 1979/1986).

This view reflects ontology of nominalism (M. Easterby-Smith et al., 2012, pp. 21-25) and it provides an ontological founding for the research methods in this project, where such characterisations are in the form of watchwords or diegesis that are collectively characterised as 'Sense-Making Items' (SMIs).

Table 5.3 and Table 5.4: Epistemological and methodological implications for social research design

Both Table 5.3 and Table 5.4 enjoin Sherlock Holmes and Miss Marple with their contrasting epistemologies of objectivism and social constructionism. While this inquiry retains Miss Marple's social constructionist view about what can be known about the world of politicly-sensitive Defence tenders (epistemology), the relevance of such an approach to investigation becomes apparent in the tables as they contrast Sherlock Holmes and his epistemology of objectivism. This does not appear to impair either party from appropriating methods. Miss Marple might use descriptive statistics and Sherlock Holmes might record changes in an individual's demeanour over time.

Under objectivism, meaning is discovered (Holmes), while under constructionism (Marple), meaning is constructed in and out of interaction between human beings and their world, and developed and transmitted within essentially a social context (Crotty, 1998, p. 42).

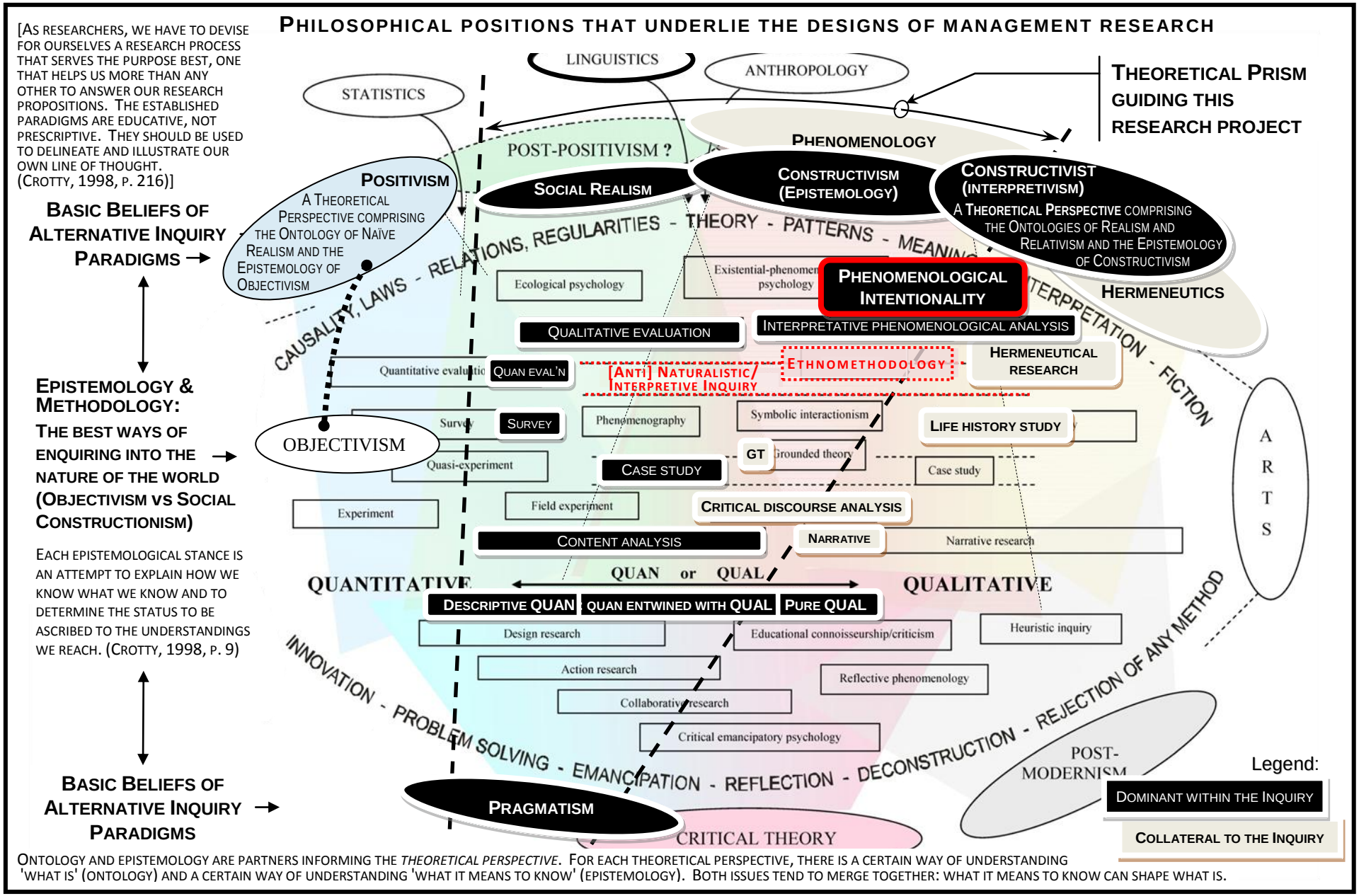

Figure 5.1: Adapted and enlarged from Niglas (2004) Model of Research Methodology; see also (Crotty, 1998; M. Easterby-Smith, Thorpe, & Jackson, 2012, p. 17; Lincoln, Lynham, & Guber, 2011, pp. 102-115). Explanations for all categories can be found in Schwandt (2007) and Thorpe & Holt (2008a).

CONSTRUCTIVIST PARADIGM: THE INTERPRETIVIST TRADITION ASSUMES THAT THE MEANING OF HUMAN ACTION IS INHERENT IN THAT ACTION, AND THE TASK OF THE INQUIRER IS TO UNEARTH THAT MEANING.

EPISTEMOLOGICAL POSITION	THEORETICAL PERSPECTIVE	METHODOLOGY	METHODS/TECHNIQUES
WHAT WE THINK CAN BE KNOWN ABOUT THE WORLD	HOW ONE VIEWS THE WORLD; WHAT IS AND WHAT IT MEANS TO KNOW:	HOW WE THINK IT CAN BE INVESTIGATED	(THE FIRST DECISION BASED ON AVAILABLE RESEARCH RESOURCES)
A META-THEORETICAL POSITION	A META-THEORETICAL PERSPECTIVE		

INFORMING HIGHER LEVELS OF ABSTRACTION

THE EPISTEMOLOGY INHERENT IN THE THEORETICAL PERSPECTIVE AND THE CHOSEN METHODOLOGY. IN THE SITUATION OF A RESEARCH PROJECT, IT PROVIDES A PHILOSOPHICAL GROUNDING FOR DECIDING WHAT KINDS OF KNOWLEDGE ARE POSSIBLE.	A CERTAIN WAY OF UNDERSTANDING 'BEING' OR 'WHAT IS' (ONTOLOGY), AS WELL AS A CERTAIN WAY OF UNDERSTANDING WHAT IT MEANS TO KNOW (EPISTEMOLOGY). ASSUMPTIONS ABOUT THE HUMAN WORLD AND SOCIAL LIFE WITHIN THAT WORLD THAT THE METHODOLOGY ENVISIONS. THE PERSPECTIVE OFFERS A WAY(S) OF VIEWING THE WORLD AND MAKING SENSE OF IT.	THE DIFFERENT WAYS OF VIEWING THE WORLD, SHAPE DIFFERENT WAYS OF REACHING THAT WORLD. THE STRATEGY (DESIGN) THAT SHAPES THE CHOICE AND USE OF PARTICULAR METHODS APPROPRIATE FOR THE DESIRED RESEARCH OUTCOME OF EXPLICATION, EXPLANATION AND THEORY BUILDING.	THE COMBINATION OF DIFFERENT METHODS TO REACH THAT WORLD. CONCRETE TECHNIQUES AND PROCEDURES IDENTIFY AND JUSTIFY A RESEARCH PROCESS SYMPATHETIC TO THE INQUIRY CONTEXT.

CONSTRUCTIVIST PARADIGM

DENZIN & LINCOLN (2011B, P. 13) EXPLAIN THAT THE CONSTRUCTIVIST PARADIGM ASSUMES A RELATIVIST ONTOLOGY (THERE ARE MULTIPLE REALITIES), A SUBJECTIVIST EPISTEMOLOGY (THE RESEARCHER AND THE PARTICIPANT CO-CREATE UNDERSTANDINGS), AND A [ANTI] NATURALISTIC SET OF METHODOLOGICAL PROCEDURES.

CONSTRUCTIVIST THEORETICAL PERSPECTIVE (INTERPRETIVISM)

COMBINES ONTOLOGICAL REALISM & RELATIVISM WITH EPISTEMOLOGICAL CONSTRUCTIONISM (CROTTY, 1998, P. 11)
REALISM: THE WORLD EXISTS INDEPENDENTLY OF OUR PERCEPTIONS.
RELATIVISM: WHAT IS SAID TO BE 'THE WAY THINGS ARE' IS REALLY JUST THE SENSE WE MAKE OF THEM.

METHODOLOGY

THE UNDERLYING ASSUMPTION IS THAT PARTICULAR METHODS FOLLOW FROM GENERAL METHODOLOGICAL POSITIONS, WHICH FOLLOW, IN WHOLE OR IN PART, FROM META-THEORETICAL POSITIONS.
(NIGLAS, 2010, P. 218)
IN PRACTICE HOWEVER, RESEARCH RESOURCES ARE A FUNDAMENTAL CONSTRAINT THAT CONFORMS HIGHER LEVELS OF ABSTRACTION.
(CROTTY, 1998)
(ANTI) NATURALISTIC INQUIRY: THE STUDY OF SOCIAL PHENOMENA CANNOT/SHOULD NOT BE UNDERTAKEN USING THE SAME METHODS OF INQUIRY AND WITH THE SAME GOAL AND MODES OF EXPLANATION THAT THE NATURAL SCIENCES EMPLOY TO STUDY NATURAL PHENOMENA (SCHWANDT, 2007, P. 8)

THE EPISTEMOLOGY OF SOCIAL CONSTRUCTIONISM INFORMING THIS INQUIRY

CONSTRUCTIONISM	RESEARCH COMMUNITY INTERPRETIVISM	METHODOLOGY	METHODS/TECHNIQUES
TRUTH, OR MEANING, AND THEREFORE MEANINGFUL REALITY, COMES INTO EXISTENCE IN AND OUT OF OUR ENGAGEMENT WITH THE REALITIES IN OUR WORLD. MEANINGFUL REALITY IS SOCIALLY CONSTRUCTED (NOT DISCOVERED) AND INFLUENCED BY INSTITUTIONS.	– SYMBOLIC INTERACTIONISM – PHENOMENOLOGY: · CONTINENTAL · NORTH AMERICAN – HERMENEUTICS: · HERMENEUTICAL PHENOMENOLOGY & POETICS · HISTORICAL HERMENEUTICS · LITERARY HERMENEUTICS – DISCOURSE ANALYSIS	▪ INTERPRETIVE PHENOMENOLOGICAL ANALYSIS ▪ MORPHOGENETIC APPROACH ▪ SURVEY RESEARCH ▪ ETHNOGRAPHY ▪ [ANTI] NATURALISTIC INQUIRY ▪ DISCOURSE ANALYSIS ▪ HERMENEUTIC DIALECTICS ▪ THEORY THAT IS GROUNDED	▪ DISCOURSE ANALYSIS ▪ QUESTIONNAIRE ▪ OBSERVATION – BY PARTICIPANT – ON PARTICIPANT – NON-PARTICIPANT ▪ INTERVIEW ▪ CASE STUDY (SMALL SAMPLE) ▪ NARRATIVE ▪ DESCRIPTIVE STATISTICAL ANALYSIS ▪ DATA REDUCTION ▪ THEME IDENTIFICATION ▪ COMPARATIVE ANALYSIS

Table 5.1: A theoretical perspective that engages epistemology of Social Constructionism. Modelled from Crotty (1998, p. 5) and informed by (M. Archer, 16 June 2014; M. Easterby-Smith et al., 2012, p. 23; Hunt, 2008, p. 181).

CONSTRUCTIONIST RESEARCH DESIGNS LINKED TO ONTOLOGICAL REALISM, RELATIVISM AND NOMINALISM

ONTOLOGIES THE SCIENCE OR STUDY OF BEING	**REALISM** (SOCIAL REALISM) COMBINES WITH EPISTEMOLOGICAL SOCIAL CONSTRUCTIONISM	**INTERNAL REALISM**	**RELATIVISM** (POSTMODERNISM) COMBINES WITH EPISTEMOLOGICAL SOCIAL CONSTRUCTIONISM	**NOMINALISM** (IDEALISM)
ONTOLOGICAL POSITION	The physical and social worlds *exist* independent of any observations about them. The 'real' are the processes – mechanisms, structures (*institutions*), or whatever (interacting) unobservable, underlying forces – that generate the observed events.	There is a single reality but it is never possible to access that reality directly.	The existence of a world without meaning is conceivable, but meaning without a mind is not. A world becomes a world of *meaning* only when meaning-making beings make sense of it. The social world is socially constructed and real in its own right.	Objects (of knowledge) in the world are 'formed' by the language we use and the names we attach to phenomena. The world is always interpreted through the mind (life, emotion, etc.) The Sense-Making Item (SMI) in this dissertation
TRUTH	Truth is not an entity in the world to be studied, but is an attribute of beliefs and linguistic expression such as *theories* and laws.	Truth exists, but is obscure. Meaning exists in objects independently of any consciousness and experience. That is, truth and meaning resides *in* the objects.	There are many 'truths'. There are no objective truths waiting for us to discover. Truth, or meaning, comes into existence in and out of our engagement with the realities in our world. What is said to be 'the way things are' is really just 'the sense we make of them'. These are historically and culturally (*institutionally*) effected interpretations, conceptual schemes or language games (**social constructivism**) rather than eternal truths of some kind.	There is no truth
FACTS	Facts are unobservable. Competing theories vie for explication and plausible explanation.	Facts are concrete but cannot be accessed directly	Facts depend on viewpoint of observer	Facts are all human creations and there is no difference between individual and social knowledge.

Table 5.2: The several ontological positions supporting the epistemology of social constructionism. Constructionist research designs are also linked to ontological Nominalism. Adapted from (Crotty, 1998, pp. 5, 10-11; M. Easterby-Smith et al., 2012, pp. 19, 25, 29, 48; Hunt, 2008, pp. 181-183; Schwandt, 2007, pp. 143, 256-258)

EPISTEMOLOGICAL IMPLICATIONS FOR SOCIAL RESEARCH DESIGN

IMPLICATIONS OF CONTRASTING EPISTEMOLOGIES:	OBJECTIVISM (SHERLOCK HOLMES)	SOCIAL CONSTRUCTIONISM (MISS MARPLE)
THE OBSERVER	must be independent	is part of what is being observed
HUMAN INTERESTS	should be irrelevant	are the main drivers of science
EXPLANATIONS	must demonstrate causality	aim to increase general understanding and explication of the situation
RESEARCH PROGRESSES THROUGH	hypotheses and deductions	gathering rich data from which ideas are induced
CONCEPTS	need to be defined so that they can be measured	should incorporate stakeholder perspectives
UNITS OF ANALYSIS	should be reduced to simplest terms	may include the complexity of 'whole' situations such as all collaborating organisational sub-units
GENERALISATION THROUGH	statistical probability	theoretical abstraction and/or methodology
SAMPLING REQUIRES	large numbers selected randomly	small number of cases chosen for specific reasons

Table 5.3: Contrasting epistemological implications for social research; with a focus on this inquiry. Adapted from Easterby-Smith et al.(2012, p. 24)

EPISTEMOLOGICAL POSITIONS AND THEIR METHODOLOGICAL IMPLICATIONS

EPISTEMOLOGICAL POSITIONS	STRONG OBJECTIVISM	OBJECTIVISM	CONSTRUCTIONISM	STRONG CONSTRUCTIONISM
	(SHERLOCK HOLMES)		(MISS MARPLE)	
METHODOLOGY:				
AIMS	Discovery	Exposure	**Convergence**	Invention
STARTING POINTS	Hypotheses	Propositions	**Propositions**	Critique
DESIGNS	Experiment	Large surveys; multi-cases	**Cases and surveys; small number of cases**	**Engagement and reflexivity**
DATA TYPES	Numbers and facts	Numbers and words	**Words and numbers**	**Discourse and experiences**
ANALYSIS/ INTERPRETATION	Verification/ falsification	**Correlation and regression**	**Complementarities**	**Sense-making; understanding**
OUTCOMES	Confirmation of theories	Theory testing and generation	**Theory generation (often mid-range theory) or a framework for reasoning (theory building).**	**New insights (explication) and actions**

Table 5.4: The different epistemologies with their methodological implications, together with the focus of this research inquiry. Adapted from Ellingson (2011, p. 606) and Easterby-Smith et al.(2012, p. 25)

As a prelude to the next chapter on the Morphogenetic Approach, the following section considers the lexis and nexus between Social Constructionism and Institutional Theory. It derives from the work of Phillips & Malhotra (2011, p. 717) who argue that Institutional Theory needs to return to its roots in Social Constructionism and 'the well-spring of creative thought that this produced'. Indeed, Spender (2008, p. 56) characterises Institutional Theory as a variety of Social Constructionism.

The Social Construction of Institutions

It would appear then, that the essence of institutional theory is a 'social construction of reality', and such social constructions engage with a power struggle over the dominating situational definition with some interpretations having temporal dominance over others. Phillips & Malhotra (2011, p. 708) find ambiguity in the idea of 'the institution'. They maintain that there are contradictory conceptualisations of the nature of institutions; what an institution actually is and how it comes to be.

Without such foundations, the idea of an 'institutional theory' might be an oxymoron.

Phillips & Malhotra do support the idea that the process of institutionalisation, and the role of social construction in that process, is the very basis for understanding that institutions are fundamentally cognitive. In general, their unease stems from the observation that this idea is often neglected. However, the focal idea is in the word 'process', so that 'process theory' with its reflection on changing patterns of behaviour, replaces any ambitions of a predictive 'institutional theory'.

Further, Phillips & Malhotra suggest that 'Old Institution's' three pillars framework (W. Richard Scott, 2012b) – regulatory, normative, and cultural-cognitive – for defining institutions has compounded the ambiguity. 'These mechanisms of institutional isomorphic change shed little light on the actual process of institutionalisation – a prerequisite for understanding institutions – nor on the nature of institutions.'

In contrast to the 'old' institutional theory – which still exists in blends with current thinking – the foundations for neo or new-institutional theory can be found in Berger and Luckmann's *Social Construction of Reality* (1966) with its phenomenological foundations.

Berger & Luckmann (1966, pp. 68, 163) offer three key perspectives:

1. institutions are *cognitive constructions*
2. the *social constructivist process of institutionalisation is a process of social construction*

3. meanings do not reside 'out there' [waiting to be discovered], but rather are socially constructed, and as such, they take part in the social construction of institutions themselves

Phillips, Malhotra and Spender add that 'there is no reality beyond what we manufacture and agree upon together' (2011, p. 708); further, the *idea* of an institution is perceived from *outside* the institution.

An institutional paradox

Institutions emerge as social stabilising mechanisms. However, in spite of the appearance of societal stability, the reality is that in an open society, institutions are under constant construction (R Chia, 1999) precisely to provide the political and economic perception of an adaptive stabilising presence.

Against the 'conventional' wisdom, Czarniawska (2011, p. 772) reflects on Scandinavian field studies showing that although 'planned change' never fully succeeds, people do persuade each other to change their opinions, beliefs, and ways of acting; and not only from mistakes. The results are paradoxical[128]:

- planned change (transformation - morphogenesis) stabilises
- routines (reproduction - morphostasis) create novelty by faulty reproduction

This explains why Archer's (1995) Morphogenetic Approach reflects generally on morphogenesis.

At play is the potentially stabilising outcome (business continuity) of organisational agility and evolutionary correction, in contrast to the potential brittleness of a 'perfect' bureaucracy with no inbuilt redundancy to account for unexpected disturbances (Snowden & Boone, November 2007).

Foundations of institutionalist thought

Czarniawska (2011, p. 779) explains that institutionalist ideas are founded on pragmatist-constructivist assumptions. What then are the theoretical ramifications of trying to formalise a world that is undergoing constant change? In part, this dissertation asserts that such formalisation might be unproductive, while middle-range theory with frameworks-for-reasoning and meaning-making is better suited to a world of ongoing construction through discourse.

[128] The cases studied in this inquiry provided a similar finding.

The process of social construction

For Institutional theorists such as Phillips & Malhotra (2011, p. 705):

> Discourse analysis provides a theoretical and methodological frame for understanding the processes of social construction that underpin institutionalisation. Discourse analysis provides an alternative perspective (to the three pillars [of 'old' institutional theory] - regulative, normative, cultural-cognitive) on the nature of institutions and the micro-institutional processes upon which they depend.

Zilber (2011, p. 638), citing Phillips, Lawrence, & Hardy (2004), amplifies this idea that institutions are social constructions constituted through discourse. That is, the structured collection of 'texts' (any communications) that *exist in a particular field* and that produce the social categories and norms shaping the understandings and behaviours of actors. Thus, the production of such texts is viewed as central to any institutional action.

Institutionalising a collaboration of organisations

Phillips & Malhotra (2011, p. 704) see the discursive approach to social construction as only one strand of the work in institutional theory; and just a step towards understanding and exploring the institutionalising phenomena of collaboration. They go further to suggest that work is required to understand the nature of institutions and the actual process of institutionalisation; noting that this particular research inquiry places emphasis on the temporal political perceptions of organisational 'legitimacy' and 'appropriateness' as potential indicators of an acceptable *progression* towards organisational institutionalism.

Such institutionalisation, Phillips & Malhotra (2011, p. 713) suggest, may occur as actors interact and come to accept shared definitions of reality (the essence of the Morphogenetic Approach (M. Archer, 16 June 2014)). After all, it is through linguistic processes that definitions of reality are constituted (Berger and Luckmann 1967).

> *The social construction of reality underpins the very existence of an institution and the process of institutionalisation.*

It is this aspect that resonates strongly with discourse analysis. Importantly, discourse analysis is not just a methodological approach but also a theoretical approach with underlying theoretical assumptions that relate specifically to the social construction of reality. Institutions as social constructions, *produced through meaningful interaction*, and constituted through discourse, are central to institutional theory and the morphogenetic approach to reasoning.

Put another way, the institutionalising process occurs through the social construction process (Nelson Phillips & Malhotra, 2011, p. 713). It is this *process* that discourse analysis seeks to understand; that is, the process of social construction that lies at the heart of institutionalisation and the micro foundations of institutional processes.

If there are unresolved tensions around the nature of an institution, then Nelson Phillips & Malhotra argue that these tensions are fundamentally cognitive and that they do not involve external sanctions. That is, external sanctions are *not* part of institutional mechanisms**;** the emphasis is on the processes of institutional construction.

Institutional theory and logics (cultural accounts)

Phillips & Malhotra (2011, p. 716) view any discussion on the place of social constructionism within institutional theory as needing to consider the relation between discourse at the field level and the broader societal discourses as both conform agency.

According to the authors, this is a matter of 'institutional logics': the logics of the field and the logics of the society**.** The combined logics might be 'murky' but Phillips & Malhotra identify a real potential for illuminating the complex processes and relationships that surround institutional logics.

Sociological institutionalism

These complex processes and relationships see actors as substantially empowered and controlled (agency) by institutional contexts, and these contexts go far beyond a few norms or network structures. From a morphogenetic perspective, these contexts are complex constructions founded on prior and external historical origins that contemporary organisational actors bring to their interactions and negotiations. In this research context, these 'starting positions' positions are emblematic of the disparate organisations that collaborate as a tender enterprise.

The enterprise is reflective of 'collaborating' regimes in the political science sense (Nelson Phillips & Malhotra, 2011, p. 716); organisational packages infused with cultural meaning.

As a recognised institutional form[129], the tender enterprise represents a complex and coherent collaboration of cultural and organisational material.

[129] rather than a collection of organisations parodying a 'unity of purpose'

Reflection

The particular interpretive theoretical perspective comprising ontological realism, ontological relativism with epistemological constructionism, facilitates an inquiry that considers: temporal social change; organisational institutionalism; and a social construction of reality. Ackroyd (2004, p. 147) addresses the outcomes of such an inquiry:

> The social world is basically an interpreted world, and relationships between people, institutions and structures are produced by people; that is, they are socially constructed. But, the constructed world is not merely socially constructed, but acquires an independence from individual people and groups. The institutional structure manifestly has independent effects on behaviour whatever the constructors think [or thought] about the matter.
>
> That is, structures are socially real[130] and not reducible to their conceptualisations. Also, it is possible to contrive a theoretically grounded account of institutions, society and social processes, despite their origins as social constructions. Thus realist social science (accounting for a temporal disposition of social structures *after* initial 'construction') was, from its inception, post-constructionist. (emphasis added)

In the context of a tender enterprise presenting as a collaboration of organisations, the enterprise establishes progressively its own identity; and the maturity, political appropriateness and perceived legitimacy of this identity might well distinguish competing enterprises at a political point in time. The 'name of the game' might well be *phenomenological intentionality*: a process of reaching out and engagement.

The locus of epistemology

In research practice, each interpretive practice makes the world visible in different but overlapping ways (Denzin & Lincoln, 2011b, p. 4). In common though, each 'world' can be understood through the meanings a) *attributed to* them and b) *generated within* them.

Thus, the broad aim of the Constructionist Approach is to move attention away from the *causes* of objective social conditions and on to the *processes* by which members of a society [*progressively*] define those conditions as problems worthy of dedicated resources (Spector & Kitsuse, 1977/1987).

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[130] People believe that it shapes behaviour and makes a difference (Fleetwood, 2005).

Important for the Morphogenetic Approach (in the next chapter), Burgess (2015) suggests that Social Constructionism is sensitive not only to the constructed character of original claims, but also to the transformations undergone.

Next chapter

The Morphogenetic Approach presents as a 'methodology for reasoning' about social change. It is a vast 'unified' assembly of social realist-based thought that has evolved over decades and is the subject of much interpretation. It does not stand as a theoretically-isolated exercise; rather it draws on ideas offered in previous chapters of this dissertation.

The Morphogenetic Approach or Morphogenetic Method (M/M) is dense, and the challenge is to offer a succinct and accessible insight, and then to provide mechanisms for its practical implementation.

Chapter 6
Epistemology:
Morphogenetic Model

The morphogenetic approach offers a framework for reasoning about patterns of social engagement that progress institutional change.

Rather than a chronological anthology of the morphogenetic approach with its alias 'M/M model'[131] and its twenty years of development, this chapter begins with the end product of Archer's initial investigation into the progressive (historical) social and political evolution of the French education institution; its analytical history of *emergence*[132]; a fundamental character of a complex (open) society.

The chapter's objective is to provide a tangible and hopefully accessible foil as a backdrop to the supporting philosophy and tenets of the morphogenetic approach. Over this and the next two chapters, *inter alia*, the intent is to present a progressive argument for the inclusion of the morphogenetic approach in this dissertation; not as a research methodology for orchestrating research, but as a methodological framework for practical reasoning in socially complex organisational and institutional contexts such as major Defence equipment tenders.

Structure and Agency

Neither the social *structuring* of society – its institutional powers – nor the social interaction responsible for it – its people with their vested interests and inherent *agency* – must be conflated into a single discussion. This principle, according to Archer, (1995, p. 247) appears to be generally accepted.

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[131] (Porpora, 31 March 2015)

[132] Reality (Social Realism) is **stratified** and **emergent**, and this is what makes sense of the distinctiveness of domains of scientific knowledge, though distinctions are always provisional since they are subject to the possibility that new connections or even real reductions to more basic causal phenomena may be found. Bhaskar (1975 [1978/1997]) makes a virtue out of the relation - dependency ambiguity of emergence - by using it to make sense of our experience of the difference between domains. Once the concept of emergence is placed in terms of the ontology of depth-reality of open systems, it gains a greater coherence. Reason, planning, devising and so on are emergent properties that must be studied in a way appropriate to them. Totalities and their internal relations are the hub of change; as in the character of emergence.

Generally accepted or not[133], what distinguishes the different theoretical approaches to this debate is how they conceptualise the interplay between, *structure* and *agency*; that is, the interplay between the institutional powers[134], and interacting people who draw on their inherent agency[135] and motivated by vested interests.

Situational Logics and *Habitas*

The institutional powers of a society – its *structure* of social relations – reflect in both positional power relations and ideational power relations (culture). Bourdieu's idea of *habitas* (Elder-Vass, 2007) considers these to be the powers that reproduce the practices of a social class, such as systems of culturally informed norms, values, attitudes, practices, habits and physical bearing. *Habitas* is not necessarily a conscious disposition, but implies embodied dispositions which are taken-for-granted and perceived as the 'proper way' of being and acting; an outcome of the *situational logics* (R. E. Meyer, 2011). Nothing is inferred in terms of reproduction or transformation. The ideas of *Habitas* and *emergence* are similar in terms of generating the intangibles of 'atmospherics' and 'assumed group influence'.

Analytical Dualism

In the case of the morphogenetic perspective, the theoretical approach that conceptualises the interplay between, *structure* and *agency* is founded in 'Analytical Dualism'. This is the idea that the two elements (structure and agency) have to be teased out separately over time precisely in order to examine their interplay.

The morphogenetic approach rests on the key tenets of Analytical Dualism being:

- the historicity[136] of interaction: that all social and cultural facts are historically determined and carry their historic values
- the ontology of emergence (J. Morgan, 2007)

Hancock (2010, p. 39) sets up four ideal-type organisational problems in order to locate emergence:

1) known outcomes + fixed sequences: deterministic

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[133] (Eubanks, 2012, p. 234; B. Flyvbjerg, 2001, pp. 137-138)
[134] Emphasis is on the social system or the contribution of social institutions to the constitution of society (Schwandt, 2007, pp. 4-5).
[135] Symbolic Interactionism and Ethnomethodology place human agency at the core of society (Schwandt, 2007, pp. 4-5).
[136] **Historicity** expresses the 'processual and dynamic' change that has occurred: a reflective account.

2) known outcomes + known probabilities: statistical or stochastic
3) known outcomes + unknown probabilities: uncertainty
4) unknown outcomes + debateable issues: **emergence**; a fundamental character of a complex open society (Snowden & Boone, November 2007).

Bringing these themes together suggests an exploratory methodology (Horrocks, 2009, p. 59) for approaching emergence: the 'practical social theory' that Archer espouses (see Figure 6.3 (D)).

Such theory recognises that since the existence of effects cannot serve to explain social origins, the task of social theory *cannot* be restricted to the mere identification of social structures as emergent properties; it must also supply an analytical history of their emergence which accounts for why matters are so and not otherwise (M. Archer, 1995, p. 167).

The morphogenetic approach provides a methodology for establishing a 'framework-for-reasoning' about how and why a society has arrived at where it is. Further, a framework-for-reasoning enables insights into the respective social pathologies of interacting organisations, not for the purpose of 'prediction' but for understanding the potential (political) resources that might have been required to enable mutual objectives and to constrain detractors.

The challenge for this and associated chapters is to underwrite a framework-for-reasoning based on the morphogenetic approach. It cannot be assumed that readers are necessarily aware of the approach, or have knowledge of its complicated compositional logic of numerous theoretical concepts and constructs.

Lineaments of the morphogenetic approach

The clarity of Figure 6.1 (below) is marginal. A first impression comes from the top-left or top-right encircled corners with the focus on 'change'. Indeed at the top right-hand side is mention of 'Patterns of Change'; necessarily reflecting a pattern language with its own grammar (Alexander et al., 1977; Schuler, 2008).

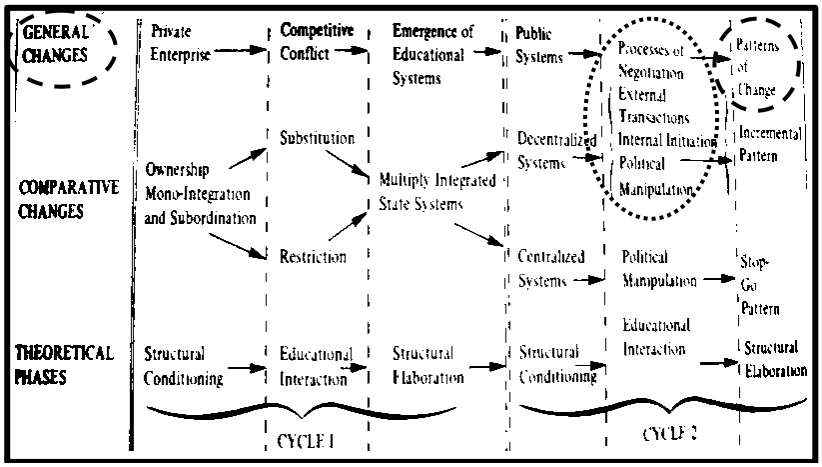

Figure 6.1: Archer's (16 June 2014, image 13 'Working with Morphogenetic Cycles') original Morphogenetic Reasoning applied to the historicity of public (state) education in France.

Atop the second column from the right, contained within the ellipse, the word 'Negotiation' is applied and underneath, 'Political Manipulation' appears. Individually, these words resonate with the research at hand. Indeed, those involved with industrial marketing campaigns, and their episodic Defence tender projects, would be familiar with these terms, as would the decision-making politicians.

Therefore, how might reacting and adapting politicians decide between competing tender enterprises? How might an enterprise of collaborating organisations be perceived in terms of its organisational institutionalism? [137] How might an enterprise evolve to become politically legitimate and appropriate in a changing geopolitical, local political and party political world?

To progress these questions, Figure 6.2 replicates and amplifies Figure 6.1 and the morphogenetic approach in practice is exposed; albeit at a high level.

This research into tendering projects investigates successful and problematic tendering campaigns and their episodic tender projects in order to provide a framework within which to reason about the questions posed above.

Referring momentarily back to Figure 6.1:

- the top row is a mix of entities and processes
- the middle row displays participating entities undergoing independent *change* while maintaining their co-existence and mutual influence.

[137] Not as an outcome, but rather in terms of what an institutional perspective tells us about organisation behaviour (Royston Greenwood, Christine Oliver, Roy Suddaby, & Kerstin Sahlin, 2011a)

- overall, the operative theme is ‘change’ (hence morphogenesis), with its sequential states as illustrated in Figure 6.2, cell 2A and cell 4A above (being a re-engineered amplification of Figure 6.1).

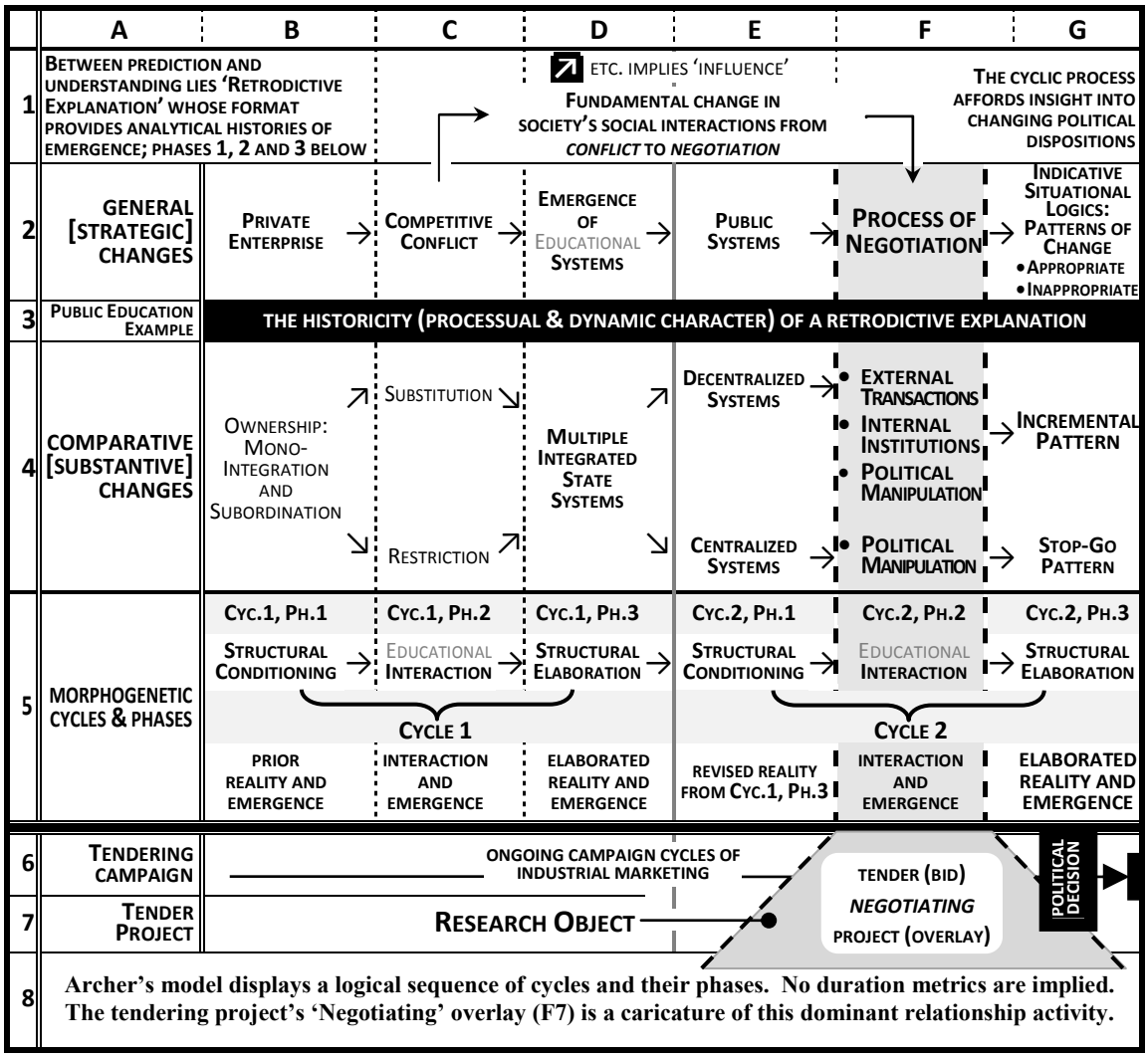

Figure 6.2: Based on Figure 6.1 above, Archer’s original Morphogenetic model (16 June 2014) is amplified and engaged with the current research inquiry into tender projects (Rows 6-8).

Figure 6.2, rows 2-5, relate to the Archer’s research into the institution of education in France.

Row 5 illustrates morphogenetic cycles and phases, and rows 6-8 enjoin this inquiry into tendering sociology.

All further reference to Figure 6.2 will use the row/column cell identifier.

> **(4A)**: indicates that what follows is a sequential trace of the evolutionary states of education in France; its schisms/cleavages and reconstructions.

(4B): indicates the historical monoculture silo of a consummate private non-secular hierarchical education system.

(4C): displays political activity that restricts progressively, the operation and coverage of non-secular education and substitutes in part, a secular alternative.

(4D): The progressive outcome appears to offer only state-based secular education of various dispositions: centralised and decentralised **(4E)**.

(4E): Some state education systems are centrally controlled, while others are decentralised and integrated within communities.

(4F): The *decentralised* systems are engaged with external stakeholders, necessary internal institutions such as regional government treasuries, and political manipulation by regional vested interests. Concurrently, the *centralised* systems are manipulated by the political instruments of state.

(4G): The decentralised systems rely on the agency[138] afforded by external stakeholders enabling the systems to evolve incrementally. Meanwhile, the centralised system is subject to the whim of political exigencies such as elections and, other than the government itself, has no other patron from which to draw agency in order to act.

(3): **Retrodiction**: The research process has developed a 'retrodictive' interpretation. That is, a historicity that expresses the 'processual and dynamic' change that has occurred: a reflective account. A more formal definition of 'retrodiction' appears in Figure 6.2 (1A-1B).

(5): **Morphogenetic Cycles**: 'Emergence' and 'Phases' are introduced.

Life in general is portrayed as a series of cycles or states. For example, every personal career has a beginning, middle and end. The same applies to an academic program and life itself.

While the idea of 'emergence' has been introduced, it will be explored within this chapter.[139]

(5B): **Structural Conditioning: How structures condition action**

This is the legacy of vested interests, social structures and institutions that confront the current generation in a new situation. These systemic properties are

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[138] Broadly understood, the term *human agency* signals the capacity of individuals to perceive their situation, reason about it, consciously monitor their action, form motives, and so on (Schwandt, 2007).
[139] **Emergence**: the realm of generative effects and causal 'mechanisms' (influences) (M. Archer, 1995, p. 178).

viewed as either a) emergent from the prevailing situational influences and taken-for-granted or b) aggregate consequences of past actions such as with the evolution of case law. They shape the situations in which a current generation of agents/actors are located, and imbues them with the prevailing vested interests (M. Archer, 1995, p. 90).

Structural conditioning of social relations, via the emergent properties of structure and culture, shape the situation in which agents/actors find themselves. Structural conditioning influences the ambitions and opportunities of the people involved. Different social groups have different freedoms and constraints with respect to the same decision. At play is the overall structured situation where the opportunity costs relate to communication gaps to be spanned in satisfaction of agential initiative (Dervin, 2003a, p. 44).

Conditioning also influences with whom agents are pre-disposed to ally and what resources can be engaged in their communications and strategic action. All these contextual/environmental conditions define the differential bargaining powers of participation (M. Archer, 1995, p. 328). However, structural conditioning is not the sole determinant of interaction patterns.

(5C): **Interaction** is the social relations we have as a normal functioning society and organisation. It takes place in a context that is not of its own making,

The presence of Agency exerts two independent influences on agents:

- **temporal**: the speed or delay in eliminating the prior structural (conditioning) influences ('washing out the priors') through the efforts of agents
- **directional:** the directional influence on agents to prosecute certain strategies

Archer (1995, p. 90) explains that social interaction is structurally conditioned but never structurally determined, since agents possess their own irreducible emergent powers of independent action. The mediatory mechanism (influences), which press prevailing vested interests (power positions) on human agents/actors, might shape *their* context in such ways as to frustrate or reward different groups, depending on their relative social position. For example, if the Prime Minister does not support 'marriage equality', then there is diminished agency afforded to the agent/actor seeking such change. Those experiencing rewards – the Prime Minister's apparatchiks – will try to retain them (defending structural reproduction).

> For Archer (1995, p. 260), *group interaction* [people] is the sole mechanism [influence] governing stability or change.[140]

Altheide & Johnson (2011, pp. 581-582) concur but from a different perspective: 'The analytical realism[141] approach suggests that we create meaning in this world through interaction'.

Following agency-imbued interaction, the outcome reflects changes to positional power structures of vested interests and ideational power structures of values and concerns. Through emergence emanating from these changes, a new regime of power positions *of themselves* evokes a new regime of influences; that is, their mere existence is influential. Importantly, the 'change' might relate to efforts negating the influence of other change initiatives.

(5D) and (5G): **Structural Elaboration**

These cells describe 'emergence' and 'elaborated reality' respectively. If human action is effective, then the prior (conditioned) structural context is changed (structurally elaborated). New social possibilities are now at play and they present a set of possibilities for entrants into the subsequent cycle. Because different outcomes are pursued by different groups (vested interests), structural elaboration is, according to Archer, largely an *unintended consequence of uncoordinated activities* (M. Archer, 1995, p. 91).

If action is effective, then the prior structural property is replaced by a new one that presents new social possibilities, such as equal pay for women. Structural elaboration provides the foundation for a new morphogenetic cycle as there now exists a new set of conditioning influences (M. Archer, 1995, p. 79).

Tendering campaign and project cycles

In Figure 6.2 **(5)**, Archer's study comprises two cycles.

In **(6, 7, & 8)**, the current research inquiry is appended to Archer's morphogenetic cycles and phases.

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[140] In the context of the morphogenetic approach, 'stability' and 'change' are not synonyms for 'reproduction' and 'transformation'. For an organisation that is designed for constant change, then 'reproduction' of the corporate ethic ensures its ongoing agile focus. 'Transformation' would indicate a move away from an agile disposition to something else.

[141] **Analytic realism** is an approach to the identification of how reflexive and interpretive methods could be presented to enhance their credibility, relevance, and importance.

(6B-6G): Generally, industrial marketing campaigns by Defence equipment suppliers are transnational and progress over multiple cycles. Possibly for national cultural reasons, this might not always be the case (Whiting, 26 August 2015).

(7E-7G): Episodic tender projects also have their cycles, in general comprising three phases of a beginning, middle and end; although this research project found at least four clearly defined cycles in each tender project. For the purpose of this research, the cycles are termed 'epochs' because they present different political agendas.

(7E): I posit that the legacy of strategic politically-inspired major Defence tenders has, of itself, *emergent influences* that frame a way of reasoning and the disposition of power relations within government, the bureaucracy, and the tender project evaluation team.

An example of how this plays out in practice was mentioned by a DMO Tender Project Manager:

> I noticed early in the process that I had a couple of people on my own team who had had poor experiences with one or both of the short-listed contractors. "Why are we wasting our time with these tenderers because they always treat us like crap?" My view is that organisations change and their behaviours change with changing leadership. I wanted to see what the company is like *now*.

This is the 'structural conditioning' or 'revised reality of positional and ideational power' of **(7E)** that impact a tender enterprise at each of its four epochs. For graphic clarity, Figure 6.2 displays only the last epoch (cycle), later identified in the Methods and Results chapters as 'E4 Negotiations'.

(7F): From then on, the project is consumed with *negotiations* from well before the actual tender project commences to the very last day of (party) political justification; and beyond as the 'unsuccessful' enter a new cycle seeking political intervention and general destabilisation **(post 7G)**.

All *negotiations* tend to influence a recalibration of relational and ideational power.

(7G): Of itself, the outcome of the political decision-making has *emergent properties* that see some old alliances fade while others blossom. The decision at **(7G)** is the end of the tender cycle and the beginning of the next morphogenesis process cycle related to, in the Defence procurement instance, the post-tender equipment production/delivery cycle. In parallel, the industrial marketing

campaign continues unabated with different cyclic patterns synchronised with Defence strategic planning and macroeconomic priorities.

Change over time

The tenets and lineaments of the morphogenetic approach are significantly more detailed and nuanced than the overview presented thus far. **(G)**, of itself, describes just one essential tenet of the morphogenetic approach:

- **(1G)** reflects on a *changing* political disposition
- **(2G)** reflects on *patterns of change*
- **(4G)** reflects on the *calculus of change*

The changing *Situational Logics* illuminates the changing *contextual* social and institutional pressures **(4G)** that, at a reflective point in time, might indicate a *pattern of strategic change* up to that instant in time. The actual change is merely a matter of record.

Outcomes of special interest related to the historicity of retrodictive explanation: its processual and dynamic character

- (**2C-2F)**: An indication that there was a fundamental transformation in the manner in which society participated in education reform: from *competitive conflict* to *negotiation*.
- **(2G)**: The idea of patterns of transformation (change) with an inherent pattern language (and grammar) **(4G)** consonant with the Situational Logics.

Historicity is not owned by the morphogenetic approach, but it does contribute to an interpretative 'morphogenetic framework-for-reasoning' based on a reflective construction of the processual and dynamic character of change.

Interim consolidation

- The preceding case study in Figure 6.1, as amplified in Figure 6.2, provided a forum in which to introduce the operational milestones and process phases of the morphogenetic approach. It is challenging as only some fundamental concepts have been discussed thus far.
- The morphogenetic model's overriding framework-for-reasoning accepts change in a variety of conformations and efficacy. Such change that is created by

human agency can lead to a radically changed social and cultural context. Radical change can reflect in paradigmatic shifts of significant magnitude; witness the internet and social media. Alternatively, benign changes can leave the prevailing context intact, such as a change of style within a product genre (Porpora, 31 March 2015).

- It all begins with agency empowered actors interacting in a political context where the temporal priority is to sustain or change the *status quo*.
- While in practice, having separate activities for structure and agency might be untenable, in theory, they can be treated as separate constructs in the form of *analytical dualism* and the insights that it offers into the nature of social change.
- These insights are reflective rather than prospective. The morphogenetic approach offers a framework-for-reasoning about the dynamics of past social action. This framework engages with: Emergence; Conditioning; Interaction; Elaboration; and Cycles, Phases and Patterns of change.
- The process of morphogenesis is one of constant change; that is, a complex society is always 'becoming' (Robert Chia, 2003). But this reality of 'becoming' is tempered by energised episodes of deliberate change avoidance – a quest for a 'being' reality – catalysed by power: morphostasis. Such power-charged change effects our social and institutional relations (structures) and dominating ideas (culture).
- The quest for a 'becoming' reality and a 'being' reality co-occur in any cycle with varying phase-shifts and amplitudes. During the maintenance of social relations and ideational relations, episodes of morphogenesis and morphostasis will be present and will impact mutually on each other, without human mediation; merely the apprehension of change might be sufficient.
- The end objective of examining any particular cycle is to provide an analytical history of *emergence* of the problematic properties under investigation (M. Archer, 1995, p. 91).

Indicative Situational Logics and Patterns of Change

Figure 6.2 **(G)** addresses 'patterns of change'. This was Archer's first objective in investigating the institution of education in France: to understand the 'visible pattern of things educational' (M. Archer, 1995, p. 115). However, in order to begin such an enterprise requires knowledge of the institutional *rules of the game* of education: a language game. Concurrently and of equal importance is the need to understanding the

contextual structures (positional power relations and ideational power relations) that enable and constrain[142] an individual's access to, or involvement with, the educational domain in focus.

In seeking to interpret the nature of a changing society, Archer posits the need to:

1. acquire an understanding of the language games-at-play in the object society
2. develop an understanding of the contextual powers (Galvin, 2014) that enable and constrain individual and group actions

The strategic direction proffered by Archer was adopted for this inquiry into tendering sociology. Indeed, the strategy becomes better focussed if, for example, the inquiry was to consider the epistemic differences between medical practitioners and barristers. Both have their own language games reflecting social-position motivations, vested interests, value positions, belief systems and 'ultimate concerns'; and both are constrained and enabled by their respective government legislation, professional societies, institutions, and the temporal situational logics of society.

The central idea of Morphostasis in the context of Morphogenesis

In a complex Open System environment that is society, some processes tend to preserve or maintain a system's given form, organisation or state: morphostasis (M. Archer, 1995, p. 163).

Further, Archer (1995, p. 140) is of the view that morphogenesis is always a transformation of morphostasis; a change from order to unorder (Snowden & Boone, November 2007).

> Therefore, on the assumption that transformation is never perfectly complete, morphogenesis and morphostasis must necessarily co-exist in some proportion. The *outcome* of a morphogenetic process (cycle) would therefore be some ratio of *stasis* to *genesis* (or *genesis* to *stasis*) (Porpora, 31 March 2015).

Further, this ratio of stasis/genesis, applies respectively to positional power structures, ideational power structures, and agential power structures. How this ratio might be

[142] The antonyms (social) 'constraints' and 'enablers', are also known as 'enlargers' and 'enfolders' (Bass & Bass, 2008, p. 171) and 'enlargers' and 'straiteners' (Clark, 1995).

derived either qualitatively or notionally is a matter of speculation. This dissertation looks to constructs of theoretical tendencies.

The presence of stasis can have both positive and negative connotations. Politically, stasis might be seen as a *failure* to change. In contrast, managerially, stasis might reflect the active maintenance of the *status quo*. The sustainment of stasis requires energy inputs to counter the natural decay (entropy) of organisation without human input.

Segue to Social Theory

The discussion thus far has an anatomical flavour. Bits and pieces of the 'skeleton' have been laid out, together with the relationships between components and their relevance for this research project. And while this might fit the format of *Popular Mechanics* magazine, this 'assembly approach' to a complicated suite of theoretical reasoning elements needs to be brought back into the fold of social theory and its practical utility, which Archer (1995, p. 136) confesses, 'is a mess'.

Social theory and the morphogenetic approach

For Archer (1995, p. 133), the task of social theory is:

> ...to explore the space between the differential distributions of options, on the one hand, and the wants and needs of different kinds and different categories of individuals [stakeholders], on the other, is to examine the degrees of freedom and constraint which are entailed by social structure [agency].

That is, a theoretical mission of social research must a) identify stakeholders and their motivations, b) how these stakeholders might perceive the satisfaction of their needs, and c) what structural conditions (power relations) hinder or support the fulfilment of stakeholder objectives.

The morphogentic approach posits that the interplay between *structure* and *agency* is 'a process that can only be *examined* because of their *temporal separability'* (M. Archer, 1995, p. 75) (emphasis added). For Realists, structures both precede human activities and are the emergent outcome of human activity (Thursfield & Hamblett, 2004, p. 118). That is, people enter a socially structured context and in turn, their presence impacts on the progressive conformation of that context (see also J. W. Meyer, 2011, p. 792).

Analogies of Social Reality

Wittgenstein's (1978) idea of social reality is expressed analogously to a steel cable comprising random short lengths of steel filaments that are wound together tightly to form the cable. Not one filament runs the full length of the cable but the essential strength, both physically and ideationally[143], of the cable comes from the fact that all the filaments working in concert. The heavier is the load, the stronger is the friction.

Archer (1995, p. 141) offers a different analogy of a garment that undergoes periodic refurbishment and change of purpose. This analogy offers different parts with their interfaces, the ability to inspect these parts, the purpose of the garment and times when refurbishment occurred and purpose changed, who was involved and how the next recipient of the garment treated the current stakeholders. This analogy incorporates issues of the structure (relations) within the garment, its reproduction and transformation by human agents.

Therefore, while Wittgenstein offers a representation of social reality in the structure (relations between filaments) being *created*, Archer looks to the notion of *reproduction* and *transformation* – changes in social structure (social relations of positional power and ideational power) – undertaken by human agents; who in turn, are imbued with the agency that social structure enables or constrains; that is, the analytical dualism of 'The Parts' and 'The People'.

These ideas of social reality are not so much dialectical but rather antinomies. Of importance for Archer (1995, p. 151) is that the logic of analytical dualism, entertains the notion that people are imbued with agency, and while their actions might be observed, little can be said of the *emergent properties of agency* itself. Something is there that does affect people and that does make a difference. It appears to emerge from the social structures around us, but like the idea of God, the idea is sufficient.

> However, what the morphogenetic approach offers is a 'methodology' or framework-for-reasoning about this *gap* between the life-world of the *people* affected, and the anthropogenic *systems of social relations* (structures) of positional power and ideational power: *The people* and *The Parts* – agency and structure (Porpora, 31 March 2015; Vandenberghe, 2003, p. 2).

[143] Recognising that a toll-way bridge is safe is likely to draw relatively enhanced patronage.

Social Realism

This gap in explanatory (perhaps interpretive) power brings the entire discussion into the realm of Social Realism; the philosophical idea that there are real objects (of knowledge or identity) that exist independently of our knowledge of their existence (Schwandt, 2007, pp. 256-259).

According to Archer (1995, p. 76):

> The morphogenetic approach to social theory is realist in its ontology and it supplements realism by making 'analytical dualism' explicit and demonstrating its methodological utility in practical social analysis.

Indeed, Archer posits that 'realism [a philosophy] is predicated on analytical dualism' (M. Archer, 1995, p. 76).[144]

Philosophically, realism has arguably been the dominant philosophical position in social sciences. It has been under attack from a countermovement of scientifically-based social (positivist) research. From the perspective of Altheide & Johnson (2011, p. 581), the debate about 'the politics of evidence' ensues[145]. In contrast, they present the realist position as assuming that:

- the basic idea of realism is that there is a real world with which we act and interact, that individuals and groups create meaning in this world, and while our theories, concepts, and perspectives may approach some kind of valid understanding, they cannot and do not exhaust the phenomena of interest
- all theories, concepts, and findings are grounded in values and perspectives; all knowledge is contextual and partial; and other conceptual schemas and perspectives are always possible
- to grasp the importance of values, beliefs, and other meanings of cultural members, it is imperative to embrace an interpretivist approach in our scientific and theoretical work
- the various versions of realism reflect an ontological realism while simultaneously accepting a form of epistemological constructionism and relativity

The retrodictive historicity in Figure 6.1 and Figure 6.2 exposes a view of evidence-as-process that is otherwise known as 'evidentiary narrative' (Altheide & Johnson, 2011, p. 582); a view that is of vital importance for this research project onto tendering sociology.

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[144] It might be argued that 'analytical dualism' is implied constitutionally in Social Realism.

[145] The 'gold standard' of the G.W. Bush Administration (Denzin & Lincoln, 2011b, p. 1; M. Easterby-Smith et al., 2012, p. 88; Teddlie & Tashakkori, 2009, p. 76).

Social Realist stratified models of causal power

Realists insist that the social world is stratified by virtue of the distinct emergent properties and powers, which develop and prove relatively enduring; and this is expressed in a *stratified [layered] model of social structure* (M. Archer, 1995, p. 190).

Such a stratified model of people also entails the recognition of *emergence*. There are emergent properties of collectivities of individuals (primary agents) that differ from the emergent properties of corporate groups that in turn, differ from populations. However, these different levels of 'social integration' have independent capacity while, at the same time, they are not isolated from the influences of 'system integration'. The consequence is that agency itself undergoes transformation, acquiring new emergent powers in the very process of mediating/negotiating the reproduction and transformation of social structures.

Figure 6.3 (below) illustrates nuanced social realist stratified models.

(A) illustrates the foundational social realist view of causal powers; (B) the evolved morphogenetic social realist view of causal powers; (C) explanation of the morphogenetic Process Model, and (D) Practical Social Theory - a synthesises of the idea of agency inhering in people, the morphogenetic cycle as an analytical tool for reasoning about the changing influences of structure and agency, and the mediating role of agents drawing on their empowering agency.

The numeric identifying tags in Figure 6.3 (below) apply for both A and B models.

In Figure 6.3(B), ❶ refers to 'Social Structures' (social relations) and ❷ refers to 'Agents' with their inherent agency. Since *structure* (social relations) and the *agency* of agents constitute different levels ❶ and ❷ of stratified social reality, each possesses distinctive emergent properties which are irreducible to each other (M. Archer, 1995, editor's Preface; Thursfield & Hamblett, 2004, p. 117).

This (realist) dualistic approach gives equal weight to the *separate* strata of *structure* and *agency* (see Figure 6.3(B) ❶ and ❷) (Thursfield & Hamblett, 2004, p. 119).

The Morphogenetic Cycle: Figure 6.3(B)

Every morphogenetic cycle delimits three broad analytical phases consisting of: ❶ a given (existing) structure (a complex set of relations between social organisations and institutions), which *conditions* but does not determine social interaction ❷. Further conditioning ❷ arises, in part, from action orientations emanating from current agents, that in turn, leads to ❸ structural elaboration (modification), that is, a *change* ('elaboration') in the relations between power structures where morphogenesis rather than morphostasis ensues. The modified contextual situation (realpolitik) feeds back at ❹ to the beginning of the next cycle at ❶.

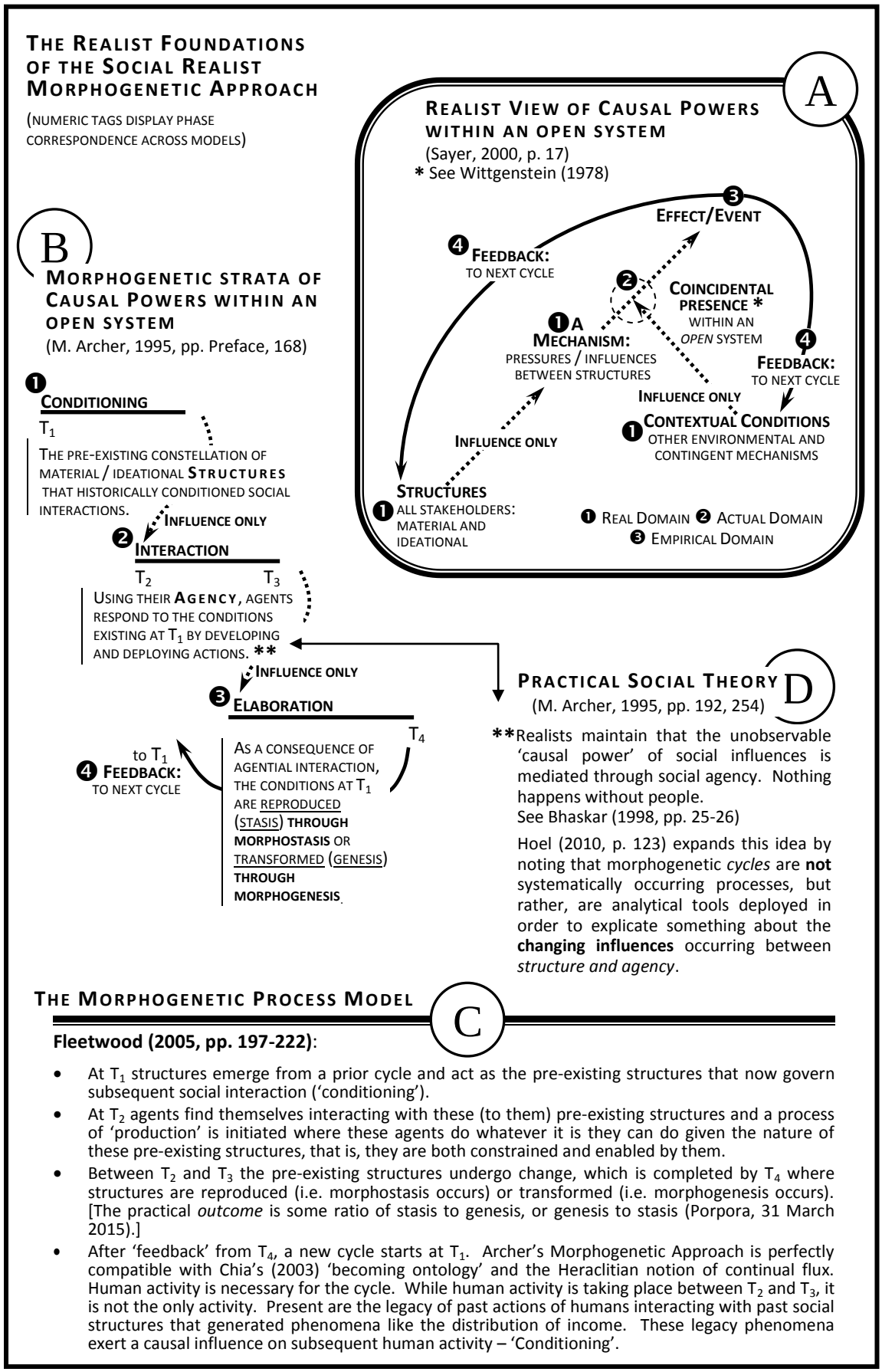

Figure 6.3: Realist Foundations of the (social realist) Morphogenetic Approach

(In contrast, a morphostatic cycle would seek the reproduction of power structures at ❸ and the elaborated[146] structures that feedback the *status quo* to ❶.)

The cycle repeats. Transition from state ❶ to state ❸ is not direct, precisely because structural conditioning is not the sole determinant of patterns of interaction (M. Archer, 1995, p. 91). This is illustrated better in Figure 6.3(A).

At any point in time within the repetition of on-going cycles, *structure pre-dates any particular cohort of occupants/incumbents*; that is institutional systems of positional power together with ideational power (culture) structures must be in place[147] before Actors can interact effectively. A vacant functional position must exist for someone to fill it. From then on, occupancy or occupation embroils the occupant in a network of social relations. People's agency does not create structure, but only reproduces or transforms it in any 'generation' (M. Archer, 1995, p. 168).

This (realist) dualistic approach gives equal weight to the *separate* strata of *structure* and *agency* (see Figure 6.3(B) ❶ and ❷ above) (Thursfield & Hamblett, 2004, p. 119).

Antecedent models and resurgence

The prior work of Laughlin (1991) appears in Figure 6.4 below and his ideas on morphostasis and morphogenesis have found resonance in the work of (Porpora, 2013). The concept of balance/coherence is an essential nature of the design archetype, but of necessity, it influences the interpretive schemes and the sub-systems (see Figure 6.4 above). In spite of disagreements and conflicts within an organisation, at some level there will be certain characteristics that bind the organisation together. Inertia around this dominant perspective, or dominant discourse, becomes the norm (Laughlin, 1991, p. 213).

Morphostasis and Morphogenesis

The accounts of Laughlin (1991), (Sayer, 1992, 2000) and Archer (1995) all deal with organisational change. Smith (1982), Levy (1986) and Robb (1988) appear to offer a collective understanding of change in the form of a 'morphostasis' (first order) and 'morphogenesis' (second order). From their perspective, morphostatic *change* involves making things 'look different' while remaining basically the same.

This idea of *superficial change* (morphostatic processes) is in contrast with *fundamental change* (morphogenesis processes); that is, a distinction between 'changes' and

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[146] This might include an incremental change back to a required level.
[147] The institution of 'property rights' is a case in point.

‘change’, or peripheral changes and core change. This distinction can be traced back even further to Argyris & Schön (1978) who termed morphostatic change as ‘single loop’ and morphogenesis as ‘double loop’.

When an organisation incurs environmentally-influenced morphostatic change, the interpretive schemes remain intact with superficial changes in presentation. However, environmentally-influenced morphogenetic (morphogenesis) change will change not only the superficial presentations of morphostatic change, but also the interpretive schemes of the organisation; its logics. In more recent time, Porpora (2013) has incorporated these ideas into the morphogenetic model.

With reference to Figure 6.4 (below):

- **Design Archetype** and **Interpretive Schemes**: both created by past participants (morphogenetic ‘conditioning’)
- **Design Archetype**: composition of structures (position power and ideational) that are given coherence and orientation by an underlying set of values and beliefs
- **Paradigms as meta-rules**: underpin and give direction to all lower levels
- **Organisational change**: generally in response to an environmental disturbance

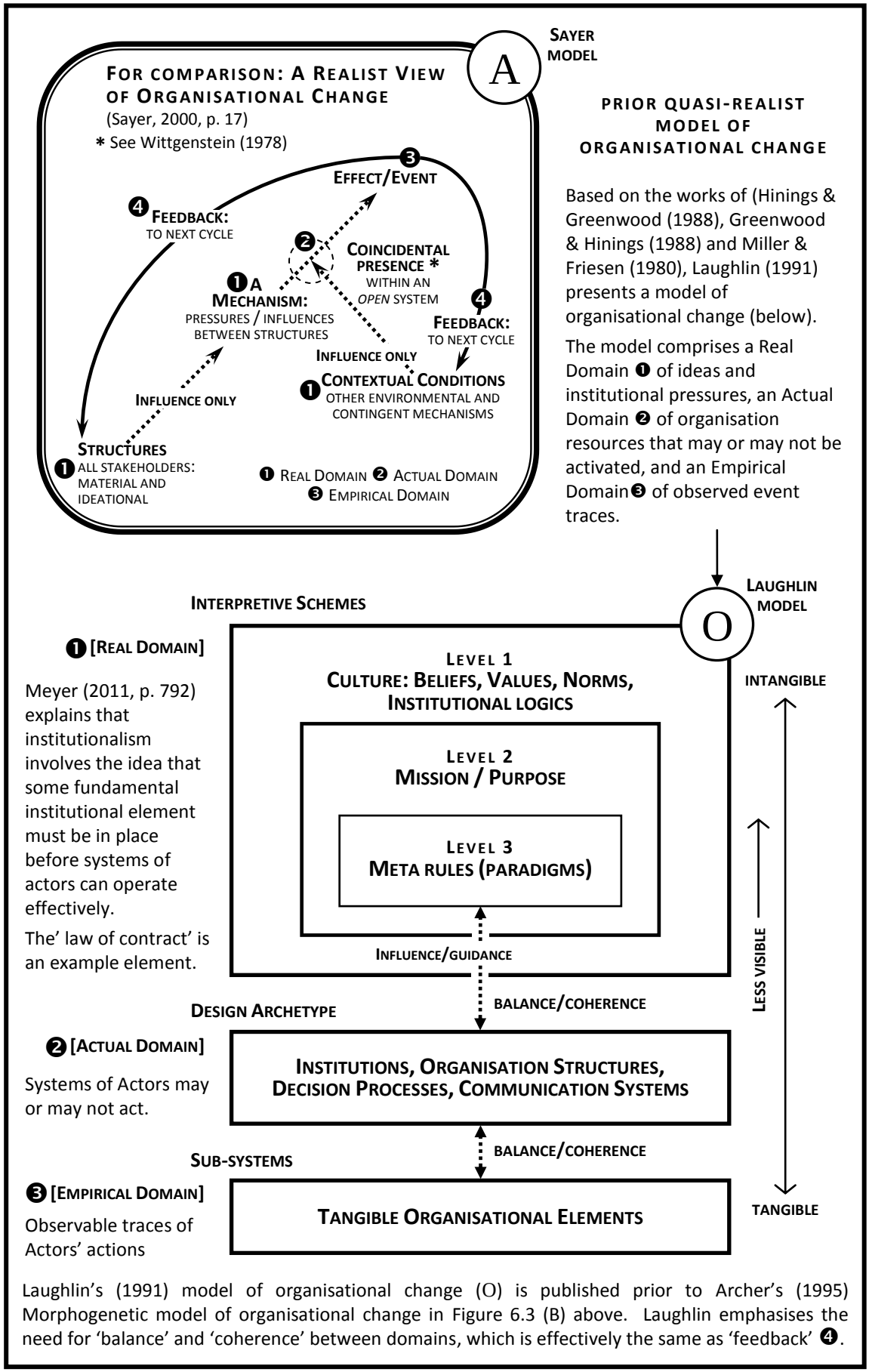

Figure 6.4: A comparison of Sayer's (Sayer, 1992, 2000) and Laughlin's (1991) approach to Realist modelling organisation change

The social world as morphogenesis

Given the concept of the reciprocal and inseparable relation between social actions (agency) and social structure (structure), how is it possible to explain facts about either agents or structures while social structures depend on the individuals that comprise them and these individuals are affected by their society? (Correspondence with Daniel Little, 27 March 2016)[148]

Archer calls her methodological approach 'morphogenetic' where the 'morpho' element acknowledges that society has no pre-set form or state, and the 'genetic' part recognises that society is formed (changed) by the intended and unintended consequences of the activities of agents. On this account, morphogenesis occurs at every level of society and at a given time each level has a degree of uniqueness that Archer terms 'emergence'. Any level is 'micro' to the level above and 'macro' to its subordinate. Such emergent properties are ascribed to the 'macro' even though they were elaborated from the 'micro' (M. Archer, 1995, pp. 7-12).

According to Daniel Little (23 May 2012), rather than 'micro' to 'macro' envisioned as some escalation in scale, Archer's methodology reflects on the influence of the 'interactional and local' to the 'systematic'. Such social realism affirms the reality of social properties as emergent properties of each of the levels of structure and agency; where each is distinct and irreducible to one another because they have different properties and powers; particularly as they reflect unique emergence elaborated from one another. This justifies Archer's assertion of the methodological distinction between structure and agency.

The central idea Archer's social world of morphogenesis is that processes of change occur for agents and social structures in interlocking and temporally complex ways:

- Incrementally, agents are formed (genesis/formation) within *a set of local situated social structures* (norms, language, communities, and power relationships).
- On a larger time scale, the *systemic structures* (positional power structures and ideational/cultural power structures) themselves change (transformation) as a result of the activities and choices of the historically situated individuals who inherit the past and who constitute those structures (see Figure 12.4).
- Hence, there are two interrelated cycles with different time frames:
    - Actors are socially constituted by socially situated structures.

[148] Professor Daniel Little is Chancellor of the University of Michigan-Dearborn.

- Structures are themselves adapted and changed by active individuals: Archer's morphogenetic cycle phases of 'social interaction' and 'structural elaboration'.
- The interrelationship affords 'micro-macro' perspectives: upwards towards more comprehensive social structures and downwards towards more refined understanding of action and interaction.

Summary

- The term morphogenesis was used by Buckley (1967, p. 58), in a biological context, to refer to 'those processes which tend to elaborate or change a system's given form, structure or state'. It is contrasted to *morphostasis*, which refers to those processes in a complex system that tends to preserve a system's conformation unchanged.
  However, these biological analogues do not account for the *emergent* properties of human agency and social systems. In Archer's adaptation of the term, she purports that society has no preferred form – contrary to mechanical, organic and cybernetic analogies – but is shaped and re-shaped by the interplay between [social] *structur*e and [human] *agency* (M. Archer, 2007, p. 319).
- Although they always interrelate causally, structure and agency remain ontologically separate (Porpora, 2013, p. 26). Searching for their respective presentations would be misguided.
- Archer (1995, p. 75) uses the term 'morphogenesis' to capture both the possibility of radical and unpredictable re-shaping of society, and the fact that the genesis of this re-shaping lies in the interplay between structure and agency – a process which can only be examined theoretically because of their temporal *separability* and an outcome which can only be explained by means of *analytical dualism*. An open society is like it is precisely because it is both *structured* and *peopled*, and therefore complex.
- Some scholars use a similar cyclic model without either being aware of the morphogenetic approach, or giving it recognition. For example, Asprem's (2015, p. 18) inquiry into 'ritual magic' concludes that 'Innovation has been driven by the interplay between deploying knowledge already considered special [esoteric] [conditioning], and obtaining new knowledge [interaction] as an effect of the ritual, which is then used to revise [elaboration] the action structure itself.

- People always *act* (with agency) out of social and cultural circumstances, and these actions ultimately *modify* (genesis[149]) or *sustain* (stasis[150]) the organisation's strategic social pathology (Porpora, 2013, p. 28). In so doing, social morphogenesis is a *process* rather than an end product (M. Archer, 2013, p. 1).
- On the one hand, social *integration* focuses on the relationship between the actors (**agency**), whereas on the other hand, problems of system *integration* focus on the parts of a social system: its **structure** (Lockwood, 1964, p. 245). Importantly, these two perspectives – an analytical dualism – are not mutually exclusive; in fact, they are reciprocal and inseparable (Daniel Little, 23 May 2012).
- Morphogenetic 'theory' considers human agency and analyses how human beings develop their personal and social identities as they pursue their ultimate concerns in ways that we can recognise generally. The focus is on how to relate the ideas of culture, social structure and agency without conflating them (Vandenberghe, 2003, p. 2).
- Morphogenesis/stasis is an approach to social theory which is realist in its ontology and which supplements realism by making *analytical dualism* explicit and demonstrating its methodological utility in practical social analysis (M. Archer, 1995, p. 76).
- Maccarini (2015, p. 167), drawing on the work of (McCann & Selsky, 2012), refer to the idea of modelling morphogenetic/morphostatic cycles comprising gradual and other forms of change; and the possible 'rhythm' of social morphogenesis within particular time spans, characterised by given conditions and structures within concrete case studies. This idea encapsulates the research project.

Next chapter

Just how the morphogenetic approach reflects its social realist roots is modelled in the next chapter. It explicates analytical dualism for practical reasoning. Analytical dualism represents potentially a significant contribution to tendering sociology, as it underwrites a framework-for-reasoning about the progressive maturation of the organisational institutionalism of a tender enterprise.

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[149] **Genesis**: production
[150] **Stasis**: in the form of homeostasis as social equilibrium

Chapter 7

Epistemology:

Analytical Dualism

Conceptual modelling of the morphogenetic model exists in several publications, albeit in skeletal format (M. Archer, 1995, pp. 193-195, 264-265; Porpora, 2013, p. 27). Hoel (2010, p. 129) suggests that 'the model is tremendously complex even when laid out as simply as possible'. The credibility, veracity and potential efficacy of a morphogenetic 'framework-for-reasoning' rests on the tractable accessibility of the morphogenetic approach using analogical models and schematics. A mechanical analogy of Analytical Dualism

Figure 7.1 addresses the three-dimensional relationship between the social system as influenced by the institutional structures of Positional Power and Ideational Power.

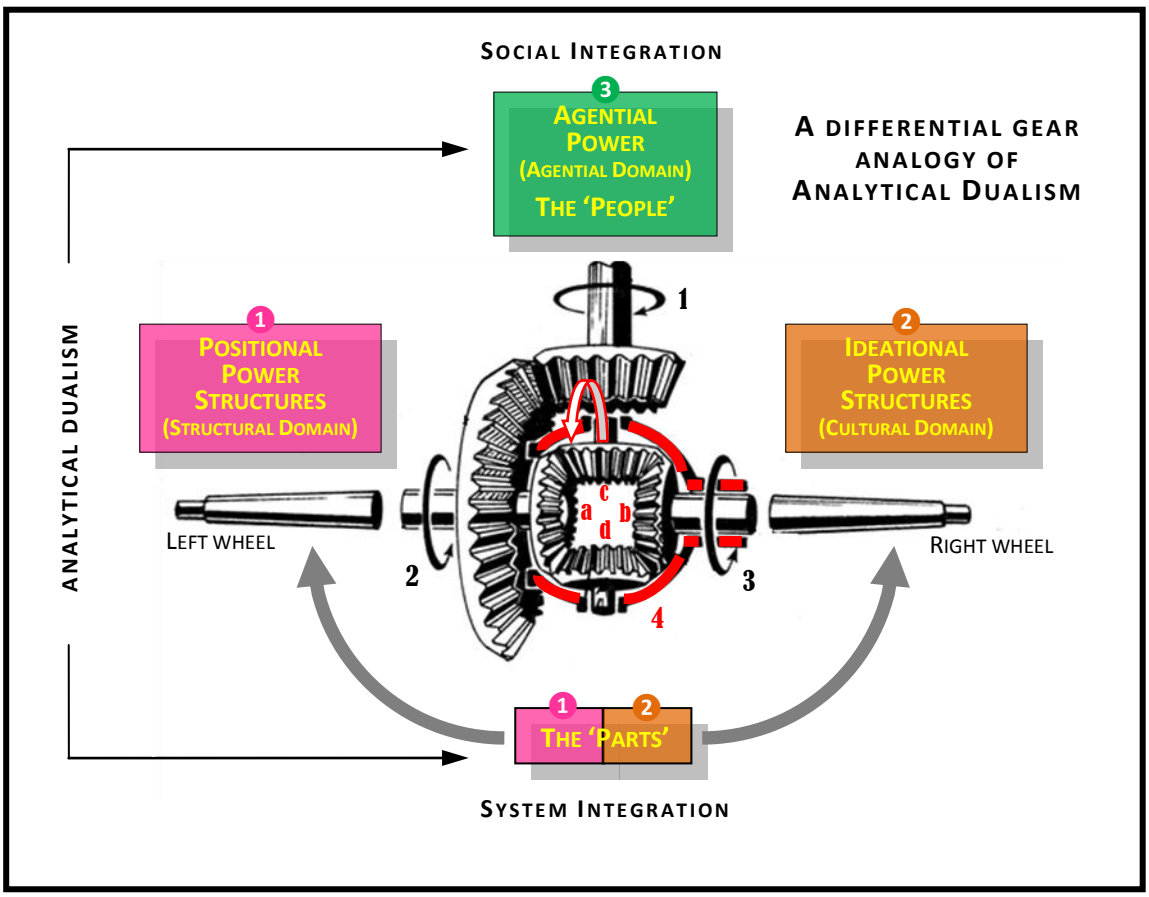

Figure 7.1: A mechanical analogy of the idea of Analytical Dualism for theorising about social change

Both (The Parts) are influenced by the Agency of people. Time adds a fourth dimension. Later, these influences will be presented as bi-directional.

As with all analogies, Figure 7.1 lacks contextual sensitivity and nuance. Analytical Dualism (M. Archer, 1995, p. 62) is a tenet of the morphogenetic approach to social change. The approach is complicated[151] and this founding tenet of Analytical Dualism is no different. Even Figure 7.1 needs guided explanation; it is an analogy and not an analogue.

The differential gear analogy

1. The analogy comprises the differential gear found in all (motor) vehicles required to turn corners. It accounts for the fact that one wheel needs to rotate faster than the other in order to avoid skidding.
2. The key components comprise: **1** the driving power from the engine; **2** the left-wheel axle; **3** the right-wheel axle; **4** (the section surface in red) a holistically rotating assemble of interacting gears.
3. This item **4** is the 'main game'. The entire outer casing (in red) is fixed to the left wheel axle **2** but freely rotates around the right wheel axle **3**. That is, the entire assembly of gears **4** rotates like a basketball around 'penetrating' axle **3**.
4. Assume that the engine is driving the rear axle via **1**. Assume also that the right wheel **3** is clamped and cannot rotate. This means that the left wheel **2** axle and attached 'ball' **4** are rotating together and 'slipping' around the right wheel axle **3**. Together, the connected gears **a**, **c** and **d** rotate around fixed gear **b**; fixed because the right wheel cannot rotate.
5. In reality, both rear wheels can rotate at different speeds and this enables a vehicle to turn around corners without one of the wheels losing grip.

Translating the analogy to Analytical Dualism

Figure 7.1 illustrates how one 'influence' from the motor can affect the two 'wheels' in the same or different ways. With some imagination, 'manually' rotating one wheel could start the motor and/or rotate the other wheel if it was free to move. In this way *three* sources of power can influence each other.

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[151] The term 'complicated' is used to indicate that 'knowledgeable' exponents can guide an explanation whereas 'complex' would indicate unknowable relations between interacting lineaments (Snowden & Boone, November 2007).

- ‘The People’ (Agents) are the ‘engine’. Nothing happens without people, be they the influencers or influenced. Whatever happens is a function of collective Agency that is inhered in people.
- ‘The Parts’ are the social structures (social relations) in which people interact. They comprise 1) positional power structures and 2) ideational power structures.

While people might create an organisation, over time, the founders will disappear and new entrants (people) will be influenced (conditioned) by the prevailing social structures (M. Archer, 1995, p. 196).

In Figure 7.1, there are theoretically separate but related identities for ‘The People’ and ‘The Parts’; as well as the ‘Positional Power Structures’ with respect to the ‘Ideational Power Structures’. Archer (1995, p. 62) identifies these as instances of ‘Analytical Dualism’. ‘The People’ are responsible for the quality of ‘Social Integration’ over time.

In Figure 7.2 below, the domains of Structure ❶, Culture ❷, and Agency ❸, are presented in two dimensions. Hoel’s (2010, p. 129) opinion on ‘complexity’ is evident. However, the three dimensional schema of Figure 7.1 (above) applies. The morphogenetic ‘process’ time adds the fourth dimension. The numbered tags correspond across Figure 7.1 and Figure 7.2.

Meanwhile, the degree to which Positional Power Structures ❶ and the Ideational Power Structures ❷ are mutually supportive (congruent) defines the disposition of *System Integration*. Later this will be discussed in terms of an organisation’s *social pathology* with which it faces other organisations.

Theorising about *social change* is the purpose of the morphogenetic approach. Because social change occurs over time, Morphogenesis as an analytical process takes a temporal structured (layered) approach: the fourth dimension.

THE COMPLICATED LOGIC OF THE MORPHOGENETIC APPROACH

PHASE 1 ⑦ CONDITIONING — The inherited context constrains and enables what people can do and achieve in terms of their initial *Bargaining Power* as they enter Phase 2 for *Negotiations* with others.

PHASE 2 ⑩ INTERACTION — This is the 'main event'. As Corporate Agents interact, they seek to transform or reproduce – mediate – their inherited situation. Such social interactions change power positions (Structure) and the relative influence of ideas (Culture), as well as the opportunities for Agents. Corporate Agents are now exerting their *Negotiating Strength* that has either enhanced or diminished their life chances.

PHASE 3 ⑯ ELABORATION — The outcome of the 'main event' reflects a ***revised*** regime of power positions, ideas, and opportunities for Agents. This is the idea of Morphogenesis. Alternatively, if resistance to change has been achieved then Morphostasis has occurred. In so doing, Corporate Agents have exercised a Transformative or Reproductive power. The Phase 1 to Phase 3 cycle process would terminate if a contract signature concludes a tender project. Alternatively, the Phase 3 Structural, Cultural, and Agential elaborations and their emergent properties will confront Agents in the next Phase 1.

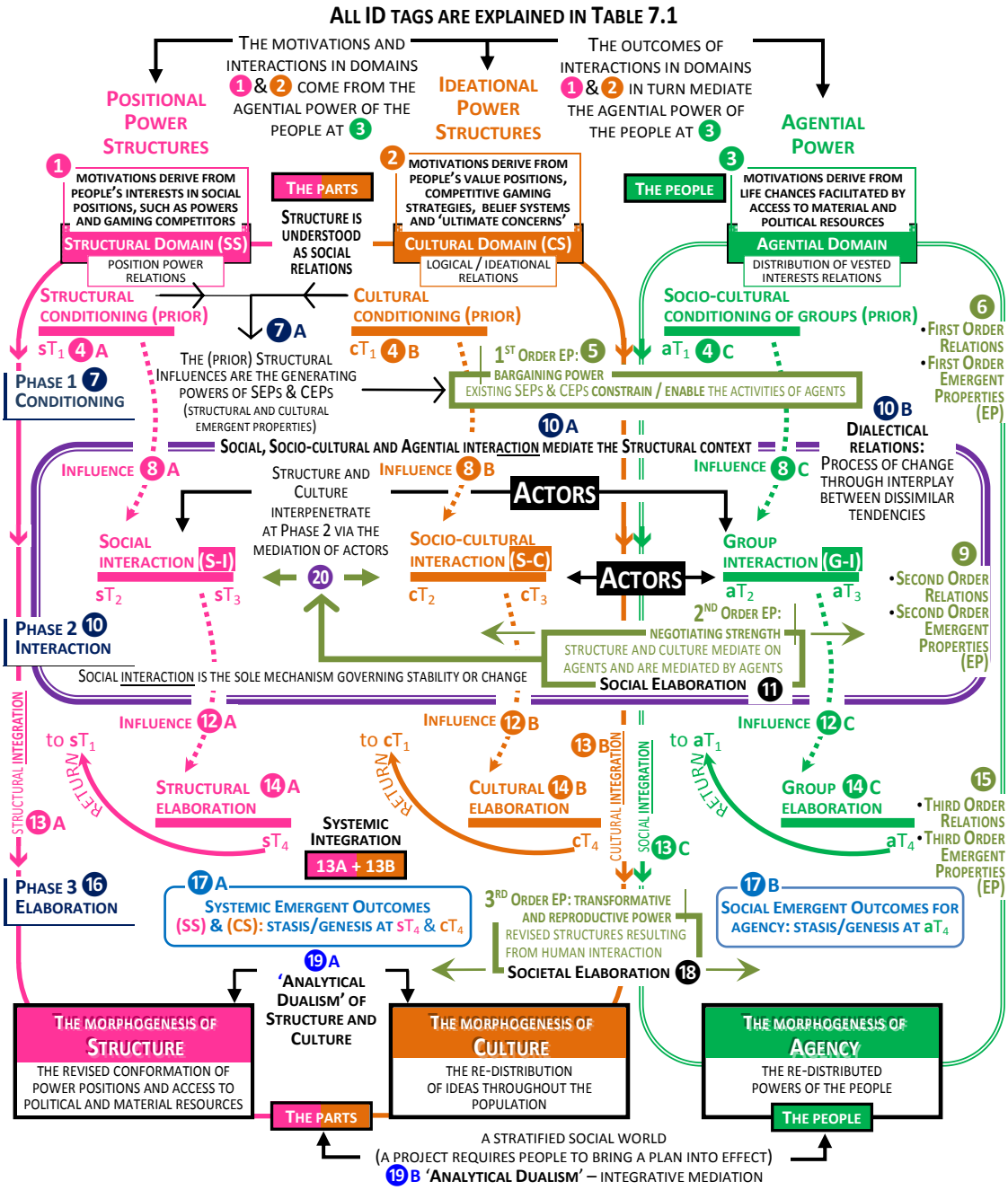


Figure 7.2: Conceptual Model of the Morphogenetic Approach enjoining Agential Power as the mediating influence on Positional Power and Ideational Power. Derived from Archer (1995, pp. 195, 264-265, 297-303) and Porpora (2013, p. 27). All numbered tags are identified in Table 7.1 following.

Table 7.1: Amplification of tagged items in Figure 7.2

6 9 15	**The idea of 'Emergent Properties' (EP):** While **People** 3 mediate the causal powers of **social structures** 1 and **cultural structures** 2, (see Figure 7.2)**,** such people are themselves 'mediated' in the process. For example: • A learner driver might become aware of the relevance of automated traffic lights and **change** personal behaviour: **Personal Emergent Property (PEP)**. • In turn, the **Cultural Emergent Properties (CEP)** of the traffic light has been **changed** to one of cognitive relevance. • Also, the **Structural Emergent Property (SEP)** of the traffic light has **changed** to a) ***enable*** reduced mortality and enhance the **power** of the relevant authority, and b) ***constrain*** the **power** of the driver relative to other drivers.
1 (SS)	**Structural Domain (Structural System [SS] of Positional Power social relations):** Material relations (structural domain) comprise *policies* and *resources* etc. (Horrocks, 2009, p. 46). Material structures have to exist first before agents can engage in practices to sustain or change them. Porpora (1998, p. 339) explains how different conceptualisations lead to very different sociological approaches. Emerging structures derive their causal powers from people presenting in some combination of 'collective identity', 'personal identity', and 'social identity'. However, the social structure has its own inherent (different) causal powers that emerge from the various identities but they remain *unidentifiable*. This is a case where the connected parts (the sum) have a capability greater than the individual parts in aggregate. They are therefore causal powers of the structures and not of the individuals (Elder-Vass, 2007, p. 40). Archer distinguishes these emergent powers of social structure from *external* and contingent factors that also have causal powers. The difference is that the **emergent properties of social structure** have their own unique powers, whereas the *external* and *contingently* related factors have their individual powers that at best, are aggregative (M. Archer, 1995, p. 174). The relations between the constituents of a social structure are *internal* to it and *necessary* for its operation (Sayer, 2000, p. 14). Only contradictions exert a conditional influence on the course of action by shaping the action contexts in which people find themselves. Structural contradictions represent obstructions to certain institutional operations and translate themselves into problem-ridden situations (wicked problems) for agents associated with them.
2 (CS)	**Cultural Domain (Cultural System [CS] of Ideational Power Structures - social relations):** Again, only contradictions exert a conditional influence on the course of action by shaping the action contexts in which people find themselves. Cultural tensions are an outcome of constraining contradictions. The causal effects of Cultural Structures (ideational power structures) are limited to the situational conditions that cultural agents mediate (see FIGURE 7.2**:** **c**T_1, **c**T_2, **c**T_3, **c**T_4).
3	**Agential Domain:** Social structures are only operative in and through the world of people - an open system - because human action is typified by innovativeness, a capacity for interpreting the same material conditions, cultural elements, circumstances and situations in different ways. In so doing, they can introduce novel patterns or courses of action in response to them. People are reflective in thought and reflexive in action, for which there can be no control (M. Archer, 1995, p. 70). Only contradictions exert a conditional influence on the course of action by shaping the action contexts in which people (Agents) find themselves.

Table 7.1 cont.

1 2 THE PARTS	**'The Parts' – The Structural Domain and the Cultural Domain:** Both are power structures. In the context of Analytical Dualism, the *Parts* 1 2 are otherwise known as 'Structure'. It comprises 'Positional Power Structures' and 'Ideational Power Structures'. 'Structure' is to be understood as *Social Relations* (Porpora, 31 March 2015). According to Archer (1995, p. 71), Bhaskar (1998) argues that in social theorising, 'the *relations* one is concerned with here must be conceptualised as holding between *positions* and *practices* ... and not between individuals who occupy/engage in them'. For example, 'structure' as an emergent entity, is not reducible to the original architects of the organisation. The structure (of an organisation) pre-exists the current staff who are not puppets of the structure because they have their own emergent properties enabling them to either reproduce or transform social structure. Archer sees the Cultural 2 and Structural domains 1 as interacting but from relatively independent positions. That is, social control in the quest for bureaucratic and chain-of-command stasis, cannot force the work of project managers to a halt. Indeed, she argues that *cultural* morphogenesis shifts the legitimating foundations for *structural* organisation and, in addition, presents socially stratified people with new ideational (cultural) resources which represent competitive advantages or new opportunities for their material projects (M. Archer, 1995, pp. 316-317). Therefore, there is structural penetration of the cultural domain, and cultural penetration of the structural domain. Actors have positions in both domains simultaneously (M. Archer, 1995, p. 305). The cultural penetration of the structural domain has to be recognised primarily because social groups not only have interests, resources and sanctions, but they also have ideas.
3 THE PEOPLE	**'The People' (Agential Domain):** Without people, 'the Parts' have potential but cannot be activated through social relations. An individual Person might be a Primary agent in one network or domain, and a Corporate agent in another. The human person can be an Agent and then an Actor. People have emergent properties. Both Agents and Actors, however, remain anchored in Persons, as neither Agents nor Actors are constructs or heuristic devices. They concern real people even though they only deal with certain ways of being in society. In so doing, they cannot represent all the ways of being human in the world (M. Archer, 1995, p. 256). **Identity**: Everyone has a *personal identity* but Archer submits that everyone does not have a *social identit***y**; that is, a role in which they can invest enough of themselves to feel confident. Absence of a social identity occurs when the roles occupied do not express what we would choose to be, or have lost through, for example, redundancy (M. Archer, 1995, p. 256). **Agency (that is accorded to an agent)**: The idea of Agency reflects on a) a collectivity, and b) the shared opportunities (resources) available to the collectivity. Life opportunities (life chances) refer to a distribution of resources within the context of structured and stable social groups. For Archer (1995, p. 185), *an Agent is always a collectivity*. It is the collectivity that determines our initial social position. From then on, there are premiums and penalties awaiting our various action courses. Agency is not static. People in different settings have different emergent properties (Horrocks, 2009). Agency exerts two independent influences. One **temporal,** being the speed or delay in elimination of prior structural influences, the other **directional**, as agents exercise influence.

Table 7.1 cont.

3 THE PEOPLE	At any point in time *structure pre-dates any particular cohort of occupants/incumbents*. A position must exist for someone to fill it. From then on, occupancy or occupation then embroils the occupant in a network of social relations. That is, agency does not create structure, but only reproduces or transforms it in any 'generation' (M. Archer, 1995, p. 168). When the contradictions [ambiguities] between the ideas of the [organisation's internal] cultural system mesh [through enabled mediation] with the social conflicts of the life-world [political tensions in the external context], morphogenesis ensues (Vandenberghe, 2003, p. 3). My interpretation of this proposition is that there is an external dimension and an internal dimension that together provides sufficient enabling political support – a confluence of optimistic demeanours – necessary for human agency to energise morphogenesis. Porpora (2013, p. 28) notes that language is a collective emergent phenomenon enabling every speaker to choose what to think – agency – but who might be less free to articulate their thoughts, as the aphorism reminds us, 'where I sit is where I stand'. 'Where I sit', is the inert *position/function* of the subject, but 'where I stand' is a reflection of my obligations to the organisation, and that can cause personal suffering. However, more generally, an explicit premise of the morphogenetic approach is that persons are more than just inert occupiers of subject (functional) positions. Indeed, they possess both material interests and idealistic convictions and, according to Porpora (2013, p. 28), they act more or less coherently out of both. Even by taking structure and culture 'fully' into account, human behaviour can never be adequately explained in these terms as human agency always exhibits irrepressible creativity. The explication of human agency requires inductive reasoning based on, *inter alia*, narrative histories (Porpora, 2013, p. 29). Although the emergent properties of structures and cultures do not determine agency, they *constrain* or *enable* the possibilities open to agents (Thursfield & Hamblett, 2004, p. 11). The *emergence of Agency* is the end-product of the 'double morphogenesis' in which collectives of human beings are grouped and then re-grouped as they contribute to the process of reproducing or transforming the structure or culture of society. In this way, they also maintain or change their collective identities as part and parcel of maintaining or transforming the socio-cultural structures that they inherited at birth (M. Archer, 1995, p. 255). If *Persons* offer activity-potential for *Actors*, then *Agency* is a necessary *mediator* between them in order to supply activity with a purpose. Agency is also the mediating mechanism that accounts for who, out of the total population, acquires which role(s) within the total role array. Different agential life chances give differential access to different parts of the array of roles available to society any given time (M. Archer, 1995, p. 256). *Agency* links *Persons* to *Actors* and is needed to account for who occupies which roles – and why they do what they do when the role does not require them to do it (M. Archer, 1995, p. 256). **Agents:** From the morphogenetic perspective, Agents are agents of something. They are agents of the socio-cultural system into which they are born (groups or collectivities) and at the same time, they are agents of the *systemic features* (positional power and ideational power) they transform (since groups and collectivities are modified in the process). This is the *morphogenesis of agency*. This might entail centuries of interaction of pre-grouping and re-grouping (M. Archer, 1995, p. 257). Agents are directed to functional positions relative to each other. A *vested interest* accompanies a functional position. When the functional requirements of a position change, so too does the vested interest. In so doing, social and cultural properties influence conditionally the agent's self-interested actions. However, such potential action is associated with opportunity costs for the self-interested agent (Horrocks, 2009, p. 48). Vested interests (by an agent in a particular position) are the means by which structural and cultural properties exert a conditional influence on subsequent action. *Actors* are motivated to act in their interests, which are a function of their social position (M. Archer, 1995, p. 203).

Table 7.1 cont.

	Agents freely perceive their own situation and are free to react. However, objective opportunity costs apply should the agent misinterpret their functional position or ignore to act sympathetically to the interests vested in the position. Agents have a power to act in various ways; to manipulate systems and material resources in such a way as to circumvent the structural constraints. That is, there are structural, cultural and agential mechanisms that have to be broken down or replaced. The objective is to create a new 'situational logics' (Horrocks, 2009, p. 48). **Two types of agents:** Everyone is a *Primary agent* in the sense of inclusion in a collectivity and involvement with the distribution of resources. The *Corporate agent* is the organiser and the 'articulating representative'. Importantly, the Corporate Agent has a capacity for strategic planning; that is, they are active social subjects. Primary Agents (possibly agitators) inhabit the (prior) contexts that Corporate Agents seek to control. That is, the Corporate Agent wrestles with the aggregate affects of Primary Agents and in so doing, Primary Agents become a part of the morphostasis and morphogenesis activities; that is, Primary Agents transform into Corporate Agents. This *morphogenesis of Agency* – the mobilisation of groups – results in changes of social identity. Society depends on reflection without embodying it, and is reliant on agents wanting change yet change rarely happens in the way anybody wants. This is because of the unpredictable and autonomous causal powers of both structure and agency respectively (M. Archer, 1995, p. 75). The human being *per se* has no particular interests to bring to any role and to be innovative in that role. However, Agents who, as Collectivities, share the same life chances, and have an interest in protecting or improving their life chances that are external to roles but prosecuted through roles. As *Agents* are defined as Collectivities (plural) they cannot have a strict identity (M. Archer, 1995, p. 256). **Primary Agents:** People who just exist are primary agents. If they co-act (as a collective) in similar ways, they have the potential to transform into Corporate agents with emergent powers of organisational development and the articulation of interests (M. Archer, 1995, p. 185). With primary agency, each person has an agential effect on the environment of which they are a part by virtue of their existence. They may not be involved in active attempts to reproduce or transform that situation, but they have effects nonetheless. While agents may not be overtly involved in the transformation or reproduction of systemic (positional power and ideational power) organisation, we cannot say that they have no effect on it. The effects are unarticulated, uncoordinated and unstated in aim (Thursfield & Hamblett, 2004, p. 126). **Corporate Agents:** In the context of realist social theory, some groups are constituted so that they are capable of acting in a unified or 'corporate' way in pursuit of their interests. Corporate agents have the capacity to alter the terms of interaction. While Primary agents and some other groups lack much of the capacity to induce change in their circumstance, they nonetheless continue to constitute themselves, and in this and other ways, contribute to *reproducing* their *own* circumstances (Ackroyd, 2004, p. 154). Corporate agency is characterised by causal powers that are politically motivated, overt and clearly stated. The actions and interactions of Corporate agents are calculated and represent more than the sum of particular individual's interests. Corporate agency is active rather than passive. It is conducted in relation to reasons, and shapes the context in which all Actors act (Thursfield & Hamblett, 2004, p. 126). (In contrast, Primary agency takes place within this environmental context and, by *responding* to Corporate agency, transforms or reproduces the environment.)
ACTORS	**Actors:** When assuming a role in an institution, an individual moves from a Person and Agent to an Actor. Social Actors emerge from Agents as they identify with their roles. But in so doing, their morphogenesis from Agent to Actor generates new roles, rules of conduct, and allocations of responsibility (Hoel, 2010, p. 46).

Table 7.1 cont.

	Such roles are emergent structural properties that cannot be reduced to the characteristics of people occupying functional positions[152]. There are internal and necessary relationships with each role such as between a teacher and student; both must be present. Actors possess strict social identity. The difference between the 'systemic' (positional power and ideational power) and the 'social' (relations between actors) is the difference between roles and their occupants - the role being relatively enduring and generally agnostic to the characteristics of different personalities. People personify the roles with their vested interest. Real actors (actors who make a difference) bring their own ideal and objectives, skill and competence, flexibility, dedication or creativeness in role transformation (M. Archer, 1995, p. 186). Actors not only reproduce roles but they have the reflexive capacity to redefine roles. That is, personal identity becomes linked to a role and personal characteristics conform the role. In sum, the Actor follows rules and normative expectations associated with a role, and additionally, shape such conduct that is associated with the role. The Actor is engaged with an array of other organisational Actors and in so doing, develops a particular social identity comprising (competitive) game playing and character acting or game playing and personality[153].
4 A (sT_1) 4 B (cT_1) 4 C (aT_1)	**Domain Timeline:** Generalised as: **αT_n (DOMAIN INITIAL 'α', TIME 'T', MILESTONE '$_n$').** For example, T_1 represents the historical legacy of material/power relations, inherited ideas, anthropogenic myths, and conflicting desires for stability and change; all dominated (initially) by the historical distribution of vested interests.
5	**Agential Bargaining Power (First Order Emergent Properties):** Agents, whose activities are directed by others, are constrained by a historical legacy 1 that limits Agents' *Bargaining Power*. (*Power* itself is an emergent property of *Interaction* 20.) This historical legacy has its own constraints and enablers on contemporary structural, cultural and agential motivations. Existing Structural and Cultural Emergent Properties impact on agents, but any form of change only occurs through agential mediation.
6 and 7 A **ACROSS ALL DOMAINS:** • **POSITIONAL POWER,** • **IDEATIONAL POWER,** • **AGENTIAL POWER**	**SEP (Structural Emergent Properties)**: Examples include a political organisation, a taxation form and corporate mergers. **CEP (Cultural Emergent Properties)**: Examples include forms of instruction, ethnic categories and marriage equality. • **First Order Relations**: The inherited resource distributions and the resulting pre-groupings of Agents according to their life chances. • **First Order Emergent Properties**: 5 6 The *existing* SEPs and CEPs that constrain or enable the activities of **Agents** to affect change or stability: their *Bargaining Power*.
7	**Phase 1. Contextual Conditioning:** This is the existing realpolitik of the distribution of relative power.
8 A 8 B 8 C	**Influences between Phase 1 and Phase 2:** The connecting arrows/links are not communication links. They represent connecting mechanisms (influences/pressures) of emergent relational properties that exist just prior to (conditioning) any interaction.

[152] The often mentioned example that you cannot dissect a person to determine their professorial status.
[153] Archetypal examples are suggested in the actor Bill Nighy or The Hon Andrew Robb AO MP (personality stasis) in contrast to actor Meryl Streep or The Hon Scott Morrison MP (character immersed).

Table 7.1 cont.

(S-I)	**Social Interaction:** Social relations between power positions. See 9
8 B	**Conditioning influence on Socio-cultural Interaction:** Structures of Ideal (ideational) vested interest groups.
(S-C)	**Socio-cultural interaction:** See 9
8 C	**Conditioning influence on Group Interaction:** Confronting the distribution of Vested Interests and their different Situational Logics that are confronted by Agents.
9 ALL DOMAINS	**Second Order Relations**: Vested interest groups are confronted with: ○ Strategic action guided by Situational Logics ○ Orderly or Conflicting *Agential Relations* at the level of Social Interaction (S-I) and Socio-Cultural Interaction (S-C) can show a significant degree of independent variation from those characterising the emergent Structural System (SS) or Cultural System (CS) respectively. ○ The capacity of Corporate Agents to mobilise resources ○ The effectiveness of mobilisation will impact on *Negotiation Strength* **Second Order Emergent Properties**: **People's Emergent Properties (PEPs)**: In the very process of seeking to change the state-of- affairs, pre-grouped **agents** (plural) undergo re-grouping. This gives rise to new **Corporate Agents** and therefore new relations between them. An example being the ascendancy of aboriginal political advocates in non-aboriginal dominated society. PEPs are associated with the **conditioning** of **strategic interaction**. (M. Archer, 1995, p. 302). Such new 'social re-grouping' provides opportunities for some individuals, while others have reduced access to resources. Phase 2 Social Interaction (S-I), Socio-Cultural Interaction (S-C) and Group Interaction nurture the evolution of SEPs, CEPs and PEPs. From these emergent properties, Actors have *Negotiating Strength* (rather than just their inherited 'Bargaining Power' as in Phase 1) to further mediate change or stability. The Group Negotiating Strength required to affect change (2nd Order) 11, is a function of: • Contextual Conditions ○ Situational Logics ○ Group Relationships • Initial Bargaining Strength (1st Order) 5
10	**Phase 2 - Social Interaction (the sources of *transformation* and *reproduction*):** Through social interaction driven by political ambition, together with the mutual impacts of Structural (positional) power and Cultural (ideational) power, a revised or unchanged regime of power distributions materialises. Negotiated-Order theory disputes the idea of a highly ordered society, rather it views interaction strategy as a stream of interactionist inquiry in which societal arrangements and procedures are considered to be constantly reworked by those who live and work within them. There is an ongoing, albeit often tacit, process of negotiation and adjustment of action (Crotty, 1998, p. 76).

Table 7.1 cont.

10 A	• ***Agential Interaction*** 10 A and ***Structural Interaction*** 20 **[located inside Phase 2]** (contrast with ***Domain Integration*** 13 A 13 B 13 C) The mere presence of Positional Power Structures and Ideational Power Structures is sufficient for them to be mutually influential via ACTORS. This Agential interaction mediates on the mutual influence, and reciprocally, the mediated power structures mediate back on Agential powers.
10 B	**Dialectical Relations:** The morphogenetic approach assumes that social change involves a dialectical relation between human *agency* and the *context* in which those Agents find themselves; contexts that include *culture, structure and in addition, physical things* (Porpora, 2013, p. 29). Dialectical Relations is variously defined as resolving (a political compromise that does not necessarily 'solve' a problem) disagreements through rational discussion. Interaction back and forth between a variety of opposing viewpoints or perspectives. The objective is to recover subjugated knowledge hidden from everyday view (Denzin & Lincoln, 2011b, p. 7).
11	**Second Order Emergent Properties** 9 **:** **Social Elaboration:** Social Elaboration is contrasted with Societal Elaboration 18. Social Elaboration in Phase 2 emerges from the interplay between Structural Emergent Properties (SEPs), Cultural Emergent Properties (CEPs) and People's Emergent Properties (PEPs). **Through these negotiated interactions, the nature of the social context changes (elaboration)**. 18 Societal (open system) or Systemic (unified system of positional power and ideational power) Elaboration (or non Elaboration), is the outcome of a morphogenetic cycles. A temporal pause, milestone or natural termination (tender submission date) provides an opportunity to consider the ramifications for a socio-cultural system or society-at-large.
12 A 12 B 12 C	**Connecting Mechanisms between Phases:** The preceding Phase 2 of Social Interactions produces social and societal change with different – perhaps subtle – emergent properties with inherent capacities for new or revised influences (elaboration of the existing context). This is the idea of 'connecting mechanisms' between phases. The exchange of power between agents is the constant medium **linking the second and third orders** 12 C**.**
System (systemic) Integration and Social Integration: Analytical Dualism	
13 A 13 B 13 C	**Positional Power Integration:** **Ideational Power Integration:** } Systemic Integration: 13 A + 13 B '**The Parts**': Issues such as class antagonism. **Social Integration: 'The People'** 13 C Relationships between Actors can vary between high social integration to low social integration.
14 A 14 B 14 B	**Third Order Emergent Properties:** Following the results flowing from the Negotiating Strength of Actors in Phase 2, Actors are enabled (or constrained) with Power to mediate Structural and Cultural Elaboration – *Transformative and Reproductive Power*. In the process, Agents/Groups themselves are elaborated. Structural, Cultural & Group Elaboration (change /transformation), or Non Elaboration (reproduction) being this cycle's process result, feed back to the beginning of the next cycle (T_1), and now represents the revised 'existing conditions'.

Table 7.1 cont.

15 ALL DOMAINS	• **Third Order Relations**: Intertwined Exchange Transactions and Power Relations account for the emergence of either Reciprocity or Control in the interaction between different groups. All Transactions are processes of: ○ Exchange of Power between Agents ○ Involve the use of political, financial, and intellectual resources
16	**Phase 3 - Elaboration:** The revised regime of power distribution ensures a revised realpolitik that of itself facilitates further distributions of relative power and the beginning of the next morphogenetic cycle with a new reality.
17A	**Systemic (unified) Emergent Outcomes: see 18** The influence of the elaborated situation depends on the degree of *Systemic Integration* of *Positional powers* and *Ideational powers* and the degree of *social integration* between the Actors. *Systemic Integration* occurs when the Positional Power System and the Ideational Power System are congruent. Such integration can vary between high and low.
17B	**Emergent Outcomes for Agency:** The elaboration of Social Agency delivers new Corporate Agents and a re-distribution of powers among people.
18	**Societal Elaboration:** Societal (open system) or Systemic (unified system) Elaboration (or non Elaboration), is the outcome of a morphogenetic cycles. A temporal pause, milestone or natural termination (tender submission date) provides an opportunity to consider the ramifications for a socio-cultural system or society-at-large.
19A	**Analytical Dualism:** A key premise of analytical dualism is that the structural domain and the cultural domain are analytically separable. Conceptualising both domains in the same terms (conditioning, interaction, and elaboration) facilitates the examination of the relationship between morphostatic and morphogenetic cycles in the two domains as mediated through agency and the power play between Agents (M. Archer, 1995, p. 323). The Parts (structure) of society have inherent powers and liabilities that are quite distinct from individuals and their inherent powers and liabilities. The whole point of analytical dualism is that the causal powers of structure (parts) and agency (people) 19B are re-integrated through the temporal process of mediation (people & structure, people & culture, and structure & culture 19A) and can be analysed with the temporal sequences of the morphogenetic process: conditioning, interaction, and elaboration.
19B THE PARTS THE PEOPLE	**Constraints and enablers**: The structural properties of Positional Power Relations and Ideational Power Relations (situational powers of 'The Parts') have a particular relationship to particular projects of particular Agents who are in particular positions, before their conditional influences operate as a **constraint** or an **enabler**. These terms reflect the congruence or incongruence between the powers of 'The Parts' in relation to the 'projects' of 'The People'; both are temporally and contextually dependent. Only when together, do the generative 'Parts' and the 'People' supply the sufficient conditions for the accomplishment of the project. An active Agent is required to mediate (bring about) the process. However, this is a conditional process, noting that mediation might not be required when the project at hand is taken-for-granted (M. Archer, 1995, p. 198). The actual constraints and enablers of the situations we confront are not the same as our powers of description or conceptualisation. Simply, our total awareness may be deficient (M. Archer, 1995, p. 197).

Table 7.1 cont.

20 (located in Phase 2)	**Structural (relationships) Mediation:** Without Social ACTORS, nothing happens. Actors mediate the mutual influence between Structure and Culture.

Commentary points

- The tabular data in Table 7.1: Amplification of tagged items in Figure 7.2
- might normally appear in an annexure. However, it is incorporated within this chapter as an essential companion to Figure 7.2.
- A messy (complicated) but essentially unified theory of Social Change is portrayed through the influences of social interaction (relationships).
- The (prevailing) *emergent properties* of Positional Power Structures ('Structure') and Ideational Power Structures ('Culture') categorised as *Structural Emergent Properties* and *Cultural Emergent Properties* (SEPs & CEPs), have of themselves social causal powers (influences).
- Social causal power is mediated through the social Agency of people; otherwise this potential power remains latent.
    - While only people (Agents) can affect (mediate) these powers, such individuals or groups cannot, in turn, be identified retrospectively.
    - Whether or not these positional and ideational powers are actually exercised, depends on the prevailing disposition of people influenced by their conditioning, context, and the structural (social relations) enablers and constraints on their activities. Together, they contribute to the prevailing capacity of people to act: 'People's Emergent Properties' (PEPs).
- The relational structures of positional power and ideational power confronted by each new generation are not of their making. However, this context does affect what contemporary Agents can achieve in terms of elaborating these relational structures.
- As a system of ideas, the Cultural System of ideational power structures defines the prevailing doctrines, theories, and beliefs etc., which circumscribe the Agents' ideational environment. In turn, the Cultural System impinges on aspects of the Positional Power System that then might be reproduced and/or transformed. The implication being that a) the Positional Power Structure is

institutional and not an initiative of human Agency and b) that ideationally-inspired people can *change* position powers. The latter proposition occurs routinely following elections.

- People's Emergent Properties (PEPs) reflect the influences that enable or constrain the activities of participating Actors and lead them to exert causal powers/influences on other Actors/Agents. However, such emergent properties result generally from social re-grouping that redistributes access to political and material resources.
- Dialectical Relations (Pragmatist philosophy[154]) posits interaction back and forth between a variety of tension points (opposing viewpoints) such as etic [outsider stakeholder] perspectives and emic [insider informant] perspectives. The objective is to recover subjugated knowledge hidden from everyday view (Denzin & Lincoln, 2011b, p. 7).
  Crotty (1998, p. 118) citing Marx (1961, p. 156) maintains Hegel's concept of dialectic:

> To recognise the dialectic is to recognise that realities are never isolated entities standing in linear, causal relationship to one another. Dialectical reality can only be understood as multifaceted interaction. This is to paint a picture of reality, and therefore of thought, as inevitably the bearer of contradiction, forever in conflict with itself.

The special cases of pure cycles of morphogenesis and morphostasis

Parallel Power Structures

In the special context of a parallel functional structure and cultural structure (see Figure 7.3 below: right-hand side), Archer posits that there is no inherent reason as to why equilibrium and emergence should co-present rather than conflict and contradiction being the normal state of these relations (M. Archer, 1995, p. 214). As Hoel (2010, p. 52) argues, that whether social stability or social change occurs, depends on how the relationships among the social structures (see $\mathbf{s}T_2$ in Figure 7.3) engage with the (group) relationships among people (see $\mathbf{a}T_2$ in Figure 7.4 below). That is, what happens in such group interaction is influenced by prior structural conditioning and how it influences the (cultural) ambitions and (structural) opportunities of the people involved.

[154] See (Brandi & Elkjaer, 2008, pp. 169-171; M. Easterby-Smith et al., 2012, p. 32; Schwandt, 2007, pp. 239-240)

This extreme case of co-occurring parallel Structural Transformation and Cultural Transformation indicates that society is in transformation and all power structures are supportive of this reality.

Sequential Power Structure

In the context of a serial functional structure and cultural structure (see Figure 7.3 below: left-hand side), positional power morphostasis is in a reciprocal relation with ideational power morphostasis. Both are ideationally and materially congruent. This extreme case is consistent with a perfect bureaucracy committed to reproduction.

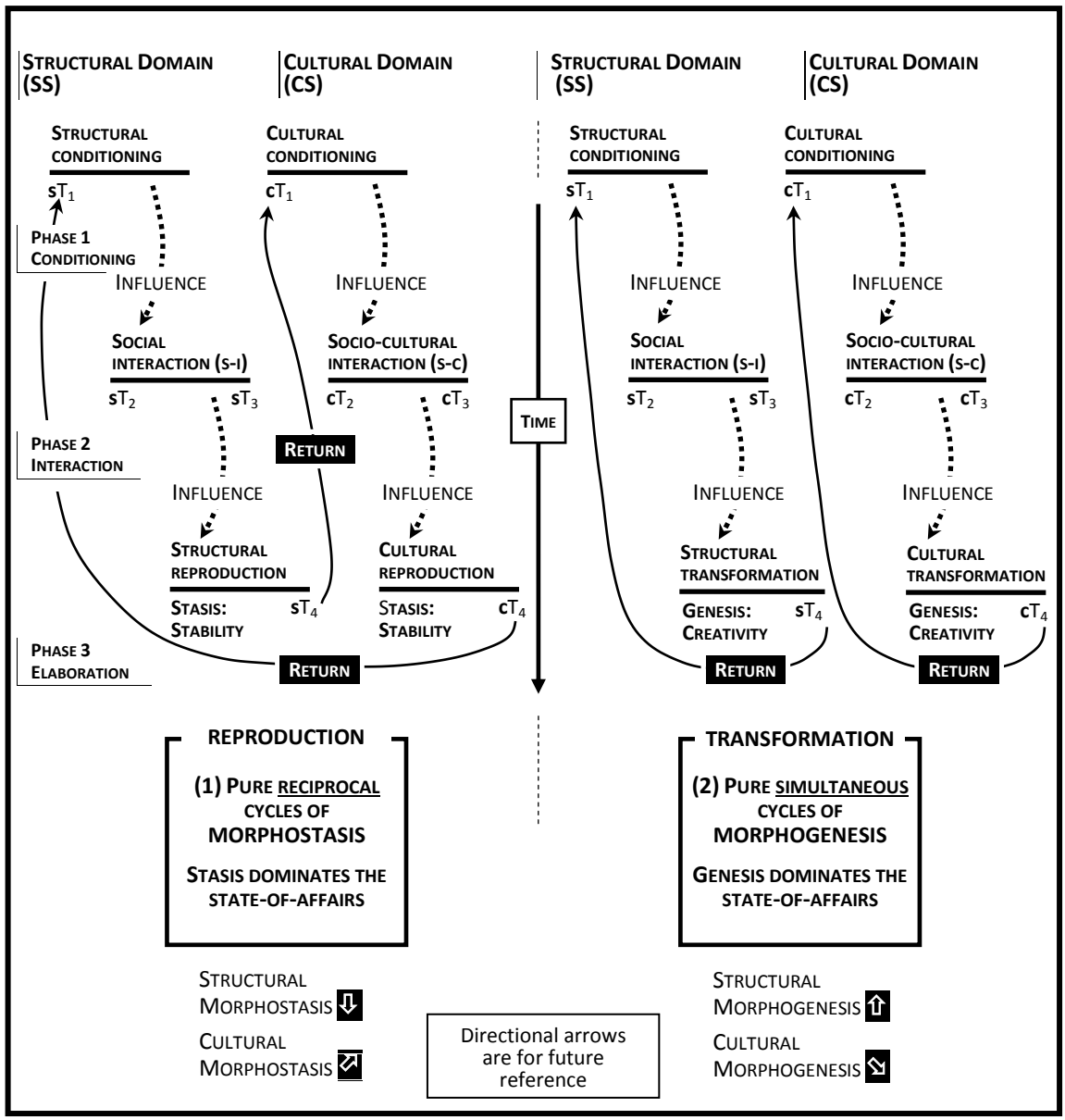


Figure 7.3: The Structural and Cultural configurations in a society operating at the extremes through: (1) pure cycles of Morphostasis and (2) pure cycles of Morphogenesis. See Archer (1995, pp. 309, 323)

The situation with Social Agency is more nuanced as there is not only the cyclic process of agential morphogenesis but also, the morphogenesis of the people themselves. This is illustrated in Figure 7.4 below.

A distillation of the morphogenetic cycle of Agency

The entire process can be distilled into ten basic propositions being abstract statements about Agents' different degrees of freedom and their combinatory potential (M. Archer, 1995, pp. 264-265).

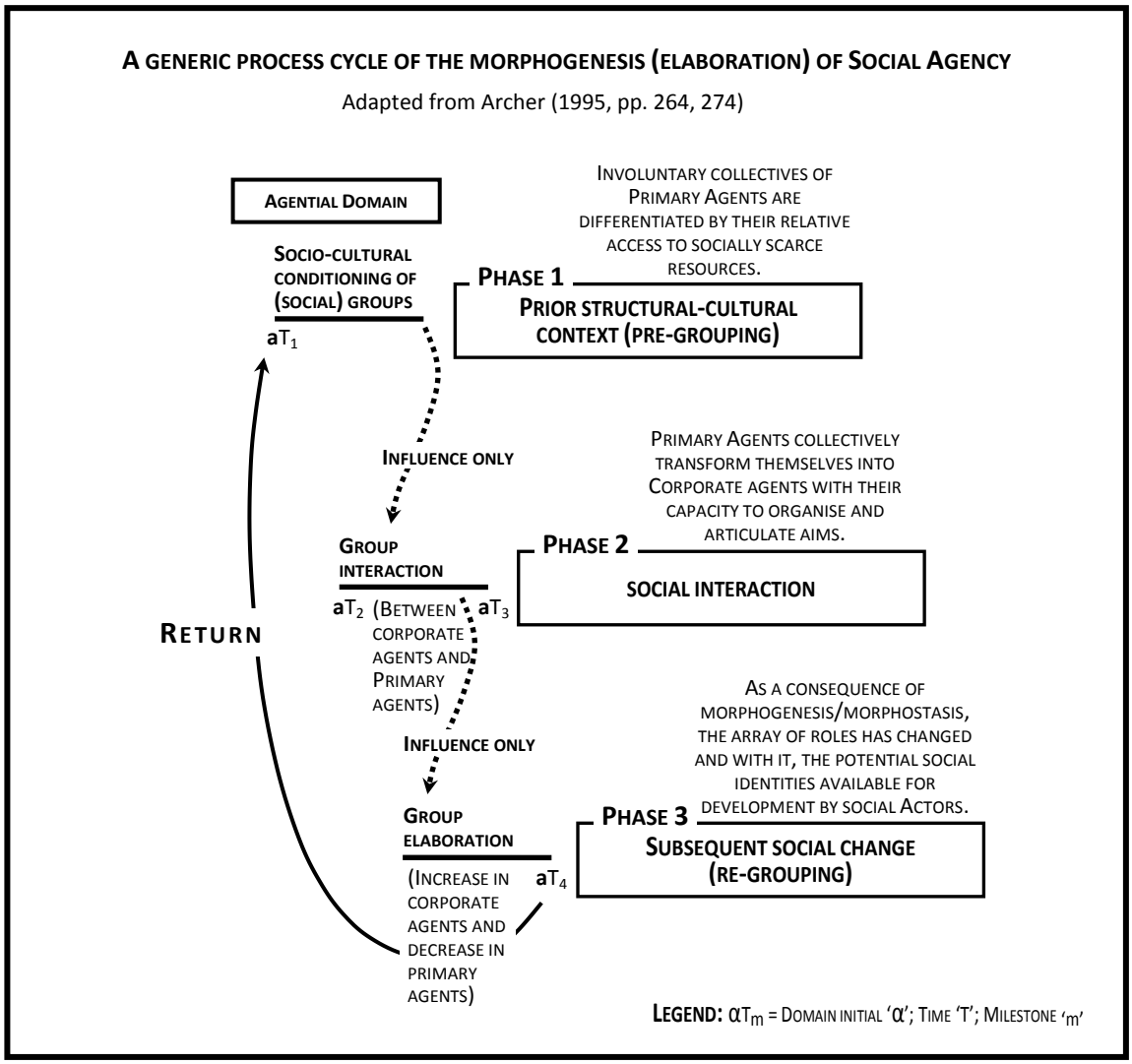


Figure 7.4: A generic cycle of morphogenesis (elaboration/change) of Social Agency that is applicable to a wide social canvas (society-wide) or a localised (project/sectional) setting.

Phase 1 (T_1) of the morphogenetic cycle:

1. All agents are not equal: the initial distributions of structural and cultural properties delineate Corporate Agents and distinguish them from Primary Agents at the start of each cycle.
2. Corporate Agents maintain/re-model the socio-cultural system 'The Parts'. Primary Agents work within the institution and with the people.
3. All agents are not equally knowledgeable because of the effects of prior interactions upon them.

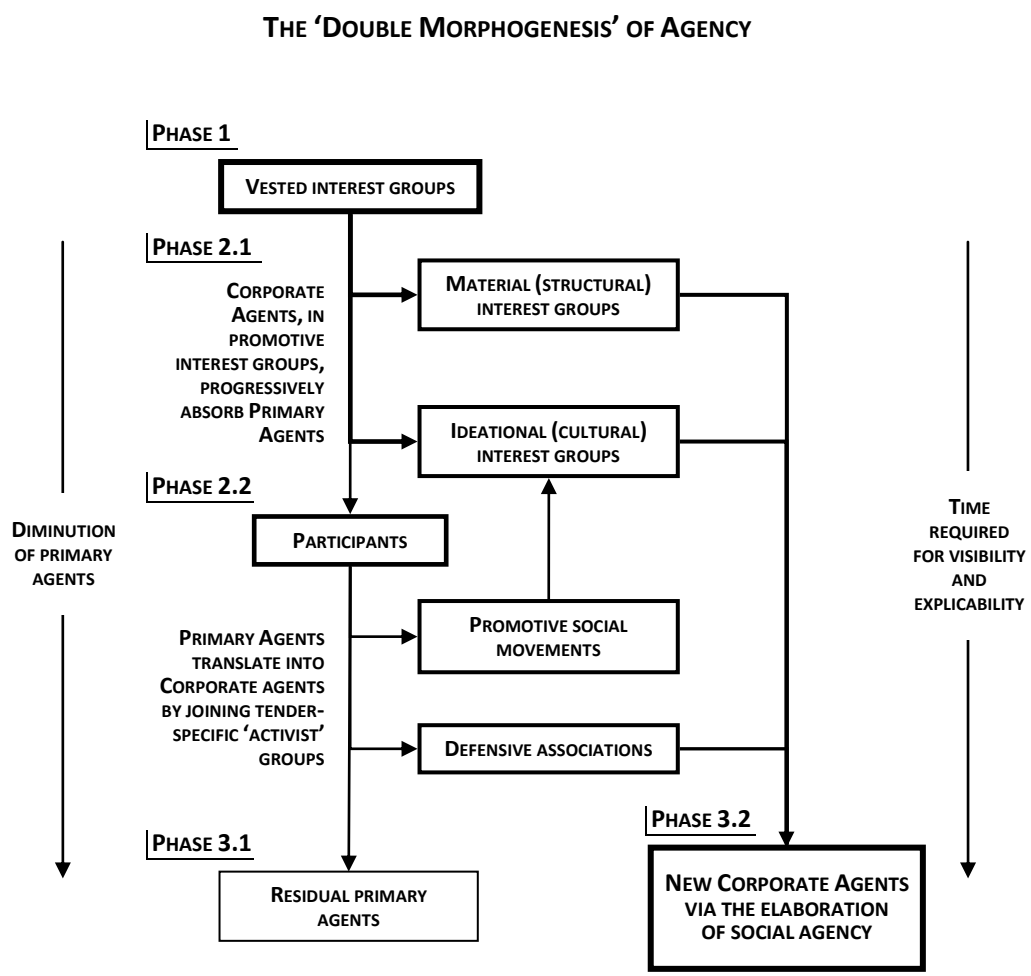
Phase 2 (T_2 – T_3) of the morphogenetic cycle

4. All change is mediated through alterations in agents' situations: Corporate Agents alter the context in which Primary Agents live and Primary Agents alter the environment in which Corporate Agents operate.
5. The categories of Corporate and Primary Agents are redefined over time through interaction in pursuit of social stability or change.
6. Actions by Corporate and Primary Agents constrain and enable one another.
7. Action by Primary Agents constitutes individualistic reactions, uncoordinated co-action or associational interaction, depending on the extent of their participation in a given institutional context.

Phase 3 (T_4) of the morphogenetic cycle

8. Interaction of Corporate Agents generates *emergent* properties: actions of Primary Agents produce *aggregate* behavioural effects.
9. The elaboration of Social Agency (society wide or sectional interests) consists in the diminution of the strata or category of Primary Agents, who become incorporated or transformed into Corporate Agents. In so doing, the strata or category of Corporate Agents enlarges.
10. Social change is the resultant of *aggregate effects* produced by Primary Agents in conjunction with *emergent* properties generated by Corporate Agents and thus does not approximate to what any one individual would necessarily want or foresee in the context of the current morphogenetic cycle. The potential for a wicked problem context is apparent. The trajectory of social change is at the whim of the ongoing cycles.

The above process delivers a 'double morphogenesis' of agency as the role of agents changes with the diminution of primary agents. These transitions are illustrated in Figure 7.5 below.



COMMENT:

- When there is a relative conjunction (congruence) between Cultural Morphogenesis and Structural Morphogenesis – a desire for change and an accommodation of change – Primary Agents transform into new 'promotive interest' groups (Corporate Agents).
- With the diminution of Primary Agents, Corporate Agents assume much of the role previously undertaken by Primary Agents.
- One consequence is that rather than rule-based resource allocation by Primary Agents, distribution is relatively better targeted with the recognition of (competing) vested interests and the temporal nature of 'wicked problems'. See also Archer (1995, pp. 264, 318)
- For a tender project's collaboration of key stakeholder organisations, the progressive tender-specific corporatisation of Primary Agents impacts on the evolving proto-organisational institutionalism of the tender enterprise. The converse appears to be problematic for the tendering enterprise.

Figure 7.5: The Double Morphogenesis of Agency. Adapted from Archer (1995, pp. 264, 275)

Reflection

- Ultimately, the morphogenetic approach brings together, analytically distinct concepts of structure, culture, and human agency, noting that these are not survey questions, but rather, their explication requires inductive reasoning based on narrative histories and the use of corroborating and/or complementing data.

  The morphogenetic model's overriding framework-for-reasoning accepts change in a variety of conformations and efficacy. Such change that is created by human agency can lead to a radically changed social and cultural context; witness the paradigm shifts resulting from the internet and social media. Alternatively, benign changes can leave the prevailing context intact, such as a change of style within a product genre.

  It all begins with actors acting in a prevailing political context where the temporal priority is to sustain or change a political outcome: hence the politicisation of a tendering sociology.

- The morphogenetic approach can shed light on the consequences of strategic action in the cultural and structural domains Hoel (2010, p. 122).

  The morphogenetic approach incorporates four definitive propositions: 1) Stratification, 2) Analytical dualism, 3) Temporality, and 4) Mediation (Thursfield & Hamblett, 2004, p. 117). Hoel (2010, p. 122) add the Historicity of interaction and the Ontology of emergence.

- Under the banner of 'general systems theory', the morphogenetic approach seeks to bring social structure, culture and agency under the same umbrella. As such, it provides a framework for undertaking social inquiry. It offers direction for research rather than explaining anything by itself. Archer suggests that it is intended as a practical tool for ordering and developing our knowledge of society (M. Archer, 1995, pp. 5-6).

- The kernel of Archer's approach is *analytical dualism*[155]; it is also the most controversial (Hoel, 2010, p. 26). In so doing, Archer seeks to conceptually separate the causal powers of social structures from human agency. Further, cultural issues, such as political preferences, are separated from the people who hold them and cannot be attributed to them.

[155] The analytical separation of Structure and Agency, and Positional Power Structures with respect to Ideational Power Structures.

- The mission of the morphogenetic approach to social theory is to present a (social) Realist[156] alternative to *structuration theory* (Vandenberghe, 2003, p. 2).
- The morphogenetic approach signifies the understanding that people always act out of social-structural and cultural circumstances, and these actions then proceed to *modify* or *sustain* the original socio-cultural context (Porpora, 2013, p. 28). It all begins with actors acting in a prevailing political context where the temporal priority is to sustain or change an outcome.
- The morphogenetic approach is neither a theory nor canon. Rather, it is a way of thinking and reasoning about people in society; an open system amenable to interpretation but not prediction.
- Vital to such reasoning within a complex (open and emergent) society is the idea that society has no preferred form (structure). Rather, its structure is shaped and re-shaped by people, with varying degrees of agency for social interaction, which results in the ongoing modification of existing power structures. In turn, these revised power structures offer moderated regimes of agency to the people. This is the idea of 'morphogenesis'. Meanwhile, in the same complex society, social energy is being devoted to preserve all or some aspects of its social structures, so that some societal precepts can be taken-for-granted, however temporal. This is the idea of 'morphostasis'. In so doing, the disruptive potential of morphogenesis coexists with the sustainment of temporal society (see also: Hartwig, 2007, p. 319). The status of both is ascribed by people; that is, what is recognised as disruptive and sustainment.
- The objective of this research project is to mobilise the morphogenetic approach to inform tendering sociology. Regardless of the controversies surrounding the approach, I argue that it clearly offers a framework-for-reasoning about change in organisations and the respective social pathologies of interacting organisations; as well as how the emergent outcomes of such interaction might be managed for the benefit of a tender enterprise.

Next chapter

Based on the understanding of Analytical Dualism, the next chapter develops a morphogenetic framework-for-reasoning about the social pathologies of ideal-type organisations, and translates these pathologies to the key stakeholders in a major Defence equipment tender enterprise. This is a contribution to theoretical reasoning.

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[156] T**he Realist approach to social theory**: explanation must go beyond statements of observed regularities to get to the mechanisms, processes, structures, or whatever unobservable real underlying forces that actually account for the regularities. Archer and her co-authors agree that satisfactory explanation cannot be at the level of experience (the empirical level) or at the level of events (the actual level) but needs to identify a real [causal] mechanism whose exercise, even in an open system that is the social order, is responsible for the intensification of social change (M. Archer, 2013, p. 1).

Chapter 8
Epistemology:
Morphogenetic Reasoning

Analytical Dualism, as outlined in the previous chapter, provides the foundation for a structured approach to morphogenetic reasoning. This chapter enlarges the kernel of an idea suggested by Archer (1995, p. 295).

Njihia & Merali (2013, p. 861) suggest that the morphogenetic approach 'offers a tractable [easily managed] comprehensive approach within which to model and theorise about change in complex contexts' (p. 883). It seeks to tease out the emergent dynamics of the components and relationships over time, within sight of the systemic 'whole' of a tendering campaign.

Lockwood (1964, pp. 249-251) suggested that the problems of theorising about *social change* might be resolved by some form of balance between *system integration* and *social integration*. That is, a balance between the integration of structures (relations) of positional power and ideational power, with respect to the integration of actors and their agency. The objective is to avoid conflating these potentially conflicting perspectives.

Archer (1995, pp. Preface, 168) identified this challenge as 'Analytical Dualism', and recognised its theoretical presence in the social realist strata of causal powers.

The tenets of Analytical Dualism embody the *social integration* (the agency of People) and *system integration* (the ideational power structures (culture) and positional power structures (structure), otherwise jointly identified as The Parts). Generally, both evolve asynchronously over time.

While the initial theoretical discussion considered *the* organisation or *the* society, Archer also embraces the reality of interacting organisations. She provides a foundation for reasoning about different organisational social pathologies and the manner in which they might present to the world, interact, or indeed interpenetrate.

Organisational interaction

The a) tender enterprise as an entity and its b) collaborating organisations can all benefit reflectively from a structured approach to reasoning about their social pathologies, their inherent attractive or repulsive dispositions, and the tender enterprise's capacity to mediate between collaborators as appropriate. In the event of ministerial intervention,

the mere idea might be sufficient, as organisations might prefer not to be tarnished publicly.[157]

From Archer's morphogenetic-reasoning foundations, this chapter builds a structure of organisational social pathologies and introduces their possible meaning for the key stakeholders interacting in a tender enterprise. The structure has identifiable elements that are associated with alpha tags, which facilitate cross-referencing (and back-tracking) so that the ideas become accessible and progress fluidly as they relate to actual players. The additional detail results in a chapter length longer than ideal.

A key theme of this dissertation is a contribution to middle-range theory (theory building) through a framework-for-reasoning about tendering sociology. Much of the framework's design appears in this chapter.

Such application of the morphogenetic approach fulfils Archer's mission of providing a capability for 'practical social analysis.'

> Morphogenesis/stasis is an approach to social theory which is realist in its ontology and which supplements realism by making 'analytical dualism' explicit and demonstrating its methodological utility in practical social analysis (M. Archer, 1995, p. 76).

When planning for the social pathologies of collaborating organisations; the *how* and *why* of the phenomena[158] is a matter of *process research* (Ann Langley, 2008, p. 173) into the 'change and temporal flux or "organisational becoming"[159]' (Tsoukas & Chia, 2002). This is the essence of the retrodictive morphogenetic approach. However, the transition from *historicity* to *planning* in a politicly-charged environment requires the experience and wisdom expressed in phronesis[160].

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[157] Political enforcement mechanisms are often not so valuable as a means of obtaining compliance but are used to signal seriousness of intention (Zucker, 2012, p. 140). Such crises usually befall managers who have become enmeshed in their own legitimating myths and have failed to notice a decline in cultural support, until some cognitively salient trip wire sets off alarms (M. C. Suchman, 2012, p. 28).

[158] *How*: principles, values and assumptions. *Why*: purpose, intentions (competing priorities, internal conflict, etc.)

[159] the cosmology of Heraclitus, whose basic principle was that 'everything flows' (becoming) (Wood, 2008, p. 171)

[160] **Phronesis**: The distinct mode of practical knowledge associated with praxis is **phronesis** ('practical wisdom'). This is neither a technical nor cognitive capacity that one has at one's disposal, but rather is bound up with the kind of person that one is and is becoming. It demands an intellectual and moral disposition toward right living and the pursuit of human good and hence a different form of reasoning and knowledge. This kind of knowledge is variously referred to as deliberative excellence, practical wisdom, or practical reason. Associated cognitive virtues are understanding, judgment, and interpretation. Phronesis is intimately concerned with the timely, the local, the particular, and the contingent (e.g., what should I do *now* in *this* situation, given *these* circumstances, facing *this* particular person, at this *time* (Schwandt, 2007, p. 242). See also: (Bent Flyvbjerg, 2006; Bent Flyvbjerg, Landman, & Schram, 2012a)

Finally, the chapter concludes by asking, "*How* and *why* do organisations behave as they do?" These are the overarching questions of organisation theory; and organisational institutionalism is the application of the institutional perspective to those questions (Royston Greenwood et al., 2011a, p. 1) to be found in the next chapter.

From 'analytic dualism' to 'ideal-type' organisations

Table 8.1 (below) reflects the 'Analytical Dualism' dyad of *Social Integration* and *System Integration*:

- problems of *Social Integration* focus on the relationships between the **Actors**, while
- problems of *System Integration* focus on '**The Parts**': the structure of a social system such as class antagonisms (Lockwood, 1964, p. 245).

Importantly, these dyadic perspectives – an analytical dualism – are not mutually exclusive and indeed, are potentially complementary.

Against Lockwood's generic proposition, Archer (1995, p. 295) proposes four ideal-type socio-cultural formations (organisation pathologies) that are detailed later in Table 8.1.

These organisational pathologies are identified as:

A. Necessary (internal) contradiction: incompatibilities/constraints
B. Contingent (external) contradiction: incompatibilities/constraints
C. Necessary (internal) complementarity: compatibilities/enablers
D. Contingent (external) complementarity: compatibilities/enablers

(The alpha tags appear throughout this chapter.)

The agential interaction (between people) associated with these social pathologies occurs in Phase 2 (Interaction – 2nd Order) of the morphogenetic cycle, and the outcome presents in Phase 3 (Elaborations – 3rd Order).

Table 8.1 consolidates these ideas with further explication.

ADVANCEMENT OF MORPHOGENETIC REASONING BASED ON THE ANALYTICAL DUALISM OF STRUCTURE (THE PARTS) AND AGENCY(THE PEOPLE)

(ANALYTICAL DUALISM) *

THE PARTS → SYSTEMIC INTEGRATION BETWEEN 'THE PARTS' (STRUCTURAL AND CULTURAL)

THE PEOPLE → SOCIAL INTEGRATION THE RELATIONSHIP BETWEEN 'THE PEOPLE'

ORGANISATION SOCIAL PATHOLOGY FOUR 2ND ORDER SOCIO-CULTURAL IDEAL-TYPE FORMATIONS

	LOW INTEGRATION	HIGH INTEGRATION	3RD ORDER OUTCOME TENDENCY
HIGH INTEGR'N	A Necessary contradiction **(penalties)**	C Necessary complementarity **(benefits)**	TOWARDS POSITIONAL POWER STRUCTURE MORPHOSTASIS
LOW INTEGR'N	B Contingent contradiction **(penalties)**	D Contingent complementarity **(benefits)**	TOWARDS POSITIONAL POWER STRUCTURE MORPHOGENESIS

ADVANCEMENT OF MORPHOGENETIC REASONING REFLECTING ACTOR SENTIMENT

Social causal power is mediated/influenced through social agency (power accorded to people).

Whatever happens is determined by the disposition of people.

A

Necessary internal contradiction

When the Actors are generally tightly coordinated (high social integration) and society in general is experiencing incongruence/instability (low social integration) then the Actors are unlikely to change positional power arrangement as there would be no guaranteed cultural support for existing benefits to remain, and penalties (loss of benefits) are likely (**structural** – positional power – **morphostasis** and **cultural** – ideational power – **morphogenesis**).

B

Contingent external contradiction

When the Actors are generally uncoordinated (low social integration) and society in general is experiencing incongruence/instability (low systemic integration) then the Actors are facing a complex context. In an attempt to stabilise their situation, Actors will unilaterally (and tentatively) initiate 'safe-to-fail' positional power experiments (**structural** – positional power – **morphogenesis** and **cultural** – ideational power – **morphostasis**).

C

Necessary internal complementarity

When the Actors are generally tightly coordinated (high social integration) and society's structures and cultures are generally mutually supportive (high systemic integration) then the Agents can only benefit from the status quo as such a tightly controlled organisation has no flexibility and any change in resourcing could be catastrophic (**structural** – positional power – **morphostasis** and **cultural** – ideational power – **morphostasis)**.

D

Contingent external complementarity

When the Actors are generally uncoordinated (low social integration) and society in general is mutually supportive (high systemic integration) then this confident society is likely to support Actors to be individually creative (ideational) and society will change as a result (**structural** – positional power – **morphogenesis and cultural** – ideational power – **morphogenesis)**.

* NOTES:

- Analytical Dualism relates to a conceptual analysis of 'The People' mediating 'The Parts' and vice-versa. 'The Parts' comprise Structure (Positional Power Relations) and Culture (Ideational Power Relations). 'The Parts' and 'The People' can change independently of each other.
- Social (agential) Integration does not necessarily mirror Systemic Integration, but it can: notably the ideal-type (extreme) cases of (C) and (D).

Table 8.1 Accounting for the form (not substance) of the tendency of Social Elaboration. See Archer (1995, p. 295) for the genesis of this table.

An introduction to the tables

- Table 8.1 is not a tool for prediction. Rather, it provides a kernel for a morphogenetic 'framework-for-reasoning' .
- The examples in Table 8.1 provide an indicative explanation of four ideal-type organisational pathologies; each comprising different combination of:
    - Cultural Morphostasis
    - Cultural Morphogenesis
    - Structural Morphostasis
    - Structural Morphogensis

  (Noting that 'Cultural' refers to Ideational Power Structures and 'Structural' refers to Positional Power Structures. The use of the term 'structure' by key scholars as an alias for Positional Power Structures, is regrettably confusing.)
- Table 8.2 amplifies each ideal-type organisation in terms of social pathology.
- Table 8.3 integrates the discussion thus far with phases of the morphogenetic cycle. In particular, the Phase 2 *Interaction* (2nd Order Relations) is characterised for each organisation pathology, as is the Phase 3 *Outcome* (Elaboration).
    - The key stakeholders in the tender enterprise are aligned with respective ideal-type organisational pathologies that are remarkably accurate.
- Table 8.4 amplifies Table 8.3 in terms of the social pathology of key stakeholder organisations.
- Table 8.5 introduces a framework-for-reasoning about interacting/interfacing organisational social pathologies. For simplicity, it is referred to a 'morphogenetic reasoning'.
    - Table 8.5 and its explication concentrates on the potential interaction of any one organisation with any other organisation. Such dyadic relationships are identified as:
        - Different worlds
        - Kindred cultural spirits
        - Focussed on Structural Reproduction
        - Focussed on Structural Transformation

THE SOCIAL PATHOLOGIES OF FOUR IDEAL-TYPE ENGAGED ORGANISATIONS

A **NECESSARY (FOR BUSINESS OPERATIONS) CONTRADICTIONS:** Where two or more organisations / institutions stand in a *necessary and potentially incompatible relationship*, the effects of their operations are to threaten the endurance of the relationship itself.

Prima facia, the operating context is unstable. However, owing to the systemic interdependence (of the collaborating organisations in a tendering campaign), agents are 'forced' to co-operate with varying degrees of reluctance. The result is a situational logic of *agent containment* and *strategic compromise*. This situational logic has inherent costs that become a cost of doing business. Ongoing compromise (change) is designed to contain contradictions, but at the cost of constant vigilance required to maintain an acceptable (political) balance. The outcome is a ***structural (positional power relations) morphostatic*** (reproduction) configuration with contemporaneous **cultural (ideational)** ***morphogenesis*** (transformation).

Both the morphostatic configurations of, **C** (below) *necessary (reinforcing) compatibilities* below and **A** *necessary (contradicting) incompatibilities*, assume a finite and known distribution of resources.

Should the resourcing situation change (including political exigencies), containment and compromise are set aside, resulting in the exacerbation of differences, and the potential excision of the recalcitrant change agent.
[Outcome: cultural morphogenesis/structural morphostasis]

B **CONTINGENT (UNCONTROLLABLE) CONTRADICTIONS:** This might be triggered by events generally external to a collaboration of organisations. The generic effect fosters a *situational logic of elimination* (risk remedy). If a substantive change should occur in the availability of resources, then existing agreements and understandings based on a previous resource sharing regime are undermined.

For some parties, what was a (comfortable) mutually reinforcing relationship designed to sustain the status quo, now becomes an assault on the purveyors of change.

Society is an open system and susceptible to disruption by external influences. Such external and contingent factors might impact individual organisations differently. During the course of any campaign, new alliances and relative power redistributions are to be expected. Such change is unlikely to be the subject of compromise – ***cultural morphostasis***.

In so doing, this mobilisation of organisations generates new social (structural) relationships – ***structural morphogenesis*** – that transform the state-of-affairs.

C **NECESSARY (FOR BUSINESS OPERATIONS) COMPLEMENTARITIES:** Such organisations have a tendency to be mutually supportive and inclusive ('in the tent'). Interdependence and protection are inculcated. There is a clear correspondence of roles and operations across organisations. Any deviant behaviour incurs penalties. This is inherently a ***structural morphostatic*** configuration. **Cultural morphostasis** supports ***structural morphostasis*** as change is discouraged and disadvantageous generally. Those 'outside the tent' have the potential to disrupt the otherwise managed stability because the outsiders have more to gain. Those 'inside the tent' endure tight mutual control with its inherent potential to disintegrate under external pressure. **[Outcome: cultural morphostasis/structural morphostasis]**

D **CONTINGENT (UNCONTROLLABLE) COMPLEMENTARITIES:** A situational logic of *pure opportunism* prevails as **potential** relations exist with 'outsiders'.
The enlargement of 'the gene pool' draws on new material (power) and ideological means for its realisation. Important for this research is the idea that the consequence of such change reflects generally in emerging *patterns of behaviour* responding to a trajectory of organisational institutionalism. Through external exigencies, the old institutional order is disrupted or broken, and a new institutional order evolves with its phased pattern-language grammar. Such structural mobilisation – ***structural morphogenesis*** – generates new social relationships with associated ideational acculturation and blending (transformation) – ***cultural morphogenesis***.

Table 8.2: Explication of four ideal-type socio-cultural formations and their 3rd Order outcome tendencies towards morphostasis and morphogenesis

3RD ORDER SOCIO-CULTURAL PREDISPOSITIONS

CULTURAL MORPHOSTASIS ⇗
CULTURAL MORPHOGENESIS ⇘
STRUCTURAL MORPHOSTASIS ⇓
STRUCTURAL MORPHOGENESIS ⇑

ADVANCEMENT OF MORPHOGENETIC REASONING BASED ON THE ANALYTICAL DUALISM OF SUBSTANTIVE SYSTEMIC INTEGRATION AND SOCIAL INTEGRATION

NECESSARY INTERNAL RELATIONS:
PARTICULAR RELATIONSHIPS NEED TO BE IN PLACE (A TEACHER REQUIRES A STUDENT).

CONTINGENT EXTERNAL RELATIONS:
RELATIONSHIPS ARE CONDITIONAL ON UNRELATED ISSUES MATERIALISING.

2ND ORDER RELATIONS:	CONTRADICTIONS (INCOMPATIBILITIES / LIABILITIES)		COMPLEMENTARITIES (COMPATIBILITIES / BENEFITS)	
	NECESSARY CONTRAD'G INTERNAL RELATIONS	CONTINGENT CONTRAD'G EXTERNAL RELATIONS	NECESSARY REINFORCING INTERNAL RELATIONS	CONTINGENT REINFORC'G EXTERNAL RELATIONS
3RD ORDER SYSTEMIC OUTCOMES:	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOGENESIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOGENESIS
[1] ORGANISATION CHARACTER : IDEAL-TYPES SITUATIONAL LOGICS	REACTION [COUNTERACTING]	ELIMINATION [COMPETING]	PROTECTION [DEFENDING]	OPPORTUNISM [CAPITALISING] [BRICOLEUR]
[2] KEY STAKEHOLDERS: ARROWS INDICATE PREDISPOSITION TO NEGOTIATIONS	A. ⇘⇓ DEFENCE MINISTER'S POLITICAL OFFICE	B. ⇗⇑ CONTRACTOR	C. ⇗⇓ DMO	D. ⇘⇑ LOBBYIST

CULTURAL DOMAIN

The full range of **cultural** developments - **[4]** below - that can be generated **if** the respective situational logics - **[1]** above - are all successfully followed and each of the relevant precursors - **[3]** - materialises.

	A.	B.	C.	D.
CEPS AT THE SOCIO-CULTURAL INTERACTION PHASE 2 (S-C) [3] 2ND ORDER PRECURSOR	UNIFICATION	CLEAVAGE[SCHISM]	REPRODUCTION	SECTIONALISM
CEPS AT THE CULTURAL SYSTEMIC PHASE 3 (CS) [4] 3RD ORDER OUTCOME	POLITICAL OFFICE → SYNCRETISM ⇘ [RECONCILIATION]	CONTRACTOR → PLURALISM ⇗	DMO → SYSTEMATISATION ⇗	LOBBYIST → SPECIALISATION ⇘

STRUCTURAL DOMAIN

The full range of **structural** developments - **[6]** below - that can be generated **if** the respective situational logics - **[1]** above - are all successfully followed and each of the relevant precursors - **[5]** - materialises.

	A.	B.	C.	D.
SEPS AT THE SOCIAL INTERACTION PHASE 2 (S-I) [5] 2ND ORDER PRECURSOR	CONTAINMENT	POLARISATION	SOLIDARITY	DIVERSIFICATION
SEPS AT THE STRUCTURAL SYSTEMIC PHASE 3 (SS) [6] 3RD ORDER OUTCOME	POLITICAL OFFICE → COMPROMISE ⇓	CONTRACTOR → COMPETITION ⇑	DMO → INTEGRATION ⇓	LOBBYIST → DIFFERENTIATION ⇑

COMMENT: **[1]** Weick (1969/1979) presses the case for the verb form.

Corporate Agents might deploy various forms of structural and cultural power as containment strategies intended to corral the locus of (2nd Order) Socio-cultural Interaction **[3]** and **[5]** and its potential impact on the desired (3rd Order) Systemic Level state-of-affairs **[4]** and **[6]**.

However, all of this is subject to counterfactuals and it becomes potentially so problematic that there is an inherent difficulty in locating with precision, the locus and conditions of transformative (morphogenesis) power versus reproductive (morphostasis) power.

Nevertheless, for any functional silo, the combination of the social and cultural states-of-affairs **[4]** and **[6],** and the disposition of key stakeholders **[2]** is surprisingly realistic.

For example, the defence minister's **Political Office [2A]** seeks to ***unify*** political thought towards the tender project's objectives and/or to shield the project from detractors **[3A]**, and to ***contain*** **unhelpful alliances [5A]**. In so doing, the **Political Office** is in the business of '***reconciliation***' **[4A]** in order to achieve '***compromise***' **[6A]** as it supports the defence minister who reacts and adapts **[1A]** to the political vagaries of society as an open system.

Table 8.3: Advancement of Morphogenetic Reasoning, (based on analytical dualism) about the disposition of presence of four key interacting stakeholders (core institutions) (see Archer (1995, pp. 295, 303-304))

AN EXPLICATION OF FOUR IDEAL-TYPE ORGANISATIONS AND THEIR 3RD ORDER CULTURAL AND STRUCTURAL EMERGENT PROPERTIES

A. THE MINISTER'S POLITICAL OFFICE: [CULTURAL MORPHOGENESIS ⇘ AND STRUCTURAL MORPHOSTASIS ⇩]

A disjunction between cultural morphogenesis and structural morphostasis occurs when the cultural dynamics reflect multiple cultural agents dispersed amongst a variety of corporate groups (stakeholders), and all of them have to interact in a context dominated by one structural agent (the minister's political office). Macro (political) social control is directed at preventing or reversing such cultural morphogenesis. These cultural and structural domains are interacting but from relatively independent positions, and such social control cannot force the creative work of these organisations to cease.

Indeed, Archer (1995) argues that cultural morphogenesis shifts the *legitimating* foundations for structural organisation (of interest to the political decision-makers) and in addition, presents socially stratified people with new ideational resources that present competitive advantages or new opportunities to their material projects (pp. 316-317).

The unelected Political Office appropriates powers of control and self-importance that might not be in the best interests of the tendering collaboration, particularly as a *tendering campaign* is an ongoing enterprise seeking to promote divergent interests from different situational logics.

However, for the *tendering project*, the Political Office seeks to contain unhelpful alliances **[5]** and to unify political thought towards the tender project's objectives and/or to shield the project from its detractors **[3]**. In so doing, the Political Office is in the business of *compromise* **[4]** and *reconciliation* **[1]** as they support the defence minister who reacts and adapts **[2]** to the political vagaries of society as an open system.

B. CONTRACTOR: [CULTURAL MORPHOSTASIS ⇗ AND STRUCTURAL MORPHOGENESIS ⇧]

The idea of Cultural Morphostasis can be found in the yards of shipbuilders or any other enterprise sharing a cultural heritage. On the other hand, Creative Structural Morphogenesis is exampled by a politicly-defined tender strategy whereby a local (minor) Australian shipbuilder is required to partner with a foreign (major) ship designer and builder in order to bring a ship design to the tender. The situational logic is one of newly created competitive contradiction. Natural competitors are required to 'mate' if they want to play the tender game.

From Archer's (1995) perspective, in such instances, structural differentiation has a greater impact on the outcome than cultural stasis, and additionally, the client's confection of a synthetic competitive contradiction (natural competitors required to 'mate'), captures everyone in the situational logic of elimination (pp. 314-325).

Indeed, in the research Case S, the major foreign shipyard sought to engage the government with the idea that the local shipbuilder should be removed or acquired.

C. DEFENCE MATERIEL ORGANISATION (DMO): [CULTURAL MORPHOSTASIS ⇗ & STRUCTURAL MORPHOSTASIS ⇩]

The morphogenetic outcome (Phase 3 Elaboration) - 3rd Order Relations - is one of complete reciprocity between the cultural domain and the structural domain.

That is, the cultural belief system is without opposition and the omnipotent structural domain prevents any cultural opposition from forming: morphostasis prevails.

With (Phase 2) 2nd Order relationships of *necessary compatibility*, the cultural elite and the structurally powerful have a mutual supporting interest. Any change would be detrimental for both. With such control over resources, the majority of agents have *Primary Agent* status, while euphemistically, Actors in a bureaucracy tend to 'die young'.

D. LOBBYIST (ENGAGED BY CONTRACTOR): [CULTURAL MORPHOGENESIS ⇘ & STRUCTURAL MORPHOGENESIS ⇧]

The cultural dynamics reflect one or multiple Cultural Agents (mediators/raconteurs) dispersed amongst a variety of self-interested corporate groups (stakeholders), and all of them have to interact positively in the context of their joint collaborative enterprise, the tender project.

There is complete reciprocity between the cultural and structural domains. The Lobbyist is a cultural eclectic and promotes structural links across mutual interest groups. A matchmaker, a diplomat, an ambassador, a prostitute; the Lobbyist above all is a 'beachcomber' with the wit to live off the land without leaving a trace.

This is the realm of 2nd Order Relations reflecting Contingent Compatibilities. Such benefits accrue from the realisation of external issues. The Lobbyist's task is to identify these external issues and their trajectory of change. Such information is valued by political decision-makers who, in return for access, disseminate non-attributable 'messages' via the Lobbyist.

Table 8.4: Based on Table 8.3, four ideal-type organisations recognised for their maximal effectiveness (Miles & Snow, 1978).

MORPHOGENETIC REASONING APPLIED TO SUBSTANTIVE ORGANISATIONAL COUPLING

SYNONYMS: CULTURAL = IDEATIONAL POWER; STRUCTURAL = POSITIONAL POWER

- ⇘ CULTURAL MORPHOGENESIS = CULTURAL TRANSFORMATION
- ⇗ CULTURAL MORPHOSTASIS = CULTURAL REPRODUCTION
- ⇧ STRUCTURAL MORPHOGENESIS = STRUCTURAL TRANSFORMATION
- ⇩ STRUCTURAL MORPHOSTASIS = STRUCTURAL REPRODUCTION

A - B DIFFERENT WORLDS

A DEFENCE MINISTER'S POLITICAL OFFICE

2ND ORDER NECESSARY CONTRADICTING INTERNAL RELATIONS. (SEE TABLE 8.3: 2nd Order

A1 ⇘ CULTURAL TRANSFORMATION
A2 ⇩ STRUCTURAL REPRODUCTION

At the **3rd Order** Outcome Level, Corp. Agents seek:

POWER COMPROMISES and **CULTURAL RECONCILIATION** and they progress these objectives with **2nd Order Interaction** addressing

POWER CONTAINMENT; monitoring 'who's who in the zoo' of social interactions,

and

CULTURAL UNIFICATION through compatibility of ideas, belief systems, value propositions and 'ultimate concerns'.

B CONTRACTOR

2ND ORDER CONTINGENT CONTRADICTING EXTERNAL RELATIONS

CULTURAL REPRODUCTION ⇗ B1
STRUCTURAL TRANSFORMATION ⇧ B2

At the **3rd Order** Outcome Level, Corp. Agents seek:

MARKET COMPETITION and **IDEATIONAL PLURALISM** and they progress these objectives with **2nd Order Interaction** addressing

POWER POLARITIES; distinguishing the effectiveness of competitors and fostering material alliances ('us and them'),

and progressing

CULTURAL SCHISMS between stakeholders with incongruent situational logics. Examples being: (1) a schism between a DMO Tender Project Office and a collectivity of all contractors, (2) a schism between a thin prime contractor resisting sidelining by a major sub contractor.

NORMATIVE STRUCTURAL REPRODUCTION — **A - C**

KINDRED CULTURAL SPIRITS

MUTUAL FACILITATION A-D
CULTURAL TRANSFORMATION

STAFF INTERCHANGE B-C
CULTURAL REPRODUCTION

CULTURAL REPRODUCTION
STAFF INTERCHANGE C-B

CULTURAL TRANSFORMATION
MUTUAL FACILITATION D-A

NORMATIVE STRUCTURAL TRANSFORMATION — **B - D**

C - D DIFFERENT WORLDS

C DMO

2ND ORDER NECESSARY REINFORCING INTERNAL RELATIONS

C1 ⇗ CULTURAL REPRODUCTION
C2 ⇩ STRUCTURAL REPRODUCTION

At the **3rd Order** Outcome Level, Corp. Agents seek:

ORGANISATIONAL INTEGRATION and **SYSTEMATICS** and they progress these objectives with **2nd Order Interaction** addressing

SOLIDARITY OF POWER DISTRIBUTION using formal command, control and reporting structures,

and the

CULTURAL REPRODUCTION of rules, knowledge and doctrine.

D LOBBYIST

2ND ORDER CONTINGENT REINFORCING EXTERNAL RELATIONS

CULTURAL TRANSFORMATION ⇘ D1
STRUCTURAL TRANSFORMATION ⇧ D2

At the **3rd Order** Outcome Level, Corp. Agents seek:

MARKET DIFFERENTIATION and **SPECIALISATION** and they progress these objectives with **2nd Order Interaction** addressing

DIVERSIFICATION OF FUNCTIONS using an assembly of linguists and specialists in geopolitical and regional political economy, government, international relations, defence strategy and matériel, together with the lobbyist's appropriated role as raconteur-at-large,

and the

CULTURAL SECTIONALISM in a tender's body politic.

Table 8.5: Advancement of Morphogenetic Reasoning to ideal-type organisational coupling and their substantive counterparts: a heuristic device

The importance of Analytical Dualism for the advancement of morphogenetic reasoning

The contribution to morphogenetic reasoning in Table 8.5 (above) is a product of Archer's (1995, pp. 309-325) synthetic heuristic; the Analytical Dualism of Structure and Culture (The Parts).

Prior to Archer's 'morphogenetic approach' to organisation and society, there had been extensive work engaging the study of organisation with the biological analogies of morphogenesis, morphostasis and autopoiesis (Argyris & Schön, 1978; Royston Greenwood & Hinings, 1988; Habermas, 1987; Hinings & Greenwood, 1988; Laughlin, 1991, p. 215; Levy, 1986; K. K. Smith, 1982, pp. 318, 363).

THE CONTRIBUTION OF 'ANALYTICAL DUALISM' TO MORPHOGENETIC REASONING

2ND ORDER RELATIONS:	CONTRADICTIONS (INCOMPATIBILITIES / LIABILITIES)		COMPLEMENTARITIES (COMPATIBILITIES / BENEFITS)	
	NECESSARY CONTRAD'G INTERNAL RELATIONS	CONTINGENT CONTRAD'G EXTERNAL RELATIONS	NECESSARY REINFORCING INTERNAL RELATIONS	CONTINGENT REINFORC'G EXTERNAL RELATIONS
* 3RD ORDER SYSTEMIC OUTCOMES:	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOGENESIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOGENESIS
ORGANISATION CHARACTER : IDEAL-TYPES SITUATIONAL LOGICS	REACTION [COUNTERACTING]	ELIMINATION [COMPETING]	PROTECTION [DEFENDING]	OPPORTUNISM [CAPITALISING]
KEY STAKEHOLDERS: (TOP SECTION; ARCHER (1995) MORPHOGENETIC APPROACH)	A. DEFENCE MINISTER'S POLITICAL OFFICE	B. CONTRACTOR	C. DMO	D. LOBBYIST
	WITH ANALYTICAL DUALISM OF STRUCTURE & CULTURE			
BOTTOM SECTION; LEVY (1986) 1ST & 2ND ORDER APPROACH	MODELS OF 'ENVIRONMENTAL DISTURBANCES AND ORGANISATIONAL TRANSITIONS / TRANSFORMATIONS'			
	WITHOUT ANALYTICAL DUALISM OF STRUCTURE & CULTURE			
1ST & 2ND ORDER CATEGORIES UNIQUE TO LEVY'S APPROACH: ORGANISATION CHARACTER (IDEAL-TYPE) PROCESS DESIGN ARCHETYPES	COLONIZATI`N [COLONIZING]	REORIENTATION [REORIENTING]	REBUTTAL [REBUTTING]	EVOLUTION [EVOLVING]
TRANSITION OR TRANSFORMATION (OUTCOMES)	2ND ORDER 'DEVELOPMENT MODE': MORPHOGENESIS	1ST ORDER 'REPETITION MODE': MORPHOSTASIS	1ST ORDER 'REPETITION MODE': MORPHOSTASIS	2ND ORDER 'DEVELOPMENT MODE': MORPHOGENESIS
* FROM 3RD ORDER SYSTEMIC (INFERRED) OUTCOMES (ABOVE): DISPOSITION OF ORGANISATIONAL CHANGE	CULTURAL MORPHOGENESIS	CULTURAL MORPHOSTASIS	CULTURAL MORPHOSTASIS	CULTURAL MORPHOGENESIS

Table 8.6: Comparison of approaches to morphogenetic reasoning: with and without the invocation of the 'Analytical Dualism' of structure and culture (M. Archer, 1995, pp. 309-325), (Levy, 1986)

The limitations of this previous work are explicated in Table 8.6.

The top section of Table 8.6 comes from Table 8.5. The bottom section of Table 8.6 consolidates the work prior to Archer; with its focus on environmental disturbances and the organisation's reactions in terms of 'transitions' and 'transformations', which is subtly different to 'reproduction' and 'transformation'. Porpora (31 March 2015) advises that both 'transition' and 'reproduction' are relevant for morphostasis.

The terminology applied to 'organisational character' is different, but sympathetic with the top section.

In the bottom section, the outcomes are identified as morphogenesis or morphostasis, but, because 'analytical dualism' unavailable for invocation, structure and culture cannot be distinguished. When this bottom section data is compared with the top section, it becomes clear that the 'pre-Archer' scholars are dealing with *cultural morphostasis* and *cultural morphogenesis*.

As a comment, in the context of institutionalism and the quest for organisational legitimacy, Hirsch (2011, p. 786) notes that in the mid 1980s, 'the theoretical ascent of culture, as establishing the appropriate behaviours to follow, both challenged and reversed the earlier superior position of structure.

Archer's (1995) insights impose a theoretical (analytical) tool that synthetically distinguishes structure and culture, and in so doing, provides the necessary foundation for the advancement of morphogenetic reasoning that is framed in Table 8.5, and explored in the next section. It is unclear whether this contribution from Archer is recognised fully.

'Mating' organisations with degrees of attractiveness

> It was almost like an analogy of partners at a dance. Up 'til then there were two girls and four blokes and we were the chaperones. So we said, you can dance with this one and you can dance with that one but you are not going to have sex now. I literally had to say them, I want you to have these discussions but you may not lock in other players. You can't lock in your combat system, etc. I was actually telling them what the rules were of [*sic*] their partnering relationship as it was being developed. We were giving them all the rules of the relationship.[161]

For a DMO tender project, many or most of the collaborators, for historical reasons including mergers, demergers and acquisitions, might be deemed imperious, antagonistic, competitive and possibly 'mortal enemies'. Whatever their constructed

[161] A DMO tender project manager

reality and social pathology, a commercial opportunity requiring orchestrated medium-term cooperation, must be taken seriously. Just how these relationships might evolve is a matter of forethought and strategy. Indeed, such is its importance that the editors at SAGE publications have recently launched a new journal, *The Journal of Strategic Contracting and Negotiation*. Inter alia, the inaugural edition posits that:

> Contracting and negotiation has become core to organizational and inter-organizational relationships, irrespective of sector or industry, and of national or international boundaries. (Pitsis, Haley, & Van Slyke, 2015)

Based on the social pathologies of organisations, this section teases out the morphogenetic logic behind relationships. It begins with *analytical dualism* and concludes with the microcosm of a tender enterprise with its collaborating organisations and their project-centric hybrid enterprise with its micro ideational power structure and positional power structure.

While theoretically, the analytical separation (analytical dualism) of *Structure and Agency* underwrites a methodology for morphogenetic reasoning, such reasoning needs, for practical purposes, to extend to multiple organisations in a collaborative or cooperative formation. In this exposure of a reasoning framework, the potential efficacy of its methodology is supported with case-based field data.

The following analyses relate to Table 8.5.

When Cultural Reproduction and Structural Transformation (B) meet Cultural Transformation and Structural Transformation (D)

- ***Normative Structural (positional power) Transformations – Power Alliances*** **B-D** (see Table 8.5 (above) right-hand side; middle)

  In Table 8.5 (**B**), the Contractor has a ‘normal’ social disposition of adapting to a variety of power positions for the purpose of enjoining external resources, while the culture of the organisation – perhaps an ‘engineering’ culture – remains as is.

  In seeking structural power alliances, the Contractor at **B2**, *inter alia*, retains the mediating services of a Lobbyist at **D2** (with whom it shares an accommodating disposition towards structural transformation – agile organisational forms). The Contractor’s mission (**B**), and the retained Lobbyist’s business (**D**), is to change or orchestrate structural power relations. In so doing, the tendering strategy might require collaborations, alliances, or joint ventures that deliver additional material power through mutual support.

- The Contractor (**B**) engages in '2nd Order *Contingent* (external) *Contradicting relations*' (working in opposition – dialectical relations). In practice, the domain of competitive tendering for major Defence equipment exists only with the presence of other rival contractors; some of whom have to 'mate' reflecting government/Defence policy, or other commercial reasons. The Lobbyist (**D**) – a facilitator – engages in '2nd Order *Contingent* (external) *Reinforcing relations*' (sympathetic to the cause). Both the Contractor and the Lobbyist deal with the *external* world-at-large: hence the synergy of agile worldly perspectives.
- In order to comply with strategic government policy, the Contractor's objective is to translate some hitherto competitors into collaborators. To this end, the Contractor retains one of more Lobbyists (**D**) who, together with the Contractor (**B**), find/orchestrate potential relationships by 'mediating' with past, current or potentially future opponents/enemies. The desired outcome ('elaboration' of the existing state-of-affairs) is to establish a tendering enterprise of collaborators. Further, there is a pressing competitive need to enhance the political legitimacy of the confected enterprise via the organisational institutionalism of natural enemies and supporters, who together, become 'friends' (friends-at-court[162]) for the duration of the tender enterprise (project).
    - One of the tender project 'collaborators', the Defence Minister's Political Office (**A**), has the capacity to indicate the political or national security acceptability of any other collaborator.
- In this context, a senior Defence executive considers the contractors' reality:

> But every contractor [**B**] works in the jungle and the alligators are hungry [2nd Order Contingent Contradicting External Relations]; whereas the DMO [**C**] [2nd Order Necessary Reinforcing Internal Relations] tries to skirt around the jungle because its nourishment comes from the government. [However], in the aggressive defence equipment market, it's all about market share and the destruction of competition. So the contractor [**B**] is going to have different goals and values to the DMO [**C**]. The contractor will actively seek political [power] alliances [**B2**] to enhance their survival prospects. This might be with other companies, industry groups, and [state & foreign] governments at all levels. Recently, there has been some

[162] Relied upon to advance their mutual interest or at least, not to degrade their political standing

> fairly strong letter writing campaigns from members of parliament around the country to the Minister, in support of a particular option. This is an alliance [collaboration] at work and without alliances; a company is likely to become terminally ill.

When Cultural Transformation and Structural Reproduction (A) meet Cultural Reproduction and Structural Reproduction (C)

- ***Normative Structural (Positional Power) Reproduction – Positional Power Sustainment*** **A-C** (left-hand side; middle)

  The DMO (**C**) seeks to maintain its bureaucratic imperative for *Structural Reproduction* **C2** and *cultural reproduction* **C1** (the 'perfect bureaucracy'). Meanwhile, the Political Office (**A**) expends much energy mediating stable (tolerable) positional power relations **A2** within its ambit; however imperfect due to ministerial changes, government changes, bureaucratic changes and diplomatic changes. Again, the 2nd Order Relations offer an insight:

  - The Defence Minister's Political Office (**A**) engages with 'Necessary *Contradicting* Internal Relations'. This is a world where competing political problems vie for limited material resources that cannot all be *solved* at this time. Only some problems might receive material attention and the others are *resolved* politicly; only to reappear, perhaps in a different guise, at some future time.
  - At the same time, the DMO (**C**) engages with 'Necessary *Reinforcing* Internal Relations' where there is an imperative for stability in bureaucratic functional/positional power structures requiring the support and stability of reciprocal (reinforcing) ideational (cultural) power structures **C1**.
    - To actively sustain this disposition of power structures, bureaucrats and military personnel from the DMO are deployed to the Political Office in an attempt, *inter alia*, to resolve temporally (not solve with sops) the wicked political problems at hand and to achieve strategic 'certainty', at least for the duration of the tender project.
    - One such deployed military Officer recalls:

> We told the contractors [**B**] [who live in a world of 'Contingent Contradicting External Relations'] not to listen to all the vested interests in Defence and other government departments. They

> are going to make it more complicated and when they do make it more complicated, come and tell us and we will use our influence to keep them on track. We had very clear directions from government on what we were to return in terms of the project outcomes.
>
> In terms of the internal politics of Australia's national security architecture, the government of the day takes on more power by making the major Defence equipment decisions and it takes that decision-making power from the bureaucracy. So the natural threat to the Kinnaird Review is for the bureaucrats to take power back and we are seeing that now and my advice to the government would be to try and reverse the trend that very unfortunately we allowed to happen in the last year or so of the Howard Coalition government.
>
> It's almost like there are two systems running. There's the black and white technical world of the equipment performance, cost and the analysis of tenders [C Necessary Reinforcing Internal Relations], and then there's the political outcome that I deal with [A Necessary Contradicting Internal Relations]. *But DMO are sort of encouraged to get to the 'right' outcome along the way*. (Emphasis added)

When Cultural Transformation and Structural Reproduction (A) meet Cultural Transformation and Structural Transformation (D)

- **Phase 3: 3rd Order Outcomes involving *'Kindred Cultural Spirits'* A-D : D-A** and **B-C : C-B** (near centre of Table 8.5)
    - **A-D : D-A** (↖ ↘) The Political Office (A) and the Lobbyist (D) share the same Cultural disposition towards *'Ideational Transformation'* (↖ ↘). In this context of changing cultural power structures, Corporate Agents readily interchange between the Political Office (A), and the Lobbyists (D). From time-to-time, Lobbyists have occupied the functional position of Chief-of-Staff to the defence minister and indeed, the Prime Minister[163]. This inextricable relationship of networked influence pervades the political (ideational) process (MacCallum, April 2010).

[163] The first Rudd Labour Government (Government Relations Australia)

When Cultural Reproduction and Structural Transformation (B) meet Cultural Reproduction and Structural Reproduction (C)

- B-C : C-B (↗ ↙) In the context of ***Ideational Reproduction*** (Cultural stasis), Corporate Agents, such as engineering and contract management staff, interchange between the DMO (C) and the Contractor (B). A DMO Engineering Manager recalls his experience:

  > Part of the problem stems from our past employees. When we negotiate, the people sitting on the other side of the negotiating table are often former officers of the Department or DMO. So they sit there, sometimes on chairs that we had deliberately lowered, knowing what we are doing because they used to do it and they have their responses prepared.

- In pedestrian terms, the exercise seeks to 'understand how the other side thinks'. Suffice to say that these exchanges would not occur without benefit for both parties. For the Contractor (B), ideational replication of the DMO (C) (language games) is considered valuable. Their desired disposition is for the DMO to perceive them as having the same social pathology as the DMO.

- During these staff exchanges, Corporate Agents enter a familiar social and ideational context (perhaps the situational logics of an 'engineering mind-set'), but at the same time, they are immersed in the different situational logics of functional power arrangements: B2 *Transformation of Position Power Structure*, and C2 *Reproduction of Position Power* Structures respectively. For the Contractor's agents, the change is from structural agility (transformation) to the inflexibility of structural 'reproduction'. The converse applies for the agents of the DMO. The ability to return to the mother organisation is probably sufficient to avoid significant distress.

- However, the importation of senior (board level) executives from industry to the DMO becomes a 'battle ground' between DMO's historicity of *Structural Reproduction* aided and abetted by its *Cultural Reproduction* versus the agile disposition of *Structural Transformation*. As a statement of generality, the bureaucrat tends to prevail (Ferguson, 31 March 2008).

When Cultural Transformation and Structural Reproduction (A) meet Cultural Reproduction and Structural Transformation (B)

- ***'Different Worlds'*** **A-B**
    - The Political Office **A1** (*Cultural Transformation*) with its associated ministerial decision-makers and the Contractor **B1** (*Cultural Reproduction*) have opposing cultural (ideational) dispositions. Concurrently, they also have opposing Structural Positional Power dispositions **A2** and **B2** respectively. Such opposing world views suggest a rationale as to why a Contractor might retain a Lobbyist for a meeting with the Political Office.
    - Former defence minister in the Howard Coalition Government, Brendan Nelson recalls:

> Some of these companies actually do need lobbyists. They need someone who knows how to shape the argument and distil the key points. Because some of these companies come to you and talking a whole lot of stuff and you think, what on earth are they on about? You need someone that is professional and can take what they are actually on about and convert it into plain language.

When Cultural Reproduction and Structural Reproduction (C) meet Cultural Transformation and Structural Transformation (D)

- ***'Different Worlds'*** **C-D**
    - The DMO (**C**) and the Lobbyist (**D**) need to co-exist and collaborate for the purpose of the tender enterprise. They have nothing in common in terms of Cultural Reproduction/Transformation and Structural Reproduction/Transformation.
    - The following extract comes from Mungo MacCallum's (April 2010) satirical piece in *The Monthly*:

> Then there are the real lobbyists, the hardened professionals who hang around Parliament House, as prolific as Bogong moths in season [a dense cloud of moths that are attracted to the lights of Parliament House], and far more pestilential. True or not, [these lobbyists] have to be considered as part of the whole immensely complex and time-consuming process of government [for whom] the real and only purpose of politics [is] winning elections.

- While there is a symbiotic and vital relations between lobbyists (**D**) and politicians (**A**) in order to convey non-attributable messages through a myriad of social networks, the 'pestilential' sentiment finds voice within the bureaucratic DMO (**C**); 'preferring' to be beyond political and commercial influence. However, both the lobbyist and the DMO, either overtly or tacitly, understand that the realpolitik of an Open System requires all possible channels of communication to be open and active.
- Therefore, the Lobbyist's (**D**) entrée to the DMO (**C**), in the first instance, might be facilitated by the Defence Minister's Political Office (**A**).

When Cultural Transformation and Structural Reproduction (A) meet Cultural Reproduction and Structural Transformation (B), or when Cultural Reproduction and Structural Reproduction (C) meet Cultural Transformation and Structural Transformation (D)

- ***Different Worlds and Dialectical Relations***:
  - *'Different Worlds'* **A-B** (*Political Office* and *Contractor*) and '*Different Worlds'* **C-D** (*DMO* and *Lobbyist*) are characterised by the presence of mediators/facilitators. In the case of the Contractor (**B**) and the Political Office (**A**), the mediator is the Lobbyist (**D**). In the case of the Lobbyist (**D**) and the DMO (**C**), the mediator is the Political Office (**A**).
  - For the Contractor (**B**) seeking engagement with the Political Office (**A**), the Contractor retains the Lobbyist (**D**). The Contract and the Lobbyist share a common disposition towards *Structural Transformation*: **B2** and **D2** respectively. Meanwhile the Lobbyist and the Political Office share a common disposition towards *Cultural Transformation* **D1** and **A1** respectively. Their common disposition to facilitation/mediation is *Cultural Transformation* **A1** and **D1**; a disposition of relevance to organisational legitimacy and the political appropriateness of tendering enterprises.
  - A similar line of reasoning might be undertaken for the Lobbyist seeking engagement with the DMO via the Political Office.
  - The morphogenetic approach refers to such facilitating/mediating activities as engaging with 'Dialectical Relations'. That is, a process of

change that results from interplay between opposite tendencies. A Political Advisor in the Political Office offers an insight:

> With the alliance [one form of collaborative enterprise] project, we went through a process to find each player in each sector and we had to find the most efficient, the most productive, the most able to deliver in this program, and then once we had the 'A' team, so to speak, we had to bring them together to deliver the project. That is a complicated thing to do but the logic was sound. But the hard part was managing the central risk [the relationships between non-natural partners with different structural and cultural dispositions and situational logics].
>
> It was a curious experience because ordinarily people come to you for Defence business, but now we were going to them. The political office shapes the relationships, especially with these guys coming in. We just had to let them know whether they were welcome in the country or not [nationalism and diplomatic alliances].

- Unnatural coupling between organisations existing in *different worlds* might require the agency (mediation) of a facilitator. In the context of a tender enterprise, the Contractor (**B**) and the Political Office (**A**) do not have natural affinities, but coupling is facilitated by and through the Lobbyist (**D**). This is not a one stop introduction but rather, an ongoing bilateral communication channel mediated/facilitated by the Lobbyist.
- Public scrutiny, through Senate Hearings and journalists,[164] ensures that an unnatural coupling between the Lobbyist (**D**) and the DMO (**C**) is undertaken with care and probity. Both parties rely on the Political Office (**A**) to mediate/facilitate some form of coupling. 'Probing' and 'sensing' are matters for the Political Office as they support a 'reacting' and 'adapting' defence minister[165].
- The essence of a tender is that there is a competition between tendering enterprises comprised of collaborators. In the Defence instance, the Political Office (**A**) and the DMO (**C**) participate in all collaborative

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164 '...generally full-time journalists, not part-time columnists, almost all of whom see themselves not as commentators, but as players in the game, movers and shakers, one-eyed supporters of one side or another (MacCallum, April 2010).'

165 'Winning the game becomes the only thing that matters; the means become the end. And, in the eyes of the media, the professional politician is the one who knows how to play the game to perfection, not the one with the ideas and vision that are supposed to drive the whole process (MacCallum, April 2010).'

> enterprises. How then might tender enterprises be distinguished for the purpose of a winning bid?

I posit that what differentiates competing tender enterprises is their individual progression towards Organisational Institutionalism and the political legitimacy and political appropriateness that is evoked. The value of the Morphogentic Approach for reasoning is that it favours *narrative history* as the paradigmatic form of explication, accounting for the contextual particularities of time and place (Porpora, 2013, p. 29) and by extension, the political efficacy of Organisational Institutionalism.

Political 'Legitimacy' and 'appropriateness' are at stake, particularly if the musings of a contractor's tender project manager are to be believed:

> ...but politicly, I could almost imagine that if you could spin the roulette wheel now then you might get a totally different answer than you did a year ago because the politics are different.

A Confluence of Contractors

Aside from all the key stakeholders in a tender enterprise, the actual tender (bid) submission is compiled by a lead or Prime Contractor who compiles a suite of negotiated sub-contracts. The competition is between Prime Contractors.

Both Prime contractors and Sub-contractors (**B**) reflect '*2nd Order Contingent External Relations*'. They generally reflect *Cultural Reproduction* **B1** and Structural Transformation **B2**. On this assumption, each organisation seeks to retain its own cultural framework but at the same time, would like to be open to various (structural) alliances with other organisations; subject to political, diplomatic and national-interest exigencies.

Given that contractors are natural opponents or at least wary of each other, how might they come together to conform a singular tender (bid) team – the enterprise?

A DMO tender project manager addresses this issue head-on:

> For instance, I was interested in how the respective contracting teams would work together. In one case, I could not envisage how that meta-team could work. They had a number of nationalities with very different Asian and European cultures who needed to cooperate. This is serious social complexity.[166]

[166] For example, trust or leadership as constructs may be conceptualised quite differently by employees in certain non-Western countries (Galvin, 2014).

In so doing, this project manager has introduced the idea of 'coupling' that will be addressed shortly. However, at least two themes are present. The first proposes social complexity and the second reflects the vagaries of an Open System that is society. Individually, or in combination, nothing can be predicted and the pervasive complexity can only be probed, sensed and then responded to with more refined probing and so forth (Snowden & Boone, November 2007, pp. 74-75). The character and timing of these activities contributes to the empirical data of this research project.

Interim reflection and supporting opinions

- The morphogenetic process cycle model provides the components for a 'framework-for-reasoning' about social influences and social change.
- Observers might develop an understanding of the demeanour of the Lobbyists' Corporate Agents and why these behaviours might evoke the ire of the bureaucracy. A DMO tender project manager adds a personal perspective:

  > So, they [the contractors] spent large sums of money, perhaps as much as $20M[167] on the whole bid. Some of this money was spent on consultants [lobbyists] to facilitate access to the Minister and anyone else who they thought might enlighten them. My belief is that with these really high-level multi-billion dollar projects, information seeking probes [into government] don't work. They don't get the information because it's so tightly held by just a few people.

- The proposed framework-for-reasoning can be applied to the Defence Minister's Political Office, the Contractor, the Lobbyist and the DMO. All their Corporate Agents are 'mediating' relations (Phase 2) but they are constrained and enabled by their contextual SEPs, CEPs and PEPs and the Situational Logics that such Emergent Properties evoke.
- The tender project (enterprise) is a collaboration of all these key players and yet, each reflects a qualitatively different Situational Logics. That is, between any two organisations, there are degrees of quality of *organisational coupling*.

The team of contractors in a tender enterprise: organisational coupling and complexity

The efficacy of a morphogenetic framework-for-reasoning is likely to be influenced by the complexity of relations between organisations; otherwise referred to as 'coupling'.

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[167] Other informants offered estimates as high as $50M.

Any two *contracting* organisations (**B**) have '*2nd Order Contingent Contradicting (incompatible) External Relations*'. Individually, they generally espouse *Cultural Reproduction* **B1** and Structural Transformation **B2**. That is, a desire to retain their own respective world views but a preparedness to join their resources for mutual benefit.

> However, what the contractor can and does do is to create a physically separate and secure office with a capacity for *Cultural Transformation* for the purpose of bid preparation.

The idea of 'coupling'

Generally, the idea of 'coupling' relates to intra-organisational structures and to inter-organisational structures; something of concern to the previously referenced project manager considering a team of contractors with diverse national cultural backgrounds who were proposing to form a tendering enterprise.

Loose coupling between organisations

Weick (1969/1979) identified *Loose Coupling* as 'an intention to convey the image that coupled events are responsive; [while] each event preserves its own [cultural] identity and some evidence of its *physical* or logical *separateness*' (Strati, 2000, p. 19). Logical separateness relates to the ideational power structures that are subject to intra-cultural reproduction.

Loose Coupling considers organisations – singular or engaged – as capable of high levels of redundancy, slack, and waste (Lincoln & Guba, 1985, p. 182). Indeed Loose Coupling permits different and even contradictory subsystems to coexist in the same organisation [or institution] with dialectical relations (Czarniawska, 2011, p. 778).

In loosely coupled organisations, a) relations among its various hierarchical levels, b) exchanges among its various operational units, c) decisions about initiatives to undertake, and d) interpretations of events occurring internally and externally, are marked by indeterminateness, ambiguity and uncertainty, even though ties holding the organisation together certainly exist. The concept of loose coupling, carries connotations of impermanence, dissolvability, and tacitness; of relevance for a collaborator in a tender enterprise (Czarniawska, 2011, p. 778; Hancock, 2010, p. 46; Lincoln & Guba, 1985, p. 16; J. W. Meyer, 2011, p. 804; Paolucci, 1999; Strati, 2000, pp. 18-19; K.E. Weick, 1969/1979).

By virtue of loose coupling, an organisation is not obliged to react to every change that occurs in the external environment. It can adapt to an unusual situation without being entirely caught up by it, while preserving the identity, uniqueness and insulation of each of its parts. That is, loose coupling supports awareness with varying degrees of engagement.

On the other hand, the effects that organisations exert on each other are often filtered and imperfect. That is, there is a loose coupling between them so that each organisation preserves a margin of discretion.

Overall, Strati (2000, p. 19) presents the notion of loose coupling as 'a dialectic concept [investigating the truth of options or contradictions and their solutions] [morphogenetic approach's Phase 2 'Interaction'] intended to help organisation theorists to understand the 'organisational puzzle' constituted by the fluidity, complexity, and the *social construction* of organisational structure [structural and cultural relationships]'. (emphasis added)

Lincoln & Guba (1985, p. 183) conclude that 'loose coupling embraces unpredictability'.

Loose Coupling and New Institutionalism

From J. W. Meyer's (2011, p. 792) perspective, 'New Institutionalism' appeared with models embedded in larger *structures* and *cultures* of one sort or another. The 'old institutional' models shared the idea that society is made up of a) *interested*, b) *purposive*, and often c) *rational* (reason-based constructions of knowledge) Actors. In contrast, 'new institutionalists' see the social environment as affecting (interacting/mediating) the behaviours, practices and ideas of people and groups made up of a1) *bounded*, b1) *purposive* and c1) *sovereign*[168] (unlimited and effective) Actors.

Beyond New Institutionalism, the New Institutional Economics (NIE) is an economic perspective that attempts to extend economics by focusing on the social and legal norms and rules (institutions in their own right) that underlie economic activity and with analysis beyond either institutional economics or neoclassical economics (Furubotn & Richter, 2005, p. 1; Roberts, 2011). It is argued that signalling theory[169] facilitates the evolutionary step required for a combined 'old institutionalism' and 'new

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[168] sovereign owner of attitudes such as "attitude", "motivation" and "value" (M. Easterby-Smith, Thorpe, & Lowe, 2002, p. 216)

[169] Signalling theory draws on the disciplines of economics, biology and game theory in order to understand phenomena in daily social interactions (Donath, 10 May 2007, p. 3).

institutionalism' to engage New Institutional Economics in order to *refocus on human uncertainty*.

> This influence of Situational Logics on Actors brings the discussion within the ambit of the morphogenetic approach with its a) Social Realist thinking and its b) confluence with New Institutionalism, New Institutional Economics and Social Constructionism.

Despite its obvious uses, J. W. Meyer (2011, pp. 804-805) considers that the concept of 'loose coupling' has been a considerable source of tension in the field. This arises, he explains, because Realist thinking is quite central to modern ideology as well as to much social theory. And from a Realist point of view, decoupling between a) organisational rules, policies and programs, and roles, on the one hand, and b) local practical action, on the other, is deeply problematic. Rules – position power structures – are created by powerful and interested actors, desiring to control action. They are put in place in particular organisations because the interests of powerful actors demanded it. They should normally *be* implemented in practice.

Slack coupling

Strati (2000, p. 18) cautions that 'slack' coupling might 'turn off awareness'. An example of 'slack coupling' comes from the field data obtained in this research project, which identified, not a contractor, but a 'hermit' DMO tender project office that isolated itself from situational awareness and presented archetypal slack coupling of disengagement: 2nd Order Necessary Reinforcing Internal Relations leading to Cultural Reproduction **C1** and Structural Reproduction **C2**. Such extreme behaviour was met by an equally pragmatic response from the other caucusing stakeholders, and ministerial intervention prevailed. The not so subtle message is that the DMO parent organisation appeared insensitive to the game-at-play.

Tight coupling

Tight coupling means there is no buffer between items. What happens in one directly affects the other. 'Lean' (just-in-time) techniques encourage tight coupling. Perhaps counter intuitively, the higher the intensity of interactive complexity (an absence of any kind of divination), the less is our ability to prevent surprises and the *tighter* the degree of coupling (Hancock, 2010, p. 40). This is why the 'perfect bureaucracy' is brittle and potentially chaotic when one link in the expected (hierarchical) relationship fails to materialise.

Uncertainty is the hallmark of the networks of inter-organisational relations: both internal and external uncertainty. In *The Paradox of Uncertainty*, Dalcher (2009, p. 27) suggests that where people interface with technology in an effort to reduce uncertainties to risks, messy and complex environments result. In such environments, characterised by interactive complexity (where two or more failures can interact in unexpected ways) and *tight coupling* (where parts of the system are intertwined and have a major impact on each other), accidents become inevitable. Adding safety measures increases the number of potential interactions (risk-taking) and the redistribution of risk may be uncertain, unpredictable, and uncontrollable (Aranda-Mena, 2003).

The implication for a tendering enterprise of collaborating entities is that there is a finite number of collaborators beyond which the distribution of risk becomes uncontrollable. The number 5 is indicative (Hazrati, Apr 14, 2009).

‘Slack’, ‘Loose’ and ‘Tight’ coupling: a digest

The idea of a socially-complex multi-organisational tender enterprise operating within the vagaries of an Open System, that is society, ensures that adequate sensitivity to emerging issues is problematic and therefore, predictive accuracy is unlikely. At best, individual collaborators might be probed, and emergent properties sensed. The resulting ‘elaboration’ of awareness lays the ‘conditioning’ foundation for the next morphogenetic cycle of probing[170] (Snowden & Boone, November 2007, pp. 74-75).

Further, it would appear that theoretical cycles of Morphogenesis can engage with systemic and social integration regardless of whether the nature of coupling in slack, loose or tight. In the case of slack coupling, change might not be immediate.

- *Loose Coupling* is an intention to convey the impression that coupled events or coupled organisations are mutually responsive. However, each event or organisation also preserves its own [cultural] identity and some evidence of its *physical* or logical *separateness*. Such might be the case for a tender enterprise.

  Collaborating organisations are marked by indeterminateness, ambiguity and uncertainty, even though ties holding the organisation together certainly exist. The concept of loose coupling (Weick 1976) carries connotations of

[170] Two parties get around the problem of asymmetric information by having one party send a signal that would reveal some piece of relevant information to the other party. That party would then interpret the signal and adjust behaviour accordingly - usually with a better targeted offer (Donath, 10 May 2007, p. 3).

impermanence, dissolvability, and tacitness (Strati, 2000, p. 19); all of which are a reality for a tender enterprise.

- *Tight Coupling* indicates that whatever happens in one organisation directly affects the other. The higher the intensity of *interactive* complexity (uncertainty), the less is our ability to prevent surprises and hence, the *tighter* the degree of organisational coupling that is reflected in 'knee-jerk' reactions. This appears to be the case for the DMO parent organisation with respect to the Political Office but not *vice versa*, and for the DMO tender project reflecting the DMO parent organisation but not the reverse (Ferguson, 31 March 2008).
- *Slack Coupling* reflects a deliberate intention to avoid social interaction with one or more collaborating organisations in the collective enterprise. As a matter of deliberate probity policy, the DMO implements this practice during the tender preparation period. Also, one case-study within this research project involved a DMO tender project office that invoked 'slack coupling' as a social pathology.

Bringing these threads together suggests that the nature of organisational coupling in complex organisational collaborations is one of uncertainty.

Relationship and Trust: coupling between the contractors (prime and sub) involved with a tender enterprise.

Without asking the question directly, the research respondents in this inquiry offered voluntarily, an indication of their recalled observations of ongoing 'probing' and 'sensing' communication behaviours interpreted as relating to matters of 'trust'; an essential tenet for a prospective hybrid organisation of collaborators (Zolin & Dillard, 2005). 'Trusting relations' would appear to be important in the reduction of doubt. Indeed, Weick (1969/1979, p. 14) makes this point 'as the basic reason for the existence of the [hybrid] organisation'.

A collation of interviewee opinions is assembled below:

- Over time, that basis of relationship, counted far more than the dollars and cents.
- I walked out of that whole thing with a real lesson: in big projects, establish the relationships first.
- It all comes down to the relationship between the two leaders. If you don't trust each other, it's almost impossible for the rest of the team to trust each other. Relationship is absolutely critical to ensure that the project is successful.

- The economic necessity for an Australian defence contractor to be able to sustain the supplied equipment through its life means that a foreign partner (supplier) must witness a high level of (Australian) process integrity in order to underwrite the necessary trust and confidence.
- I don't think the creation of value has very much to do with any of the operating paradigms within Defence at all. For a contractor, you have to be known in Canberra. It's not all about price; it has much more to do with trust when it works properly, but it's also about the confidence that I know that the person *is* going to do it.
- Before we ever talked about business, we had to figure out if we liked each other, OK, and if we can trust each other. When the commercial discussions were over, we would go out that night for dinner and the games went away and we really had a very close personal relationship with our teammates there. And that almost Jekyll and Hyde relationship between us I think had an incredible impact on our eventual success.[171]

Two domain scholars offer supporting insights:

- Strategic cooperation is not restricted to existing and trusted alliances but is used to foster new alliances designed to improve trust and understanding (Radford, July 2004).
- *Trust*, or what might be more broadly referred to as the social context of the procurement relationship, [in the presence of contractual incompleteness] might be least distorting when agents share a broad understanding of goals and of the norms that are acceptable in achieving those goals (Ergas & Menezes, 2004). (emphasis added)

Trust as an objective tender project outcome appears to be deliberately facilitated, in part through the efforts of the ongoing industrial marketing campaign.

Facilitating trusting relationships

Earlier in this chapter, the Lobbyist (**D**) and the Defence Minister's Political Office (**A**) facilitated or mediated relations between collaborators with incongruent (interfacing) social pathologies (see Table 8.5). As each organisation within a hybrid tender enterprise would have a different rationale for existence, such incongruence would appear to be axiomatic. The potential impact of pathological incongruence can have political implications; hence the Minister and the Minister's Political Office become directly involved.[172] There are two further incidental reasons for ministerial involvement:

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[171] Mehrabian (1981) suggests that most of the information about whether one person likes who they are talking to comes not from what is said (7%) but on how it is said and on their facial expressions (93%).
[172] (Hawthorne, 12 March 2011)

- There is an increased and more powerful role for ministerial staff [who are working with] and sometimes directing departmental heads or agencies within the public service (ABC Radio National, 10 July 2009).
- There was every possibility that this tender process of keeping two [foreign] design options alive [as required by the Kinnaird Review] until the end, could fall into a great big steaming heap and become a huge mess. And if that had happened and the idea had come out of the DMO or the Defence department, heads would have rolled (Political Advisor in the Political Office of the Minister for Defence in the Howard Coalition Government).

Not only do the politicians bring gravitas to the situation, their presence indicates to the collaborators that they 'must negotiate or make certain compromises concerning cultural differences, thereby allowing various cultural values and practices, both foreign and local, to be integrated' (van den Ende & van Marrewijk, 2015, p. 169); at least for the duration of the tender enterprise: *2nd Order Necessary Contradicting Internal Relations* (see Table 8.2 (**A**)) .

From the perspective of the morphogenetic approach, van den Ende & van Marrewijk are 'suggesting' that for the benefit of a collaborative tender enterprise, prime contractors and their sub contractors (some of whom are larger than the prime) need to transition from a disposition of individual *Cultural Reproduction* with *Structural Transformation* (**B**) to one of *Cultural Transformation* with *Structural Reproduction* (**A**). That is, while each contractor would have natural '***contingent*** *contradicting* ***external*** *realtions*' with any other organisation, the realpolitik of a hybrid organisation – the tender enterprise – suggests that they now find themselves operating in the context of '***necessary*** *contradicting* ***internal*** *relations*' (within the tender enterprise).

For the duration of the tender enterprise, participating Contractors (**B**) would need to adopt the same social pathology of the Political Office (**A**) with its need to accommodate multiple cultures corralled into a common purpose.

Table 8.2 (**A**) – *2nd Order necessary contradicting internal relations* – illuminates this reality, and now the contractor faces a new realpolitik:

> Where two or more organisations / institutions stand in a *necessary and potentially incompatible relationship*, the effects of their operations are to threaten the endurance of the relationship itself.
>
> *Prima facia*, the operating context is unstable. However, owing to the systemic interdependence, agents are 'forced' to co-operate with varying degrees of reluctance. The result is a situational logic of *power compromises and cultural reconciliation*.

> Such a situational logic has inherent costs that just become a cost of doing business. Ongoing compromise (change) is designed to contain contradictions, but at the cost of constant vigilance.
>
> In so doing, the unelected Political Office appropriates powers of control and self-importance.

Each Contractor (**B**) is now transitioning from *Cultural Reproduction* to an active *social construction* of their localised micro culture in the tender enterprise (similar to **A**). Further, such cross-cultural integration between these collaborating contractors implies potentially, that Agents need to be able to make sense of cultural and conflicting differences (van den Ende & van Marrewijk, 2015, p. 168).

The (ongoing) social construction of cultural differences

At stake is the potential success of the tender enterprise that might be undermined by the varying perspectives, interpretations and interests of the league of contractors contributing to a tender enterprise. In such cross-cultural management, van den Ende & van Marrewijk (2015, p. 169) press the case for culture to be a *negotiated* and *socially constructed* phenomenon. Given that negotiation – political, strategic, or tactical – is vital for the overall tender enterprise, such recognition of purposive cultural (ideational) development might hitherto have been unaccounted in tendering practice. However, such cross-cultural management has been flagged in Australia by Radford (July 2004) and Ergas & Menezes (2004).

From a *negotiated culture perspective*, van den Ende & van Marrewijk (2015, pp. 170-183) conclude that:

- Daily collaboration in an enterprise sees culture as a *socially* (and situationally) *constructed*[173] *phenomenon* which *transforms* [morphogenesis] over time.
- There is a need to emphasise the relevance of adopting *power-sensitive* (positional power relations and ideational power relations) *comprehension of cultural differences*[174] by revealing, at the micro level, a culturally hybridized system [Phase 2 Integration].

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[173] **Constructivism** has different meanings depending on the discourse at hand. In this instance, it means that human beings do not find or discover knowledge so much as construct or make it. We invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience (Schwandt, 2007, p. 38).

[174] multiple cultures including: regional, organisational, departmental, and professional (van den Ende & van Marrewijk, 2015, p. 170)

- Such cross-cultural hybridisation can present an antidote to power struggles, cultural tensions and essentialist[175] notions of culture.
- Cross-cultural studies should be contextual and historical, focused on social interactions and *social constructions* of power relations, conflict abnormalities and ethnic tensions and so forth, as they develop over time.
- There are no homogenous entities. People are hybrids with multiple identities. Hybrid practices reflect the culturally heterogeneous context and composition of countries, regions, projects, organisations, etc.
- As we move away from essentialist conceptions of culture, culture should be seen as a *negotiated* and *socially constructed* phenomenon. Within a given context, [collaborating contractors] will make sense of and ascribe meaning to cultural differences, thereby constructing culture as they see fit. Culture is negotiated and renegotiated, constructed and reconstructed to suit the existing cultural heterogeneous business environment that develops from cross-cultural interactions and interfaces [of social pathologies].
- Agents can emphasise or diminish their national and/or organisation culture for social or political purposes. Therefore, cultural differences should be understood not as coherent, stable entities, but as shifting social constructs that are contextually dependent on the specific interests at stake.
- Strategy implementation depends on what works best in a given situation and point in time. Collaborators must realise that they need to respond and adapt to each other's needs and demands to complete the [tender] project. In so doing, culturally diverse practices become mutually integrated. This creates a hybrid system that is continuously fine-tuned, unique, and different from all the sub-cultures from which it is comprised.

With respect for these scholarly contributions above, the thoughts of a DMO Tender project manager and Contractor counterpart (different project) still resonate:

> ...I could not envisage how that meta-team could work. They had a number of nationalities with very different Asian and European cultures who needed to cooperate. This is serious social complexity.
>
> Before we ever talked about business, we had to figure out if we liked each other, OK, and if we can trust each other. When the commercial discussions were over, we would go out that night for dinner and the games

[175] **Essentialism** is a metaphysical doctrine that holds that objects have essence - that is, intrinsic identifying or characterising properties that constitute their real, true, nature (Schwandt, 2007, p. 89).

> went away and we really had a very close personal relationship with our teammates there.

van den Ende & van Marrewijk (2015, pp. 170-183) made the point above that 'within a given context, [collaborating contractors] will make sense of and ascribe meaning to cultural differences, thereby constructing culture as they see fit'; but in reality, not all constructions are 'buildable'.

At stake is the organisational institutionalism of the 'team'. How could 'new alliances' be designed to improve trust and understanding?

The sub-text in the propositions and opinions above is 'available time for acculturation or accommodation to materialise'. There is virtually no appropriate time within the formation of a tender enterprise. In practice, the *negotiated culture perspective* of van den Ende & van Marrewijk (2015, pp. 170-183), while sound in itself, might require something akin to speed-dating slowed down a notch or two. Even when the DMO tender project manager advised the contracting team that '...you can dance with this one and you can dance with that one but you are not going to have sex now', his audience was already on the politicly-approved short-list.

Reflection

In seeking to advance the idea of morphogenetic reasoning, this chapter has painted a broad canvas from the initial suggestion by Lockwood that when theorising about social change, it might be useful to find a balance between *system integration* (structure) and *social integration* (agency). That is, the integration of positional power structures together with ideational power structures should be considered in the context of the social integration of actors with their inherent agency. This analytical dualism contrasts with other approaches that conflate structure and agency (DiMaggio & Powell, 1983, p. 215).

While the presentation of the morphogenetic approach tends to focus on the cyclic processes and emergent properties, a much unheralded facility is its approach to reasoning about why an organisation or a society is 'why' it is and 'how' it got there.

To the overarching questions of organisation theory being *how* and *why* organisations behave as they do, organisational institutionalism offers an *institutional perspective* (Royston Greenwood et al., 2011a, p. 1).

According to C. Brown (2004) and S. L. Brown & Eisenhardt (1997), the institutional perspective needs to be a cyclic temporal perspective because complex society is in a state of constant change – a state of 'becoming'. From this explanation, it would appear

that the morphogenetic approach is inherently an ‘institutional perspective’ (see M. Archer, 1995, pp. 218, 342).

Such reasoning about the ‘why’ is founded explicitly on Archer’s synthetic heuristic of the Analytical Dualism of structure and culture; while the ‘how’ is the subject of historicity.

This chapter has relied on tabular format to condense much information that is presented is a logical progression against the foil of case-study field data. Hopefully, this has breathed life into an otherwise dense exposition. The objective is to contribute to Archer’s mission of providing a logical and defensible framework in which to undertake practical social analysis.

Next chapter

The next chapter presents a logical extension of the morphogenetic framework-for-reasoning by incorporating it into the theory of organisational institutionalism. From the outset, Archer applied the institutional perspective to the changing systems of education in France (M. Archer, 1995, p. 342). In analysing the processual and dynamic character of social change, she was able to offer retrodictive reasoning to the dynamics of the *how* and *why*. A tendering sociology would be incomplete without such an institutional perspective.

Chapter 9
Epistemology:
Organisational institutionalism

In the previous chapter, the morphogenetic approach was explored for its capacity to underpin a framework-for-reasoning about the structural and cultural disposition of an organisation. Such reasoning is founded on ideal-type organisations where each is decomposed synthetically into respective Social Integration and Systemic Integration. Social Integration relates to the degree of cohesion between people, and Systemic Integration relates to the congruence between positional power structures and ideational power structures (the PARTS).

Reasoning about organisational disposition is a precursor to reasoning about organisational behaviour: the domain of institutional thought. However, the idea of an institutional theory is a vexed proposition.

As a unique tender enterprise, the challenge for the collaborating organisations is to proto-organise internally and proto-institutionalise externally. The effectiveness of these social processes reflects in external political perceptions of the enterprise's appropriateness, and implied legitimacy at the date of tender selection. In the meantime, cost is a matter of technical data and the demise of legitimacy can occur at any time.

This chapter teases out the lineaments of 'organisation' and 'institution' together with the idea of organisational institutionalism and its social construction processes. Any notions about the prospect of an 'institutional theory' must acknowledge its evolutionary reality and unsettled positions. In essence, institutional theory is a social construction of temporal reality, and such constructions engage with a power struggle over the definition of the contextual situation: some interpretations succeeding over others. Given the open-system modality of society, such uncertainty would appear to be normative and constructive.

Key features of this chapter include discussions that:

- distinguish and integrate the ideas of 'organisation' and 'institution' as symbiotic

- explore the social construction of institutional theory – its messy empirical manifestations and identity
- reflect on the resilience of accorded organisational legitimacy in the presence of imperfect institutionalisation
- recognise that the temporal appropriateness of an organisation is conferred politicly, and its temporal legitimacy status flows from such political appropriateness

Greenwood et al. (2012, p. 1) express the turmoil they faced:

> Given the proliferation of theoretical paradigms, do organization theories build into coherent conceptual frameworks supported by diligently conducted work, or do they fragment into proliferated confusion?

The structure of this chapter is in the form of a conspectus as some scholars find the ideas of *institutionalism* and *theory* to be incongruent.

Organisational Institutionalism

Greenwood et al. (2012, p. 1) show how institutional research applied to organisational behaviour has evolved over time, but identifying the distinctive nature of 'organisational institutionalism' appears problematic. A more fruitful endeavour they suggest is to consider, 'What does the institutional *perspective* tell us about organizational behaviour?' (emphasis added) The research milieu would appear therefore as a quest for middle-range theory (theory-building) (Gregor, 2006).

Theory aside, Barley's (2011, p. 506) assessment that 'no concept is more central to institutional theory than legitimacy' reflects the general trajectory of the conspectus and the perspective of this dissertation that deals with organisational behaviour; its apprehension internally and its perception externally.

Institutional perspectives in the face of evolved thinking

Against this unsettling introduction, Phillips & Malhotra (2011, p. 703) reflect on *institution* that, as a foundational concept, remains unclear with contradictory conceptualisations of its nature:

> A 'taxonomic' approach [**old**, **new** and **neo-**institutional theory][176] has come to dominate institutional theory while there has been little attention paid to developing an explanation of the process of production of institutions in the first place.
>
> There is an ever present danger of making the neo-institutionalist enterprise [generally political institutionalism] a taxonomic rather than explanatory theory-building science.

Further, from a holistic perspective, Haveman & David (2011, p. 582) believe that:

> The institutional 'tent' houses a loose collection of propositions, of varying degrees of formality, some seemingly incompatible and others only tenuously connected. The institutionalists have not built systematically on one another's work, and the institutional perspective has not accumulated empirical successes.

Roberts (2011, p. 566) is of the view that economists have not yet embraced the main tenets of institutional theory as they develop their accounts of market and institutional phenomena. 'What is ultimately required is an agnostic blending of the irrational and the rational elements of organisational issues.'

'Simply calling something an institution because it results in conformity does little to explain how it actually does so and even less to explain what it actually is (Nelson Phillips & Malhotra, 2011, p. 703).' Labelling a process or structure does not explain it.

Douglas (1986, p. 41) begs the question as to the presence of *institutionalism* as a theory with definitions of its subject, a set of axioms and logically connected statements. She argues against such a mission on the grounds that 'social theory would be killed by strict formalisation'. In sympathy, Barley (2011, p. 508) also argues that 'should the image of institutions as well-bounded phenomena become an ontological assumption, organisation studies would be left with a thin view of institutional reality'.

The presence of a Heraclitian echo appears pervasive: institutionally, everything is 'becoming'.

Hirsch (2011, p. 784) advises that around the mid 1970s, the term 'institution' was not coupled to the word 'theory'. *Institution* implied a place at which political action occurred and change was possible. At that time, culture and institution did not overlap and were not linked in the field.

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[176] **Old** institutionalism – regulative, normative and taken-for-granted; **New** institutionalism – cultural-cognitive based; **Neo** institutionalism – a product of a (temporal) political process (Rao & Kenney, 2011, p. 368)

According to Meyer (2011, p. 800), sociological institutional theory is tied to none of the broader philosophical perspectives of old, new and neo-institutionalism, but rather, 'has developed as a set of very general sociological explanatory ideas'. The reason, in part, comes from the observation that practical activity in organisations only corresponds loosely with policies and structures: political games (ever-changing 'rules') having greater impact.

The next section considers how these sociological 'explanations' (interpretations) might be given some ontological essence.

What is an 'Institution'?

Institutions

Institutions cluster in the sense that what distinguishes one social world from another is an integrated and unique set of institutionalised forms (manifestos), practices, and conventions. This web of clustered relationships ensures a mess[177] of institutional connectedness[178]. At play is a long-term sense of social stability: the domain of macrosocial[179] theory.

Individually, institutions are the 'rules of the game', consisting of both the formal legal rules and the informal social norms that a) govern individual behaviour and b) structure social interactions (Furubotn & Richter, 2005, p. 3).

The mess of institutional connectedness reflects in institutional frameworks that are always nested within other broader institutional frameworks (Furubotn & Richter, 2005, p. 4). Such higher-level institutions might compete for their constituents – such as which higher-level institution has purview of the subordinate institution of marriage: the state or the church (Washington et al., 2011, p. 729).

Douglas (1986, p. 41) proffers that the institution represents an externally *legitimised* social grouping.

In the institutional environment, organisations vie for legitimacy (Palmer et al., 2011, p. 755); witness the recognition of university degrees by some professions and not others, and the status of a university/program perceived by fee-paying students.

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[177] a puzzle of relationships with rationales known to only some players but unknown to the casual observer

[178] The Australian stock market identifies collectively 'institutional investors'.

[179] Australian Government *Style manual* (Department of Finance and Administration, 2008, p. 89)

Organisations

Organisations by contrast, are those groups of people, and the governance arrangements that they create to coordinate their team action against other teams performing also as organisations. In technical environments, organisations compete with one another on the basis of their efficiency and effectiveness of operation (Palmer et al., 2011, p. 755).

Rao & Kenney (2011, p. 352) citing (DiMaggio, 1988, p. 18) claim that:

> Organisational forms arise when [a] actors with sufficient resources see in them an opportunity to realise interests that they value highly [winning a Defence contract], but [b] first they must legitimate the theory and values [their manifesto] underpinning the form [that is, they must seek and receive community recognition of the political appropriateness of the form and hence its legitimacy].

The result is an *institutionalised organisation* comprising bundles of conventions about decision-making rules and other organisational routines that have congealed into a structural form that can be copied and recognised generally as meeting taken-for-granted community expectations with no surprises (Palmer et al., 2011, p. 749).

Origins of an institution

- Phillips & Malhotra (2011, p. 706) suggest that 'institutions arise when groups of people come to understand some activity in a certain way and that understanding becomes shared across a group'.
- Berger & Luckmann (1966, p. 54) propose that an institution is a *practice*[180] made *meaningful* through *interpretation*. Institutions are constructed in *social interaction* through the production of 'shared typifications'.
- The political term 'institutional' is the analytical level at which the process of change and bargaining over rules occurs: Archer's morphogenesis Phase 2 Interaction (1995, p. 305).

Disposition of an institution

Institutions are by definition, constructs that are only visible[181] when enacted[182] by individuals in social settings[183] (Palmer et al., 2011, p. 748; Sayer, 2000). Such

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[180] **Practice**: refers to engaged action or activity by actors organised around a shared practical understanding. A central assumption is that human reality is practice, and not social structures, systems or individuals and their attributes (Schwandt, 2007, p. 239).
[181] the Empirical domain

enactment is a reaction to social needs and pressures – indicating a responsive and adaptive organism (Washington et al., 2011, p. 728).

According to Lawrence et al.(2002, p. 282), institutions are social entities characterised by their self-regulating nature. Indeed, institutions are those social patterns that when chronologically reproduced, owe their survival to relatively self-activating social processes: autopoiesis (Bakken & Hernes, 2008, p. 33). It becomes costly to choose other practices, technologies, or rules that have become 'institutionalised' (Donath, 4 February 2005).

Social realist models of institutionalism

The application of realism to organisation and management studies is in principle, fairly obvious. Organisations are structures that are reproduced by the participants in them, but they also have *emergent properties* that bind participants into a particular pattern of relationships (Ackroyd, 2004, p. 148).

Against the stratified model of social realism, Palmer et al.(2011, p. 759) map: a) the actors experience to the level of the empirical, b) institutions to the level of the actual and c) institutional logics (cultural accounts) to the level of the real: latent contextual influences (Galvin, 2014).

According to Palmer et al.:

- **At the level of the *empirical***, organisation researchers are interested in interpreting through discourse analysis, the subjective meanings actors give to their activity.
- **At the level of the *actual***, institutions can be identified, even if actors do not recognise them because they have become taken-for-granted. Depending on contextual factors and the actions of actors, institutional logics (cultural reasoning) will unfold in the actual domain as manifested institutions.
- **At the level of the *real*,** institutional logics underlie and shape institutions. Institutions – socially real entities – are the results of the ways in which individuals transpose those institutional logics through precise scripts, rules, and norms in specific contexts (Leca & Naccahe, Sep 2006).

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[182] the Actual domain
[183] the Real domain

Realist institutionalism and its Core Principle

'Realist institutionalism embraces the idea that some fundamental [core] institutional principle must be in place [the real domain] before systems of actors [organisations] [the actual domain] can effectively operate [traces of which are observed in the empirical domain] (J. W. Meyer, 2011, p. 792).' This idea of 'core principle' is congruent with Archer's (1995, pp. 72-73) 'activity dependence' assumption that the structure must be in place before anything else can occur.

Meyer explains that a classic economic core principle is that of property rights. Once the core principle is in place – property law – systems of actors (organisations) freed from further institutional influences are thought to function stably and effectively over time.

> There is, according to Meyer (2011, p. 792), a tendency to see the situation as one of *punctuated equilibrium*. This idea was appropriated by the dissertation to characterise the tender process for high cost politicly-sensitive Defence equipment. That is, the institutionalising ongoing marketing campaign is punctuated by tender (bid) episodes.

I posit that the 'core principle' in the Defence tender context is that all *bone fide* stakeholders are able to 'associate', albeit in a structured realm of power relations and the legal framework[184]. This phenomenon of 'reaching out' to exchange policy information exists before, during and after the tender, while the tender process reflects a formulaic process of submitted questions from suppliers and crafted replies by buyers dealing with matters of fact.

The tender enterprise of collaborating organisations adopts (or should adopt) this dispositional identity that in turn, provides a guide for what should be done and how other institutions should relate to them. It implies an inter-organisational and

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[184]In Australia, there is no specialised legal framework regulating government tender of the type found in the United States and in the European Union. However, Australia has signed the Australia-United States Free Trade Agreement which, in Chapter 15, imposes a government procurement regime on the parties incorporating local measures. At a Commonwealth level, Chapter 15 has been comprehensively implemented through the Commonwealth Procurement Rules made under the Financial Management and Accountability Regulations 1997 (Cth) reg 7. The Rules are a legislative instrument. However, the Commonwealth Procurement Rules do not apply to specified military purchases; those identified as 'Strategic Materiel' which is the ambit of this research project. The sources of law for government tenders in Australia are the common law, the Commonwealth Procurement Rules at Commonwealth level and possibly, legislation such as the Competition and Consumer Act 2010 (Cth) and the Australian Consumer Law, though in Chapter 6 it is demonstrated that governments at all levels are very substantially exempt from this legislation in respect of their procurement activities. Legal regulation of the tendering process is a relatively undeveloped area of law in Australia, while some overseas jurisdictions are relatively more advanced, in particular, Canada (Seddon, 2013, pp. 335-339).

institutional environment that legitimises the tender enterprise; all based on the phenomenon of 'reaching out' flowing from the need to interact.

In a phenomenological version of sociological institutional theory, we are dealing with *rapidly expanding meaning systems* that are formally structured in decentralised associational formats rather than around sovereign actors (J. W. Meyer, 2011, p. 797). This idea has resonance with the realpolitik of a tender enterprise.

Ideas of institution and organisation, together with core principles and theoretical models of institutions, provide a foundation from which the next section explores institutional thought and existing frameworks for reasoning about theoretical constructs.

Reflection

The progressive waves of institutional thinking overlap with legacy and contemporary ideas co-existing: a messy state of evolution (Czarniawska, 2011, p. 772).

> **Old institutionalism:** old institutionalism reflects theories of the embeddedness of organisations in social and cultural contexts where *rules* and *identities* are taken-for-granted normatively, and the idea that society is made up of interested, purposive, and often rational actors (J. W. Meyer, 2011, pp. 790-792).
>
> **New institutionalism**: the 'rational-actor' models of organisation are replaced by an alternative theory of individual action, which stresses unreflective, routine, taken-for-granted nature of most human behaviour and views interests and actors as themselves constituted by institutions (Nelson Phillips & Malhotra, 2011, p. 702).
>
> The unique contribution of new institutionalism, an insight that it shares with few if any other organisation theories, is that organisations and organisational participants are products of the larger social structure; in particular, the *cognitive elements* of that (societal) structure.
>
> As a result, organisations, and the people who inhabit them, act in ways that are taken-for-granted as appropriate and even assumed to be rational, despite the fact that these ways of being are fundamentally arbitrary (Palmer et al., 2011, p. 754). That is, organisations not only act, but they often do so for cultural and symbolic reasons and that these actions do matter for an organisation's fate.
>
> New institutionalism was developed to explain the ceremonial adoption of structures and practices by organisations situated in non-market environments. According to Palmer et al. (2011, p. 739), new institutionalism is arguably the dominant paradigm in organisation studies. However, its most evident failure is

its inability to develop a unique understanding of 'power' (Palmer et al., 2011, pp. 750-751).

Neo-institutionalism: neo-institutionalists postulate that organisational forms are created through an inherently political process (Rao & Kenney, 2011, p. 368). Meyer (2011, p. 533) suggests that the main concepts of 'neo-institutional theory bear a strong socio-phenomenological imprint'.

With its strong phenomenological and 'culturalist' emphasis, Hasse & Krücken (2011, p. 541) suggest that the macroperspective in neo-institutional (politicised institutionalism) research contrasts with realist, individualistic, and actor-centred social theories.

Meyer (2011, p. 794) describes a continuum (with overlaps) of philosophical perspectives from *realist formats* through to *phenomenological formats*:

- **Social Realist**: Institutional structures affect actors through 'coercive processes' including nation-state legal actions.
- **Middle ground (social constructivism[185])**: 'Normative' controls of environments over actors, emphasising the influence of professionalised standards. This is the 'person–environment' interaction of constructivism.
- **Phenomenological perspective**: A supposition that environments create standards adopted by actors 'mimetically', reflecting taken-for-granted standards. Actors are imbued (conditioned) with cultural and organisational materials from their environments.

According to Meyer, the difference between the social constructivism perspective and the phenomenological perspective is moot.

Further, Myer makes an important point:

> Theories of rational behaviour explain the responses of actors to coercive and normative mechanisms, while cognitive mechanisms – their taken-for-grantedness – explain something very different, and this is the proper domain of institutional theory (J. W. Meyer, 2011, p. 794).

While different perspectives have been canvassed, a common theme appears to be the nexus between organisations and institutions; to which the literature variously assigns

[185] 'Constructivism', in the social inquiry sense, means that human beings do not find or discover knowledge so much as construct or make it. We invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience (Schwandt, 2007, p. 37).

the terms ‘micro’ and ‘macro’ to reflect a notional hierarchy subject to relationship changes[186].

Relation between organisation and institution: 'macro', 'micro' and 'inter' perspectives

According to Meyer (2011, p. 792), most institutional theories see local actors, be they individuals, organisations, or national states, as affected by institutions built up in much wider (macro) environments. Individuals and organisations (micro) are affected by societal institutions (macro); and nation-states (micro) are affected by a world society (macro): status assigned by analytical relativity.[187]

While not stated explicitly, Parsons’ (1956) *Suggestions for a Sociological Approach to the Theory of Organizations* introduces surreptitiously the ‘macro / micro’ logic in which the *internal* activities within the organisation are juxtaposed with *external* institutional control.

- **Internally [micro]**, work gets done at the firm’s technical level.
- It is coordinated at the managerial level.
- **Externally [macro]**, laws and regulations are created outside the firm’s boundaries – at the institutional level – and enforced in the markets and the external environments in which organisations operate.

This is the potential genesis of proto-organisational practices – a tender enterprise – and the resulting meanings that are attached to these routines (Powell & Colyvas, 2011, p. 278).

> Of relevance for this research project, the authors suggest than rather than discuss (the tender enterprise’s) success or failure, ‘it is better to explain the nature of what becomes regarded as *appropriate* or *venerable’*: the temporal political cognition of the enterprise. (emphasis added)

Key features of the macro / microsociological perspectives:

- **The macrosociological perspective on organisations** assumes that organisations are shaped by the broader social and cultural forces of society (new institutionalism). It assumes that:

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[186] for example, the relationship between dentist and patient, where the patient is the dentist’s landlord

[187] In contrast to the institutional perspective, morphogenesis treats ‘macro’ and ‘micro’ as from ‘interactional and local’ to ‘systemic’ (M. Archer, 1995, pp. 7-12) .

- Modern society is not a concrete hard-wired structure composed of actors. Rather, it is a broader and imagined cultural system, in which cultural patterns are embedded.
- Society, as the embodiment of broader cultural norms, constitutes its actors.

According to Hasse and Krücken (2011, p. 554), social systems theory (Luhmann, 1995) can play a crucial role in coming to terms with the heterogeneity and variety at the macro level of society. 'In this, it is a relevant antidote to the traditional *neo-institutional* emphasis on homogenising [political] forces.'

Importantly, neo-institutionalists postulate that organisational forms are created through an inherently political process (Rao & Kenney, 2011, p. 368); an idea of significance for politicly-sensitive government-sponsored Defence tenders.

Instead of reflecting on the role of purposive actors as in the concept of institutional entrepreneurs, sociological systems theory stresses the conceptual links between organisational analysis and *wider societal fields* and their developments that are the genesis of *organisational institutionalism*.

For the purpose of this research project, the distinct logic of one societal system – politics and the role of political organisation – is highlighted.

- **Inter-organisational perspective**: Within the context of organisational fields, organisational behaviour is intimately bound to other organisations in their field.
- **Microlevel (individual actor) perspective:** The concept of the 'institutional entrepreneur' is used to explain why organisations that operate within the same circumstances do not always become similar, resulting in heterogenity and variety. By focusing on the micro level of individual actors, the basic feature of the new institutionalism in organisational analysis – the analysis of interrelations between organisations and their wider social environments – becomes less pronounced.

Mechanism-based theorising (macro and micro)

Glynn (2011, p. 426) suggests that a useful approach to relating the two perspectives of the macroinstitutional level with the micro-organisational level is that of mechanism-based theorising.

This approach relates variables at one level of analysis to those at a different level of analysis; for example, a higher institutional level of analysis with respect to a subordinate organisational level of analysis. The mechanism is a 'bridge' between the institutionalists' emphasis on the inter-organisational environment, and the identity's emphasis on the intra-organisational environment.

As such, mechanisms expose the 'how' of the relationships' 'what'.

Two mechanisms move across levels of analysis and are relevant to institutions and identity. They present as: 'situational mechanisms', and 'transformational mechanisms'

Situational mechanisms explain how actions or variables at a macrolevel affect those at more microlevels. With situational mechanisms, institutions enable identities.

- Institutional theory implies three sets of situational mechanisms that operate on organisations:
    - **normative** (or value-laden) expectations of institutional fields or industry sectors
    - **cognitive** (guidance systems) that supply abstract structures of meaning
    - **regulatory** (or coercive forces) that can limit identity choices such as in marriage equality
- Glynn (2011, p. 426) argues that institutions enable organisational identities in three basic ways:
    - by formulating the essential identity elements (centrality, distinctiveness, durability
    - by supplying the 'raw' cultural materials that organisations assemble in a process of institutional 'bricolage'[188] to achieve 'optimal distinctiveness' within institutional fields
    - by motivating performance in organisations in a way that is governed by the institutional logics (cultural accounts) of identity
- Institutions can induce variations, as well as temper them (Mary Ann Glynn, 2011, p. 426); for example, the government probity rules with respect to tendering constraints that formalise communications between buyer and seller. However, the institutional eminence of a former Chief Justice can (and did)

[188] (Schwandt, 2007, p. 26) suggests that of the many conceptions of a *bricoleur* performing *bricolage*, one might be viewed as a way of signalling that the object of (qualitative) inquiry as well as the practice itself is relational and processual (a network of interlocking discourses) rather than fixed and formal.

induce variation to the interpretation of the probity rules in the circumstance of sellers offering different value propositions.

- A process of mutualisation would require acceptable variations in institutionalised identity across the key collaborators in the tender project (Clemens & Cook, 1999; Mary Ann Glynn, 2011, p. 426).
- Institutions (relative 'macro') serve up the resources for identity-work in organisations (relative 'micro') by supplying cognitive templates for both the form (grammar) and content (meanings and symbols) of organisational identities. Further, by sanctioning (or legitimating) some particular identity representations (or symbols) over others, an institutional perspective on identity suggests that some identities may be more potent than others in particular historical periods (Mary Ann Glynn, 2011, p. 426); as well as across the phases of the tender campaign.

Transformational mechanisms explain how microlevel actions or variables alter macrolevel patterns at a higher level of analysis (example: universal franchise.)

With transformational mechanisms, fields are altered by aggregating or leveraging potent organisational-level identities: systemic morphogenetic elaboration (M. Archer, 1995, p. 172).

While the metaphorical idea of 'mechanisms' is used by institutional scholars to structure levels of influence, such ideas and relationships are social constructions.

A discursive approach to the analysis of the social construction of institutions

Previously, Berger & Luckmann (1966) proposed that an institution is (a) a *practice* made *meaningful* through (b) *interpretation*.

So too, the *discursive* perspective (Anne L. Cunliffe, 2008, pp. 81-82; Schwandt, 2007, pp. 72-73) also focuses attention on *practice* and how it is made *meaningful* in *discourse* (interaction). Both are required to affect institutionalisation. Patterns of practices need to be combined with interpreted interactions (a relational ontology) to make the practices meaningful. This complexity of processes is the domain of the institutional theorist.

Phillips & Malhotra (2011, p. 706) reflecting on Mead (1934), suggest that via *symbolic systems,* meaning is created in interaction through gestures, particularly the vocal gestures of language.[189]

> This idea can now be seen as foreshadowing a discursive approach to the analysis of social constructions: important for the methodology applied in this research project.

Berger and Luckmann (1966, p. 54) propose the conceptualisation of institutions as *cognitive structures*. Their approach focuses on the creation of shared knowledge and belief systems – objectified social knowledge – through meaningful and subjective interaction; hence the idea of cognitive frameworks for conceptualising institutions (M. Archer, 1995, p. 295).

Berger and Luckmann focus explicitly on the *socially constructed nature of institutions,* arguing that they arise out of the meaningful interactions of actors and shape behaviour by conditioning cognition (M. Archer, 1995, pp. 195-197); and it is this cognitive focus that provides the distinctiveness of institutional theory.

Not only are there organisations and institutions but, as a matter of survival, organisations proto-institutionalise in order to be perceived as politicly appropriate and hence, accorded with legitimate status. This is the theme of the next section.

The Realpolitik of Organisational institutionalism

Selznick's (1957, p. 16) key idea is to infuse the organisation with value beyond the technical requirements of the task at hand; such values coming, for example, from the wider society. The traditional strength of organisational institutionalism lies in its focus on the co-evolution of organisations and their societal environments (Hasse & Krücken, 2011, p. 555) and the stability that is accomplished amid ever changing situations and constellations of agents (R. E. Meyer, 2011, p. 533).

According to Rao & Kenney (2011, p. 352), the impetus for an institutional project, that is, an organisation's institutionalisation or the institutionalisation of a collective of organisations, can arise from a) organised politics, such as a tender project, or b) social movements such as universal suffrage. Importantly, resources and interests are not fixed and consequently, the rules governing interaction – particularly with politicians – are not fixed, as political compromises are part of the game. As a result, a tender enterprise's institutional 'constitution' or 'manifesto' is the subject of ongoing

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[189] **Symbolic interactionism**: is founded philosophically on Pragmatism (Schwandt, 2007, p. 240).

mediation by stakeholders to the exclusion of the unilateral acts of just one dominant organisation in the collaboration.

> Indeed, in one of the cases studied where the more powerful (state-sponsored) subcontractor sought to depose the Australian prime contractor, the prevailing realpolitik was deliberately ignored, misunderstood or not 'seen' from a foreign cultural perspective (Janis, 1982). Alternatively, the rational law-of-the-jungle was at play. A series of meeting exclusions and removals followed, paralleled with 'more civilised' diplomatic entreaties.

A Defence (or any) minister waits to be advised of a 'constitution' that will be most pleasing politicly: the game-at-play. Through a process of suboptimal presentations, the Defence minister will receive a 'constitution' that reflects the 'most pleasing' option. In the background, lobbyists, the minister's Political Office and other stakeholders operate as conciliators and mediators.

Analytically, this crucial shift implies that an organisation appears to be an integral part of its institutional setting; a shift from environment to the exigencies of (political) context (Galvin, 2014; Hasse & Krücken, 2011, p. 543).

Hasse & Krücken (2011, p. 543) also suggest that two basic questions emerge from this perspective of an organisation's context:

1. *What determines whether or not organisations can be successful in actively intervening in their context; for example, changing a Defence Minister's perceptions before the final choice?*

   While some organisations may experience their field context as immune to organisation control, others may be in a position that allows for an institutional engineering of fields (Hasse & Krücken, 2011, p. 543) [the tender campaign]. Such processing of *environmental* constraints is open to variation, and this affects deeply the potential for the reproduction of the institutional *context*. Indeed, the industrial marketing campaign underwriting a tender project attempts to manipulate the institutional engineering of fields towards preferred value propositions.

2. *What determines how organisations use their potential for active intervention? Political contingency factors determine the opportunity structures for successful intervention* (Hasse & Krücken, 2011, p. 544).

   One such example from the case data exposed a 'bunkered' Defence tender management team operating contrary to the wishes of the Defence minister who,

> as a matter of policy, engaged earnestly with stakeholders and assumed that a bureaucracy would do similar.

Sectors of operation

Hasse & Krücken (2011, p. 543) suggest that an organisation's disposition or character is located in a sector, such as the Defence equipment supply sector. These sectors can be conceptualised as functional domains which are composed of diverse organisations, as well as corresponding non-organisational features such as meanings and beliefs, systems or governance structures, and other 'rules of the game'. Both the sector field and the all-encompassing society reflect in the organisation's character or disposition.

A particular type of organisation is constituted temporarily from a subset of sector organisations: a collective, collaboration, alliance, mutual society, union and so forth. In the case of a tender process, the ongoing industrial marketing campaign tends to be representative of the stakeholders; while the tender project comprises 'expeditionary' units from each contracting stakeholder.

Collaborations

Hasse & Krücken (2011, p. 554) propose that collaborations (such as the tender enterprise) are important as they mediate between different organisational and institutional systems and make their specific rationalities visible. 'They need to be conceptualised as opportunity structures that can be exploited by any of its participants.'

The formation of new collaborations leads to new avenues for exploring the dominant rationalities of the parent organisations involved. This is particularly relevant for collaborations with power imbalances between constituent organisations and authority structures unfamiliar to some participants; matters of trust and therefore information exchange being at stake.

Indeed, a major Defence contractor, embarking on an industrial marketing campaign *and* its tender project, recalls the problem of identity that he faced on arrival in Australia:

> I did not know him [the DMO project manager] from a bar of soap and he didn't know me. And not very many people in my organisation did know him; and so, there was no relationship.

In contrast to a proto-organisation comprised of components of collaborating organisations, Lawrence et al.(2002) examine how 'proto-institutions' (institutions in

the making) can evolve from (macro) inter-organisational collaboration. That is, organisations collaborate at a high level to create an umbrella institution that provides overarching stability and legitimacy for its collective constitution. Such collaboration in and of itself is a source of institutionalisation (Royston Greenwood et al., 2011a, p. 32).

The term 'field' has been used above; however the next section delimits institutional fields, organisational fields and multi-organisation fields that might cross normative field boundaries.

Fields

- **An institutional field** demarcates spheres of institutionalised meaning.
    - A core characteristic of institutions is their ability to bridge time and place, and hence, carriers of meaning. Institutional fields connect actors beyond their temporal and spatial co-presence. 'Actors in the field are, in varying degrees, interdependent, and their temporal and spatial co-presence indicates a *network structure* (R. E. Meyer, 2011, p. 525).'
    - Institutional fields focus on shared typifications and mutual expectations. They can provide insights into how institutional customs and reasoning expand and contract.
    - Institutional fields embody a) those actors who are expected to deliver an institution and b) those actors who expect the institution to be delivered, that is, those who share its frame of reference.
    - Meaning-making occurs *without* the institutionalised orders, forms and practices made visible necessarily; they are taken-for-granted.
- **Organisational fields** focus on the degree to which a *field of actors* is characterised by a single dominant or by multiple (potentially competing) *institutional* customs or logics (cultural accounts).
    - An organisational field is a community of organisations that engage in common activities and is subject to similar reputational or regulatory pressures; the collaborating organisations in a tender enterprise.
    - Fields are fairly barren without the interpretive lenses and resource channels created by networks; both organisational and personal.
    - **Logics** (cultural accounts) render networks and organisational structures sensible in particular fields, but many if not most activities are amenable

to multiple logics. Thus, the cultural disposition of logics – as sustained by a particular social group to shape social action – depends intimately on the structures (positional and ideational power structures) in which activities take place and the partners with whom they are undertaken (see also: Owen-Smith & Powell, 2011, p. 604).[190] Generally, the objective is to intervene in (manipulate) such action.

  - Through a politicly-filtered lens, a field is seen as a space of value positions whose characteristics are jointly defined by the configuration of their interrelationships. (Fligstein (2012) characterises organisational fields as political arenas.) Fields, in the neo-institutional perspective, are centres for debate in which competing political interests negotiate over issues of interpretation (R. E. Meyer, 2011, p. 525).
  - 'Relationships are "moves in games". Relationships matter precisely because their meanings are variable and depend on the orientations of participants to the various logics and contexts that render them sensible (Owen-Smith & Powell, 2011, pp. 601-603).' Another government agency might view the same relationship through a different institutional lens: different cultural logics for reasoning.

- **Multi-organisational field (a collaborative proto-organisation field)**:
  - a complex structured field in which individual and collective actors try to mobilise consensus for their claims, even though there are changing systems of alliances and conflict
  - 'Relationships are multiply-embedded [overlapping networks], and the social entanglements that make economic exchange [proto-organisations] possible are the joint outcome of both networks and institutions (Owen-Smith & Powell, 2011, p. 603).'

Both organisations and institutions have networked relationships and these are considered in the next section.

[190] A teacher has value positions and a student also has value positions. Together, their mutual relationship (intervention) produces (shapes) additional emergent value positions. Both positional and ideational power structures have changed.

Networks

Networks and organisations

A 'social world' is a set of common or joint activities of concern to organisations that are bound together by a network of communications. One of the most important features of social worlds is their inevitable differentiation into sub-worlds. 'Social worlds can splinter, amalgamate, disintegrate and reform (Barley, 2011, p. 503).'

The network of contracting organisations collaborating for the purpose of a tender opportunity, allocate respective organisational resources. The objective, which may only be partially achieved, is to craft a proto-organisation (micro network) of collaborating organisations with its own evolved logics.

Networks and institutions

Owen-Smith & Powell (2011, pp. 596-597) argue that social networks and institutions mutually shape each other as an ongoing process.

Understanding how networks and institutions co-evolve to shape a social and an economic arrangement – for example, the collaboration of organisations comprising the tender enterprise – requires an understanding of the myriad ways that relationships (and trust) influence each other (Owen-Smith & Powell, 2011, p. 605).

Additionally, Owen-Smith & Powell (2011, pp. 617-619) offer the following points:

- Institutions and networks are intertwined in theoretical and empirical ways in *sociology and organisational theory*.
- Networks are essential because they are both the pipes through which resources circulate and the prisms that observers use to make sense of actions.
- A collaborative enterprise is associated with particular logics of action and it is these logics that make networks potentially effective by determining which sorts of relationships participants can conceive. [Hence the rationale for the Defence Minister and the Minister's Political Office to be collaborators in the industrial marketing campaign and the tender enterprise.[191]]
- Owen-Smith & Powell argue that networks and institutions are co-constitutive. They set the conditions of possibility for each other. This co-evolution of

[191] Noting however, that while the Minister 'listens', positions of substance are conveyed usually through press releases; while in the background, lobbyists are 'weaving their magic'.

relationship rests on [a] a key duality between: *relationships* being the building blocks of networks, and [b] *categories of legitimacy* being the building blocks of institutions.

- In the context of an approach to research, the authors suggest that *temporality* is at the centre of analyses of comparative data sets. 'Variations in networks and institutions may be more apparent when we adopt a lens that emphasises *comparative dynamics*.' (emphasis added)
  Such comparative temporal dynamics is the methodological approach adopted for this research project.

Vital for the interpretation of human behaviour, logics are the 'cultural accounts' that frame perceptions and reasoning.

Logics of action and identity

According to Cooper et al. (2011, p. 696), 'institutional theory does not readily conceive of logics as forms of power': *power* is associated with agency (positional power structures and ideational power structures) (M. Archer, 1995, pp. 302-308), whereas *logics*[192] are associated with political appropriateness and hence, legitimacy (Powell & Colyvas, 2011, pp. 282-283).

Institutional logics (cultural accounts) in institutional fields

The logics of institutions – organisations that are now institutionalised – do not reside in the institutions and their external purposes, but in the way these are treated and reflected upon *from outside* the institution by society and *from inside* by the organisations. That is, external perceptions of the institution are translated into assumed cultural ways of thinking and reasoning.

For Cooper et al. (2011, p. 692), what is conceived or passes for the logics of institutions is an *articulation* of a particular value propositions or value-oriented discourses, *not* a reflection of the social practices that are represented through these discourses.

'Institutional theory [logics] and critical theory [power] offer alternative, value-oriented ways of representing the social world, including the nature and significance of institutionalisation (Cooper et al., 2011, p. 692).'

[192] There is strong nexus between logics and sensemaking (K.E. Weick, Sutcliffe, & Obstfeld, 2005).

Institutional logics (cultural accounts) in organisational fields

Organisational fields are characterised by institutional logics.

These logics:

- endow the actors and actions in the field with meaning and legitimacy
- 'are the socially constructed historical patterns of material practices, assumptions, values, beliefs, and rules by which individuals produce and reproduce their material subsistence, organise time and space, and provide meaning to their social reality (Mary Ann Glynn, 2011, p. 425)'
- constitute the rules and conventions of a particular organisational field
- provide the constellation of beliefs and associated practices that a field's participants hold in common
- provide packages of beliefs and practices that are organising principles and recipes for action
- provide rationales for action, such as justifying a choice using the cultural idea of 'value-for-money' that is impossible to deconstruct

Logics do more than forge collaborations into a proto-organisation. Without institutional logics, it would be impossible to explain what kinds of social relationships have what kind of effect on the behaviour of organisations and individuals (Owen-Smith & Powell, 2011, p. 602).

Logics of identity and 'vested interests'

Glynn (2011, p. 425) suggests that, 'passions are disciplined not by incentives but by identity' (vested interests):

> Who am I?
>
> What situation am I in?
>
> What does a person like me do in a situation like this?

Thus, the 'logic of identity' (the *in-order-to* motive) offers a counter to the 'logic of consequences' (the *because-of* motive) that typically dominates organisational thought.

Vested interests

The *in-order-to* motive actively draws on vested interests (M. Archer, 1995, pp. 204-205) in the context of resource scarcity (physical, social and political). Vested interests are concerned with relative advantage rather than absolute well-being. With vested

interests come motives for the reproduction of advantages or the transformation of disadvantages (M. Archer, 1995, pp. 302-308). What is crucial is the *relational nature of motives* that are constituted by vested interests. Such vested interests reflect the (tender) project and the outcome imagined – the subjective meaning: a *future-oriented motivation* that is only fully comprehensible to the proponent (consciousness), but not necessarily to others.

For Weick (1969/1979), conceptions of logics of action and identity are relational, constructed not only through projections of self and others' perceptions, but also through scripted interactions in relation to what others are 'supposed to do' (Powell & Colyvas, 2011, pp. 277-285, 292-296).

Institutional and organisational identity

According to Rao & Kenney (2011, p. 368), **neo-institutionalists** postulate that organisational forms are created through an inherently political process, while **organisational ecologists** assert that organisational forms are socially coded *identities*.

Glynn (2011, p. 425) adds clarity to this plurality of identity with its potential ambiguity:

> **Institutionalists** look for similarities among organisations in a field, such as inter-organisational convergence, isomorphism, and meaning-construction through inter-organisational paradigm constructs: a political process. An institutional interpretation of organisational identity reflects an organisation's *membership in a recognised social category* with its constitutive rules, rights and obligations: constitution or manifesto (Mary Ann Glynn, 2011, p. 419).
>
> **Organisational identity theorists** look for similarities among individuals in an organisation.
>
> **Organisational culture researchers** look for organisational divergence, polymorphism, and individual organisational identity construction through collective sensemaking. Organisational 'essence' is seen as the central, distinctive and enduring attribute (Barley, 2011, p. 500; Ann L. Cunliffe, 2008a, p. 201; Mary Ann Glynn, 2011, p. 418).

Rao & Kenney suggest that together, these are fundamentally circular in their effects – two sides of the same coin. However, a tender enterprise would appear to be assembled, at least in the first instance, to an institutional script and then develops a unique organisational identity (2011, p. 368).

Organisational ecologists: In an effort to garner stakeholder acceptability, Glynn (2011, p. 422) explains how an organisation's expressed identity is projected out [reaches out] to its audience with the intention that this identity be conferred back' in the form of accorded appropriateness and hence, legitimacy.

The expressed identity of a proto-organisation needs to offer cues (Donath, 26 October 2011) that enable the external audiences to perceive the organisation as *appropriate* and hence, *legitimate*. If organisations are perceived to conform to desirable identity categories, then stakeholders tend to sanction that organisation with beneficial resources – including political support.

Glynn (2011, p. 413) is clear that regardless of the organisation's expressed identity (public presentation), 'the link between institutional theorising and organisational identity remains relatively unexplored'; the idea remaining a theoretical proposition. This research contributes to such theory-building through its applied methodology.

Organisations and their associated institutions

Beyond constraints, institutions enable organisational identity-construction by supplying a set of possible identity elements with which to construct, give meaning to, and legitimise identities and identity symbols. That is, institutionalism offers a process model of 'transformational mechanisms that express how macrolevel, inter-organisational influences situate [time and place] and shape particular organisational identities and hence, their *institutional logics*' (Mary Ann Glynn, 2011, p. 413).

Identity and meaning

'Both institutionalism and organisational identity have *meaning* at their core' (Mary Ann Glynn, 2011, p. 413).

Cunliffe (2008a, p. 202) extends the discussion by suggesting that the meanings accorded to social phenomena occur in prevailing modes of situated interaction, and therefore, meanings are given situated status. For example, an individual might have different status positions in differently situated organisations with different discourses.

Discourse analysis and meaning

Discourse analysis attempts to answer the question of where meaning comes from (Nelson Phillips & Malhotra, 2011, p. 712). It is the study of discourse and the social reality that it constitutes: the proto-organisational institutionalism of the tender enterprise in this instance.

Discourse analysis accounts for an ‘interrelated set of texts’ – the documents, communications and discussions within, in this instance, the tender process – and the associated practices of social interaction that bring an idea or value proposition, in or out of currency.

While an idea of ‘meaning’ might be variously expressed, it has a particular nuance in the context of social systems; its purpose is to *link events* (Bakken & Hernes, 2008, p. 34), which is the essence of Luhmann’s (1995, 2000) non-organistic concept of autopoiesis.

Autopoiesis

Although autopoiesis assumes auto-production, it does not preclude change. There are always possibilities for change through connection to events outside the system. Therefore, although the system operates from a basis of stability, this stability may be precarious. In this way, the concept of autopoiesis opens up to view organisations in a ‘constant state of insecurity’ about themselves and their relationship to the environment. Organisations control and produce this kind of ‘insecurity’ through self-organisation. On this understanding, autopoiesis and the morphogenetic model are complementary ideas.

The self-organisation takes place through the recursive networks of operations, which present connections, as well as the ability to connect to other elements with potentially different meaning.

This idea of an autopoietic organisation provides the essential character of the proto-organisational institutionalism of the tender enterprise comprised of collaborating organisations. The need to link events to provide meaning – and hence identity – is an outcome of the strategic orientation of the tender enterprise; its quest for competitive political advantage.

Fox-Wolfgramm et al.(1998) found that organisational identity, which is linked to strategic posture (counteracting, competing, defending, capitalising etc.), affected an organisation's compliance or resistance to institutional change. However, external changes in institutional environments – such as a change in government – can change legitimacy dynamics and, in turn, affect organisational survival; possibly through de-institutionalisation.

Glynn (2011, p. 423) draws on the work of Gioia, Schultz, & Corley (2000) who characterise identity as having ‘adaptive instability’, changing in response to others’ images of the organisation.

They argue that identity continuity implies flexibility with regard to a *core central character***,** as external audiences can destabilise identity, causing the organisation to reconsider the framing or constitution of its identity.

Further, in considering that identity locates organisations in social or institutional space, Albert & Whetten (1985) treat organisational identity as a trinity, composed of three key criteria: central character, distinctiveness, and temporal continuity (see also: Mary Ann Glynn, 2011, p. 423).

Corley & Gioia (2004) found that identity change does occur and that organisational leadership has to manage that change. It requires a fundamental change in how the organisation thinks of itself, and Glynn (2011, p. 423) suggests that organisational identity emerges from the *unending conversations* that occur between members of an organisational culture and its many stakeholders. (emphasis added)

With respect to this research project, such a fundamental change did occur with the DMO case-study organisation (National Commission of Audit, February 2014), but the 'strategic thinking' came from outside the organisation: the government and stakeholders. As an organisation, the DMO no longer exists.

Using morphogenetic model constructs (M. Archer, 1995, pp. 303-304) and a purported social pathology of the DMO as 'Cultural Reproduction' supporting 'Structural Reproduction', the organisation was inherently constrained within itself in order to maintain/defend itself.

Glynn's (2011, p. 423) suggestion that 'organisational identity emerges from the *unending conversations*' begs the question as to what happens when such conversations are curtailed or avoided?

The case data from this research project indicate that:

- when the conversations are disrupted temporally, then the discourse transfers (with over compensating vigour) to other external sources of potential insight, and
- when the conversations are avoided from the outset, organisational identity and legitimacy become problematic; resulting in the affected stakeholders negotiating with institutional leadership: consequential change was directed by the Defence Minister

Proto-organisational identity

Glynn (2011, p. 421) provides reasoning behind the idea of a 'proto-organisational identity'. The tender project enterprise of collaborating organisations is certainly, in its embryonic stage, a 'proto-organisation'. In this formation, the 'central core' of a proto-organisation's identity is contested by the key stakeholders. Each comes with a different core ideology reflected in their central character or essence. The military is focussed on mission success and the bureaucracy is focussed on fiscal responsibility (stewardship). This hybridisation of a proto-organisation identity may have a multiplicity of claims on its central character.

Each collaborator has a set of valued symbolic boundaries that provide 'categories' for meaningful description of valued identities.

Institutionally-based categories can describe *cultural repertoires of meaning* that *organisations can appropriate* to address the questions of 'who we are'. The response simultaneously characterises their 'central character' but also classifies them as a member of an organisational field.

- The problem for a proto-organisation in the Defence supply domain is that these 'institutionally-based categories' might derive from a variety of national identities reflecting the trans-national milieu of military supplies. From an acculturation and enculturation perspective, there is a vital need for bilateral ongoing industrial marketing campaigns based in the countries of the buyer and seller. In the Australian context, a buyer might court a reluctant seller; particularly in the presence of strategic alliances.[193]

Identity, then, can function as a kind of institutional logic that governs organisational behaviour and choice; although while it can at times limit choices, it also enables and advances action because *identities are performed* (Mary Ann Glynn, 2011, p. 425). Identity functions as a quasi-institutional logic, a set of shared rules and typifications that identify categories of social actors and their appropriate activities or relationships.

Westenholz (2006) suggests that people are artful in their mobilisation of different (quasi) institutional logics to serve their purpose. That is, while identity is conferred by the external agency of institutions, these institutions might be 'gamed' by organisational agents transitioning across multiple institutions.

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[193] The government (politicians, diplomats and bureaucrats) engages in an industrial marketing campaign to attract potential sellers and manage regional sensitivities and alliances in the process. The necessity for a synthetic 'competition' or 'commercial evaluation' adds to the complexity of this wicked problem (Callender, Vinsen, Jamieson, & Brown, 2006; Rittel & Webber, 1984; Smithson, 2010).

Glynn makes clear that when organisations appropriate institutional elements from different – and especially oppositional categories – they can erode the boundaries that compartmentalise these elements and thus blunt the distinctiveness so essential for organisational institutionalism. van den Ende & van Marrewijk (2015) explore the frictions between Russian project staff with Soviet management sensibilities facing Western project staff coming with a culture of singular responsibility and cost management protocols based on projected final project profit.

As it currently stands, institutionalised identities and frames of meaning-making come with expectations about how actors should perform an identity in specific situations; mainly because institutional survival is a matter of maintaining values and distinctive identity (Mary Ann Glynn, 2011, p. 425). This understanding of 'institution' is reflective of professional and regulative institutions. However, the work of van den Ende & van Marrewijk indicates the potential other approaches.

While Glynn (2011, p. 427) suggests that:

> ...theorists introduce aspects of organisational choice and creative deviation that are institutionally informed but not necessarily mandated. Such a perspective would take the institutionalism of identity, and hence the idea of an 'institutionalised identity', beyond a model of constraint to one that enables and enriches identity construction in organisations...

In reality, morphing cultural boundaries is a social activity; and this lends weight to the critical importance of the industrial marketing campaign with its quest for political appropriateness.

Legitimacy: a logic of appropriateness

Over time, a 'logic of (political) appropriateness' develops in which assumptions about what the conformation of the tender enterprise – the proto-institutional identity of the tender enterprise – should look like. Owen-Smith & Powell (2011) suggest that external sources of knowledge became widely differentiated and a preference for diversity and affiliation with multiple connected collaborators has powerful mobilising consequences (pp. 607-610). In the results chapters of this research project, these external sources are particularly evident in the case of the successful contractor and the case of a problematic DMO tender project team.

Indeed, as Owen-Smith & Powell indicate, a commercial collaborator (Contractor (**B**) in this instance) with its inherent 'closed' proprietary logics (of cultural morphostasis),

needs to position itself in a *central network position*[194] (p. 611). In practice, this might be achieved by having a contractor's bid management team with managers-as-diplomats relocated from the parent company and/or the facilitations of the contractor's retained Lobbyist(s) (**D**) who has a cultural disposition of morphogenesis (see Table 9.1); and the DMO (**C**) with whom the contractor shares a disposition of cultural morphostasis . In this way, the social pathology of parent organisations is not challenged.

2ND ORDER RELATIONS:	CONTRADICTIONS (INCOMPATIBILITIES / LIABILITIES)		COMPLEMENTARITIES (COMPATIBILITIES / BENEFITS)	
	NECESSARY CONTRAD'G INTERNAL RELATIONS	CONTINGENT CONTRAD'G EXTERNAL RELATIONS	NECESSARY REINFORCING INTERNAL RELATIONS	CONTINGENT REINFORC'G EXTERNAL RELATIONS
3RD ORDER SYSTEMIC OUTCOMES:	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOGENESIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOGENESIS
ORGANISATION CHARACTER : IDEAL-TYPES SITUATIONAL LOGICS	REACTION [COUNTERACTING]	ELIMINATION [COMPETING]	PROTECTION [DEFENDING]	OPPORTUNISM [CAPITALISING]
KEY STAKEHOLDERS:	B. DEFENCE MINISTER'S POLITICAL OFFICE	B. CONTRACTOR	C. DMO	D. LOBBYIST

Table 9.1: The logics (cultural accounts) of 1. Contractor (B) – cultural morphostasis; and 2. Lobbyist (D) – cultural morphogenesis (M. Archer, 1995, pp. 309-325)

Even though 'legitimacy' is declared to be central to institutional theory (Barley, 2011, p. 506; Haveman & David, 2011, p. 579), it hinges not only on the substance of ideas and claims, but also on the 'where' (state or federal politicians, or both), the 'when' (proximity to elections), the 'how' (with which resources such as subcontractors and supporting lobbyists), and the 'why' people play games by signalling ideas and claims (Donath, 1998).

Gaming the system for legitimacy

While Table 9.1 (above) illustrates potentially useful relationships, organisations can 'game' the system to attain legitimacy. All they needed to do is to respond to environmental signals; or appear to do so. More importance is placed on conforming appearance and symbols that are defined by external evaluators as 'legitimate' (Hirsch, 2011, p. 785). Through myth and ceremony, organisations can reap rewards by only appearing to be – but not actually – conforming to the environment's signals.

[194] because the (prime) contractor submits the bid that enjoins all collaborators who have a contractual relation with this contractor

The social construction of legitimacy and the morphogenetic model

Barley (2011, p. 508) provides a contemporary perspective suggesting that: 'grounded studies of action and interaction (morphogenetic model) are crucial for developing adequate accounts of the social construction of legitimacy, if for no other reason than struggles for legitimacy are largely battles of rhetoric'. Further, 'as institutional analysis takes its interpretive turn, it is well worth remembering that writing, reading and rhetoric are important for negotiating legitimacy'.

Barley (2011, p. 507) is clear that 'to understand legitimisation in action, one must examine behaviour *in situ* and in real time'; in this research instance, the 'real time' being the participants' recalled observations of temporal behaviours.

> The implication, particularly for research methodology, is that legitimation in action is assessed from both the *internal* perspective of participants in the tender enterprise and the *external* perceptions of stakeholders.

Legitimacy: its ambiguity and theory-building

Haveman & David (2011, p. 587) explain that institutionalists do not agree among themselves as to how the various aspects of legitimacy might be categorised:

- socio-political and constitutive legitimacy (Haveman & David, 2011, p. 587)
- regulative, normative , and cognitive legitimacy (W. R. Scott, 1995/2001)
- pragmatic, moral, and cognitive legitimacy (M. C. Suchman, 2012)

Haveman & David recommend that institutionalists develop a set of related theories of the mid-range in order to accumulate knowledge (that is, to reject some ideas and to affirm others).

In response, this research inquiry assembles logically connected theories to support a framework-for-reasoning about the political maturation – its appropriateness and legitimacy – of a tender enterprise. The various categories of Haveman & David (above) are combined but the ideas of Scott and Suchman dominate.

Legitimation and de-legitimation

If organisations are legitimised politicly, then they can also incur de-legitimisation. *Inter alia*, de-legitimisation might be precipitated by internal political forces or external shifts in polity (in the government policy sense). An example from one of the cases studied saw a caucus of competing contractors de-legitimise the DMO tender

management team when effective communications effectively ceased unilaterally. The Defence minister has the capacity to listen, take advice, and intervene[195].

In this context, Haveman & David (2011, p. 581) suggest that commercial organisations do not simply react to environmental challenges; instead they are often proactive and seek to control their environments. Further, I posit that such manipulative tactics are necessary to maintain (political) legitimacy as it signals a proactive management culture and cognition of political gaming.

Socially constructed realpolitik of organisational legitimacy

Roberts (2011, p. 561) referring to Scott (1995/2001) argues that tangible forces in an organisation's external environment directly or indirectly tilt choices away from technical considerations – such as cost and technical performance – toward the pursuit of (political) appropriateness and legitimacy. And in this context Crotty (1998, p. 112), alluding to Saul's (1992, p. 8) aphorism, reminds us that 'language – not money or force – provides legitimacy'.

Barley (2011, p. 512) reflects on Suchman (1995, p. 574) who considers the socially constructed legitimacy of organisations:

- An organisation may diverge dramatically from societal norms yet retain legitimacy because the divergence goes unnoticed.
- Legitimacy is socially constructed in that it reflects congruence between the behaviours of the legitimised entity and the shared (or assumedly shared) beliefs of some social group; thus, legitimacy is dependent on a collective audience, yet independent of particular observers.
- An organisation may deviate from values of individuals yet retain legitimacy because the deviation draws no public disapproval.
- Suggesting that a certain pattern of behaviour possesses legitimacy, asserts that some group of observers, as a whole, accepts or supports what those observers perceive to be the behavioural pattern, as a whole, despite reservations that any single observer might have about any single behaviour, and despite reservations that any or all observers might have, were they to observe more.

[195] 'There is what I describe as this "conspiracy of optimism" that operates there. So, unfortunately the Minister's job at times is to prick it. Well, I'm immediately thinking of one very big project where the Minister did not take their [Defence] advice and thank God, the taxpayer would be very grateful that that was the case (extract from interview transcript: Brendan Nelson, 27 May 2009).'

In this spirit, Scott (2012b, p. 230) explains that temporal organisational legitimacy:

- is generalised rather than an event-specific evaluation
- is not an input to be combined or transformed to produce some new and different output, but a symbolic value to be displayed in a manner such that it is visible to outsiders: a signal (Donath, 10 May 2007)
- is dependent on a collective audience, yet independent of particular observers or their opinions: external stakeholders
- is possessed objectively (the political adequacy or inadequacy of the total 'bundle') yet created subjectively: the 'fibres' of meaning (M. C. Suchman, 2012, p. 5)
- explains the institutional order by ascribing cognitive validity to its practical imperatives
- is not a commodity but a condition that refers to the degree of cultural and/or political support for an organisation (Fleetwood, 2004, p. 51)
- translates power into authority to the extent that its exercise is supported by prevailing social norms, whether traditional, charismatic, or bureaucratic

Reflections on the conspectus

The respective ideas of 'theory' and 'institution' are variously engaged, divorced or exist in some form of accommodation. Much has been written and a key text, *The SAGE Handbook of Organizational Institutionalism* (Royston Greenwood, Christine Oliver, Roy Suddaby, & Kerstin Sahlin, 2011b), presents a multitude of arguments and positions.

But, as these editors state on page 1:

> Our stance is not to ask what is distinctive of 'organizational institutionalism?' But, instead: 'what does the institutional perspective tell us about organisational behaviour?'

That is, rather than embarking on a quest to define an institutional canon, the enlarging array of ideas facilitates a context-specific framework-for-reasoning about organisational behaviour: middle-range theory.

This chapter, and the dissertation at large, reflect this stance. In focus is the contractor's mission to socially construct the meanings of temporal political appropriateness and at the same time, to 'construct socially' (manipulate) the

constructions of political appropriateness; against which the tender enterprise needs congruence at the tender selection date.

What might stand for ‘institutional theory’ is a social construction of temporal reality, and such constructions are dependent organisationally and influenced politicly. Of itself, this is sufficient founding from which to develop the next chapters on multi-methodology.

In support of those chapters, significant research ideas flowing from this chapter include the centrality of organisational legitimacy together with a core principle of phenomenological intentionality, of ‘reaching out’ to share information and build trust. The forms of a tendering organisation are inherently political, and therefore, research methodology should recognise the symbolic impact on meaning, identity and the discursive context.

Further, the methodology should recognise that to understand such legitimacy-seeking processes requires examination of behaviour in real time. Such is the demand on the multi-methodological approach and its supporting methods.

Chapter 10
Methodology:
Management Research

The previous chapter canvassed the question, 'what does the institutional perspective tell us about organisational behaviour?' *Inter alia*, such behaviours are reflective of the organisation's quest for political appropriateness and temporal legitimacy by the date for tender selection. Now, the focus switches to the research process and how it might investigate these propositions empirically.

This first of a trilogy of methodology chapters falls back initially to consider the indeterminate nature of management research in contrast to research within the social sciences. Therefore, what is so distinctive of managing in a socially complex context? A hint comes from Archer's (2013) morphogenetic model concerned with recognising phases of political activity, the associated discourses dominating each respective phase, and patterns of behaviour. The question then turns to how this might be investigated.

This chapter takes a closer look at what can a discussion on methodology consider in the context of management research. For example, Interpretive Phenomenological Analysis and Process Philosophy together with Process Research, offer ways of thinking about management research with a lens, in this instance, on political sociology; the changing political games enveloping a politicly-sensitive high cost Defence equipment supply competition; more specifically, the 'game-of-mirrors'.

The second chapter of the trilogy considers a framework for methodology design and the third chapter offers an operational schema. The methods chapter follows this trilogy. Exactly where 'methodology' gives way to 'methods' is moot and therefore, they should be treated as 'accommodating' companions. Some issues of method are absorbed into the trilogy, however, the distinctive features of management research need explication in the first instance.

Management research

The nature of management research is that reality is reflected in suggestive rather than exhaustive theory. Of interest are behavioural tendencies and an ever-present need for managers in a resource-dependent environment to actively shape the frames of awareness and understanding of internal and external stakeholders.

In contrast to some canonical research practices in the social sciences, the challenge of undertaking management research is the reality that it draws on panoply of worldviews and methodological pluralism: a reflection of a complex context.

The supporting literature suggests that in the context of management research, social constructionism's supporting methodology can enjoin case method and social survey, while it also has a standing capacity to enhance existing traditions such as pragmatism.

The focus is on meaningful explanation/explication, rather than a search for regularities and constant conjunctions of variables for the purpose of prediction, although both can be mutually informative. Flyvbjerg (2012, p. 170) presses the case for both.

Social realism's mission is theory building rather than theory testing. Nevertheless, to locate a putative causal explanation of what is going on, requires an appreciation of the social, cultural and political forces influencing an instance of decision-making: a synthesised plurality of logics.

Against this background, this chapter explores the idea of management research that engages with a *problem-solving* imperative for managers together with the need for a facilitating research methodology.

The Social Construction of Problems

In *La formation de l'esprit scientifique*, Bachelard (1934/2002) expresses the view that: 'Problems do not arise by themselves. All knowledge is in response to a question. Nothing proceeds from itself. Nothing is given. All is constructed'.

While reflecting on the development of the Constructionist Approach, Burgess (2015), advises that social 'problems' (within a tendering sociology in this instance) should be seen less as a *condition*, and more as an *activity*.

Further, Burgess offers an identification structure to support activity process-analysis:

- **claims**: the rhetoric used to define social problems [an activity] and promote policy solutions for them
- **the claim makers**: who advance these claims
- **responses**: the crucial issue of how various institutions and people respond over time

Of concern is the possibility that each item might have its own logics and framework-for-reasoning.

The essence of 'response' determines whether a 'problem' defined by a group or individual, becomes an issue for society at large. In this research instance, 'response' is

associated with the tender campaign, as well as the collaboration of organisations comprising a tender enterprise. Society at large is engaged with both. Such associated mechanisms of social interactions and the progressive *reproduction* or *transformation* of *motivations* are kernel to the morphogenetic approach (see M. Archer, 16 June 2014, image 13).

Mechanisms – how and why things happen – middle-range theory

A 'mechanism' represents ideas, opportunities and constraints that shape a causal outcome (Harrison & Easton, 2004, p. 200). A self-fulfilling prophecy is a mechanism; the point being that a correlation between two observed phenomena is not sufficient as an explanation. Instead of replications of exactly the same intervention, the research activity seeks out examples of the same theoretical mechanism in different situations. The *unit of analysis* (Yin, 2009, p. 31) is not the intervention, but the mechanism as a *theory of change* by which different interventions are thought to work. The researcher independently constructs theory – one that explains how and why a given theoretical mechanism works for, in this instance, different tender project types in different tendering campaign contexts. This type of theory is characterised as 'middle-range theory' (Merton, 1973) that can contribute to the refinement of other theories and so advance management theory in general (Harden & Thomas, 2010, pp. 755-756).

Within a tendering campaign, the influence of the many interdependent stakeholders can vary across activities, time and location. How then should we understand, present and judge this interdependence with its inherent uncertainties? This is the domain of management research, which has traditionally, and at times perhaps problematically, drawn inspiration and guidance from disciplines within the social sciences.

Problem solving for managers

However, the realpolitik of managing and organising is that problems change, and are not fixed, universal, or entirely tractable (Thorpe & Holt, 2008b, p. 2). Thiétart & Forgues (1995) detail this reality and suggest that managerial practices and research findings are neither universal nor time-relevant, and in addition:

- their external validity (transferability) is frequently low
- idiographic findings are often not durable even within the case-based organisation
- findings derive from experiences and conditions that replicate rarely in the future

As Thorpe & Holt suggest, 'The researcher's job is to reflect and attempt to make sense of this; and the task becomes comprehensible when management is understood in terms of its *potential* [to act (agency)], rather than as a formally defined field' (Thorpe & Holt, 2008b, p. 2).

Therefore, what defines managerial research activity is not the provision of definitive solutions seeking to set habitual and acceptable limits to what we do and say, but rather, the continuing interest in the idea of how an *awareness* of what we do and say, can transform our practices; in this instance, practices associated with a politicised tendering campaign.

Further, Thorpe & Holt caution that if social science has the objective of fixing meanings concerning what exists, then it will degenerate because it will not address why life matters, and in what ways it can be lived differently in the future; its prospect (Thorpe & Holt, 2008b, p. 3).

To avoid this entropy, the field of management inquiry and associated disciplines needs to concern itself with problem-solving activities (B. Flyvbjerg, 2001, p. 133; Bent Flyvbjerg, 2008; Bent Flyvbjerg et al., 2012a, 2012b). As each problem-solving activity progresses through phases, distinct and alternate fundamental philosophical positions might engage at specific times of the problem's definition and resolution. At hand are the different worldviews, methodologies, and methods that reflect a range of disciplinary influences (M. Easterby-Smith et al., 2012, pp. 19-24; Midgley, 2000, p. 5).

Disciplinary influences on management research

Thorpe & Holt (2008b, p. 3) believe that this critical mess of views, methods and data, is '...the stuff of doing good research'. What distinguishes the various framed approaches is the manner in which experiences are highlighted and sifted. This distinction is important because it suggests that, at the extremes, there are differing fundamental views about the purpose of management research (Thorpe & Holt, 2008b, p. 4) and the way knowledge should be developed.

Those exclusively using quantitative approaches will tend to emphasise the importance of getting accurate representations (the data) of what we mean by social. These representations can be analysed for patterns from which the robustness of stated theories concerning managerial activity are re-tested under different conditions and over time.

For researchers using qualitative approaches, the focus is on the problems experienced by managers (anecdotes), their organisations and the idea and prospect of a better future.

Methodological pluralism embraces both. From an ontological perspective, methodological pluralism is relevant to an adequate explication of events[196], and this alone is a considerable challenge to much orthodox thinking in methodology (Fleetwood & Ackroyd, 2004).

Theory and practice in management research

Further, Thorpe & Holt suggest that management theory founded on adequate explanations/explications[197] of events is theory-in-evolution, being *suggestive* rather than *exhaustive and predictive*, precisely because it retains its connection to the open-ended phenomena under investigation (an open system).

In further differentiating management research from social and psychological research, Easterby-Smith et al. (2008, pp. 104-114) offer the following:

- In essence, management is about control, influence and structure[198] (shaping the *awareness* of others).
- Management is the process by which organisations achieve a semblance of coherence and direction.
- The practical knowledge used by managers is essentially context bound, and is learnt through engaging in practice. It follows that for research to have theoretical value, it should also focus on these local practices, which might well be unique to that situation.
- Managerial behaviour is culturally relative, and includes both national and organisational cultures. Therefore, researchers should formulate their ideas separately within each cultural context, and should not try to generalise across cultures.
- Political issues are rarely absent and they can influence the nature and direction of research.

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[196] The principle of explication of events describes the necessity to identify the detailed aspects of events being studied, usually through the abstraction of experiences, as the foundation of causal analysis (Wynn & Williams, 2012, pp. 796-797).

[197] While the idea of 'explaining' is often understood in terms of causality, 'explication' means to show by unfolding something, making it visible in a more detailed way, or to render it in a fresh way. Explication and rendering suggest a temporal dimension to the progressive unfolding or opening up of a process.

[198] This idea of structure has a particular nuance. A building is a structure with designed purposes, but the ongoing impact of the building on its occupants and external community is emergent and therefore difficult to predict. The same applies to organisational structures. Of itself, the organisation as a structure has powers of presence that the original organisational architects could not have foreseen.

- Empirical research in the social sciences usually focuses on members of society who are less powerful – 'the mad, the bad, and the ill'. However, when conducting research into managers and management, the subjects of research (managers) are very likely to be more powerful than the researcher.

Mark Easterby-Smith, et al. encapsulate the essence of the foregoing by suggesting that management research poses some unusual problems rarely encountered in the broader social sciences, and therefore, there is a need to engage with techniques borrowed from other fields (disciplines). 'These unusual [management research] challenges provide opportunities to develop new research methods and traditions (Mark Easterby-Smith et al., 2008, p. 7).'

Because of their essential relevance for this research project, the last words go to Easton, Thorpe & Holt and MacLean & MacIntosh:

> Research into management decision-making suggests that managers often rely on gut feel or in academic terms, intuition. Since many, if not most, decisions have to be made quickly they have little time to think through, from first principles, what the real issues are, what options are available and what value to place on each of those options (Easton, 2010, p. 127).
>
> Fundamentally, human action is not predictable and so it makes no sense to attempt to divine the kind of predictive, tight theories common to explanatory modes in natural science (Thorpe & Holt, 2008b, p. 5).
>
> Management and organisation research become a complex and unpredictable dynamic whose practices, processes and outcomes emerge from the conduct of the research as it proceeds, and which can neither be specified in advance nor controlled to any great degree (MacLean & MacIntosh, 2008, p. 49).

While potentially disquieting, these authors combine to offer a necessary perspective prior to embarking on a program of management research. In particular, what are the implications for methodology and what can theory about methodology contribute to research design in such circumstances?

Methodology

The term 'methodology' appears to have a wide ambit. Ezzy addresses this issue by asking, 'Does research methodology refer to the overall research process or just the general research paradigm?' He suggests that, 'the overall research design [a process] is the research model' (Ezzy, 2006, p. 35).

Fox (2008, p. 91) argues that if 'methodology' generally means the scientific [naturalistic] methods of knowledge production, then 'ethnomethodology' generally

means the study of ordinary methods of knowing; hence, social constructivism. Ethnomethodological studies seek to 'explicate' an organising process; to progressively open-up this organising process and render it comprehensible.

This is why Denzin & Lincoln (2011b, p. 14) refer to 'an ethnographic experience'.

Sense-making

Reflecting on Karl Weick (1995a, p. 24), Fox (2008, p. 92) argues that what is significant about ethnomethodology is its emphasis on retrospective sense-making. It emphasises the lived experience; that is, 'lived' in the past tense, captures 'the reality that people can know what they are doing only after they have done it'. *Inter alia*, such 'knowing' is related to reactions to the event; particularly if none eventuates.

On this understanding, Barley (2011, p. 492) explains that ethnomethodology is primarily a cognitive – of appreciating the *post hoc* impact of an event – rather than a behavioural or political sociology**.** In ethnomethodology, as in institutional theory, sense-making trumps vested action.

Sense-making analyses share with ethnomethodology a methodological stance that privileges cases that in turn, reveal rather than represent. While the ethnomethodologists highlight the cognitive work of individuals in creating social order, sense-making attends to the contingent influences of norms and role structure: a social construction.

The social construction of reality

Therefore, according to Palmer, Biggart, & Dick (2011, p. 758) reality (to the extent that we can speak of reality as an independent state) only comes into practical existence insofar as it is encoded in representations of social actors.

In this sense, social constructionism considers *representations of reality* (and the relationships among these representation), rather than reality itself (and the relationship of representations to it), as the crucial objects of study.

Social constructionism not only encourages researchers to challenge taken-for-granted realities, but also, it can form the genesis for change by emphasising the *emergent nature of life and knowledge* and therefore the possibility of creating alternative realities: the morphogenetic approach to 'elaboration'.

If sense-making and the social construction of reality is a reflexive process, then according to Gergen (2009), the opportunity presents for a researcher to participate in the process of meaning construction.

In consequence, Denzin & Lincoln (2011b, p. 13) explain that the constructivist paradigm offers research quality assessment terms like credibility; transferability; dependability, and confirmability that replace the usual positivist criteria of internal and external validity; reliability, and objectivity.

The same idea is found in Burningham & Cooper (May 1999) who suggest that in presenting their research findings, social constructionists do not present them in objectivist terms, but rely instead on the plausibility of their findings. In other words, they set out to have their findings accepted by presenting a convincing argument rather than arguing that their results are definitive. This is consistent with the constructionist idea that the findings of research are one of many discourses[199]. The suggestion here is that far from being neutral, social constructionism can generate real debate and lead to change.

Guidance for methods

Following this theme, Denzin & Lincoln (2011e, p. xiii) state clearly that there is no one way to do interpretive, qualitative inquiry. 'We are all interpretive bricoleurs stuck in the present, working against the past, as we move into a politically charged and challenging future': a perspective congruent with the morphogenetic approach (M. Archer, 2013). Any idea of a predictive political sociology of tendering is unlikely to mature, as Erickson (2011, p. 56) explains because of the 'non-literal, unstable or lapsable meanings inherent in social action, [and] the unexpected twists and turns that belie prediction and control. Qualitative social inquiry is better equipped to take account of the poetics of social and cultural processes.'

Erickson (2011, p. 54) sees the way open for 'the participant-observational fieldworker as an observer/author'. In practice, both the researcher and participant contribute to observational activities and the constructions of interpretations. Further, major strategies of inquiry might engage with mixed methods, case study, narrative ethnography, grounded theory, and so forth.

The participant as 'observer and author' dwells in perceptions of reactive behaviours and atmospherics; phenomena that are being interpreted and later explicated

[199] dispositions discourse; contextualizing discourse; discourse of subjectivity and narrative; process discourse (Young & Collin, 2004)

contextually. This is the realm of Interpretive Phenomenological Analysis as explored in the next section.

Interpretive Phenomenological Analysis (IPA)

Dunworth,(2008, p. 115) explains that:

> IPA is phenomenological in the sense that it deals with individuals' personal perceptions or accounts of phenomena rather than striving to arrive at objective statements regarding these phenomena. It is an important interpretative endeavour whereby the researcher attempts to get close to the participants' personal world, while acknowledging the necessary role played by the researcher's own perceptions and concepts in making sense of other peoples' accounts of their experience.

The idiographic character of IPA suggests that individual cases provide the starting point, and general categorisations are developed gradually. The individual voices of participants are privileged. These anecdotes and stories lead to the development of theoretical constructs generally of a metaphoric nature.

The inherent limitation of IPA is that it can only deal with expressions of 'how' behaviours and atmospherics were perceived rather than the 'why' of the recalled experience. From a morphogenetic perspective, it is a particularly useful approach for examining process and change; and hence patterns.

The inherent power of IPA is in its explicative capacity; the progressive 'opening up' of patterns of behaviour and perceptions. To this end, IPA might at best contribute to theory-building (mid-range theory).

In the panoply of phenomenological approaches to management inquiry, IPA provides an accessible, flexible, researcher- and participant-friendly method for exploring the experiences of individuals and groups; and it headlines in this research project.

Central to IDA is its application for examining process, change and patterns. Its limitation to matters of 'how' is complemented by the aim of 'Process Research' to expose 'how' and 'why' phenomena evolve over time (Ann Langley, 2008, p. 173).

Process Research

Phenomena, by definition, imply action, change and temporal flux, and according to Langley (2008, p. 173), process research 'is particularly relevant to the study of organisational change – organisational 'becoming'.

Variance Theory and Process Theory

Mohr (1982) places process research in context by juxtaposing it with variance theory that is found in management accounting:

- **Variance theories** provide explanations for phenomena in terms of relationships among dependent and independent variables. Cost management from a historical accounting perspective takes this quantitative perspective to predict a future status.
- Variance theory tends to either ignore or freeze temporal flows into scaled variables, for example, decision processes as more or less political punctuation.
- **Process theories** are polyrhythmic. Historic patterns of events are interpreted in terms of their inter-influencing temporal outcomes. Based on these interpretations, a future status is posited and this is the subject of ongoing interpretive re-appraisal. For example, this process reflects cost management from a 'management accounting' perspective that needs to project final cost-centre profit (loss) based on fact and updated apprehensions. It enjoins variance theory with IPA.
- Process theory takes these temporal flows as its object. It is the flows themselves that are of research interest, and the examined data consist largely of stories about what happened and who did what when: that is, events, activities and choices ordered over time.
- Process theories provide explanations in terms of the pattern of events leading to an outcome over time. Causal logic is based on narrative sequence and ordering, rather than correlation (M. Archer, 16 June 2014; Ann Langley, 2008, p. 173).

Process Philosophy and Process research

Process research is associated with a philosophical tradition and an ontological perspective in which the world is viewed as composed primarily of fluid 'processes' rather than immutable 'things (Robert Chia, 2003, pp. 1-18; Van de Ven & Johnson, 2006; Van de Ven & Poole, 1989).

Chia & Langley (2004, p. 1466) distinguish between what they call 'strong-form' and 'weak-form' process thinking (Ann Langley, 2008, p. 174):

- **Weak-form**: treats processes as important but ultimately reducible to the action of things

- **Strong-form**: deems actions and things to be instantiations of process-complexes
    - This strong view unmasks the socially constructed nature of habitual conceptions of organisations and other phenomena, such as structure and culture as stable objects, focusing attention instead on the way they are continuously constituted, reproduced and adapted through everyday actions and interactions. That is, strong-form process thinking suggests that what is taken-for-granted in much management research is inherently problematic.
      With a similar line of reasoning, Weick & Sutcliffe (2005) recommend the use of gerunds so that 'organisation' becomes 'organising'.

Empirical guidance

Van de Ven & Poole (1989) recognise the essential complexity of society as an open system and indicate the importance of boundaries of inclusion and exclusion (Midgley, 2000, p. 7); a bounding of objects and units of analysis (Ann Langley, 2008).

Langley (2008, p. 178) considers that a process perspective to empirical research and theory-building might be challenging: the data are messy.

Interview data deals with time-embedded incidents, events and trends. Meanwhile, process data tend to be eclectic, drawing on less concrete phenomena, such as changing relationships, thoughts, feelings and interpretations.

Making sense of process data

The 'narrative' and 'quantification' sense-making strategies required for this research inquiry lie at opposite ends of a continuum. The narrative approach involves the reconstitution of events into an extended verbal account or 'thick description' and is associated with ethnography. It is high on accuracy to the extent that it reflects the detail and ambiguity of particular events, but theorising derived from it may be lower on parsimony and generality; hence the purpose of mid-range (theory-building) theory.

Langley (2008, p. 175) offers combined strategies for making sense of, and theorising from, process data, where each strategy provides complementary strengths and weaknesses in terms of accuracy, parsimony and generality. Importantly, Langley identifies strategies between 'narrative' and 'quantification', so that a symbiotic relation exists. Langley's proffered strategies are moderated in the context of this inquiry.

- Grounded Narrative
    - inductive (bottom-up) metaphoric behavioural categories for grouping similar perceptions or sentiments
    - cross-referencing unmediated thick descriptions for cultural and situational comparisons
- Quantification (descriptive statistics)
    - temporal occurrences of metaphoric behavioural categories
    - reconstituting temporal behaviour categories into purposive gerunds
- Visual mapping (A. Langley & Truax, 1994)
    - visual presentations of temporal descriptive statistics of metaphorical behavioural categories together with statistical networks of bracketed (phased) purposive gerunds
- Temporal Bracketing
    - primarily used to define a regime of process phases
        - The temporal bracketing strategy involves the generation of comparative units of analysis in the form of distinct time periods. That is, process models with successive adjacent periods result in models of sequential progression. In addition, bracketing enables the examination of how actions in one period lead to changes in context that will affect action in subsequent periods – the morphogenetic cycle.
    - Cross-case analysis based on common phasing definitions
- Synthetic strategies
    - for reconstituting temporal decomposition of descriptive statistics into purposive gerunds (such as ‘negotiating’) with common bracketing to enable phase-specific cross-case analysis
        - This strategy involves the comparison of processes as wholes across different cases. Because of the focus on the whole process and the attraction of relating processes to outcomes, such an approach may tend to lead to variance theoretic formulations of processes.
        - For this research inquiry, entire cases are described in terms of the mean and standard deviation of phase-specific recalled

observations/perceptions of purposive gerunds. Bayesian Belief Learning Networks construct the statistical relationships (co-relations using cross-validation) between purposive gerunds (variance theoretic formulations of process) and case comparisons with known outcomes (tender win or loss).

- Alternate templates
    - Involves the application of multiple *a priori* theoretical frames or lenses on the same data set such as, 'leadership complexity capability'; 'emergent behaviours reflected against controlling behaviours'; 'sense-giving against sense-making behaviours' and so forth; all with respect to known outcomes.

These six strategies for theorising from process data are not exhaustive of all possibilities, nor are they mutually exclusive. They offer a series of complementary angles for deriving useful insights about process phenomena (Ann Langley, 2008, p. 175).

Reflection

Pettigrew (1992) offers a cogent summary. 'Process research focuses attention directly on change, flow and movement in and around organisations; "capturing reality in flight".'

Wood (2008, p. 171) explains that the emphasis is on the changing and developmental nature of *managing*, rather than focusing on *management*. For process thinkers, the concrete reality of 'things' is characterised by processes of change, movement and transformation: morphogenesis. What is real is change itself.

The disposition of this dynamic is considered by Whitehead (1929/1978, p. 314):

> The 'passage of nature' or 'its creative advance' is a fundamental characteristic of experience. In this continuous advance or universal becoming, every occasion of actual experience is the outcome of preceding experiences. Actual occasions of experience or 'actual entities'[200] have a certain duration during which they arise, reach satisfaction and perish. However, they do not disappear without trace; rather, they leave behind consequences that have the potential for entering into other passing moments of experience.

[200] An entity is real if it has causal efficacy; that is, its shapes behaviour and makes a difference (Fleetwood 2005).

Wood (2008, p. 171) provides focus for Whitehead's thoughts:

> Therefore, each step of sense-making is no longer of things simply as they appear to be at any given moment: they are also what they were even a fraction of a second ago, and what they can become.

Langley (2008, p. 175) brings these threads together:

- The static nomothetic generalisations of traditional variance-based management research give hints about the systemic patterns surrounding organisational phenomena, but they do not provide the temporally embedded accounts that enable us to understand how such patterns come to be.
- Variance-based generalisations can even sometimes be misleading because they ignore the non-linear effects of action under complexity: actions to improve performance engender reactions that feed back into further actions, often with unexpected [emergent] consequences that such models do not capture.
- The experience of the immediate world around is not captured in the simple facets of things such as organisation demeanour. Such a singular instance of observation and sense-making is an error of mistaking abstract constructions for substantial processes (misplaced concreteness); the traditional concepts of a 'here' and 'now' without duration.
- The contrasting view sees each actual experience as being alive; it 'arises as the bringing together into one real context of diverse perceptions, diverse feelings, diverse purposes, and other diverse activities' (Whitehead, 1929/1978, p. 9).

A challenge for social constructionism

According to Bergson (1907/1983, p. 302), our conception of time reflects a series of positions [phases], which is a matter of abstract thinking [ontology] and not a property of concrete [living] time itself. Such [socially] constructed time elements give substantiality [substance] to our experience, while the fluxing [continuous change] nature of reality is neglected. For Bergson (p. 237), mobility [change] is the only actual reality, and we must detach ourselves from the 'already made' to the 'being made'; hence the work of Weick and his gerundive 'organising' (rather than organisation): a processual style of thinking (Dervin, 2003d; Karl E. Weick, 1995b).

Wood (2008, p. 173) concludes with 'Key issues for consideration':

- Whether organisations consist of things *or* processes, or whether these are complementary ways of viewing entity and flux.
- The difference between:
    - process theorists purporting to explain organisational development and change by making expedient use of longitudinal case studies, and
    - those accepting the metaphysical centrality of a process-relational outlook, but as yet unable or unwilling to fabricate methodological pathways in response to the perceived demand of organisation and management studies.

Wood then comments: 'However, these are only problems if we retain a static vision of things'.

Static and fluid analogues

Bergson (1907/1983, p. 302) enumerates two opposing tendencies for apprehending reality:

- The logic (epistemology) of the intellect, which apprehends the world as an already determined series of solids.
  It forces on us a static conception of the real, which if taken too far, cannot embrace the continuity of flow itself (ontology).
- The process of intuition, whereby we plunge into the very life of something and identify ourselves with it by a kind of internalisation.
  Here reality is expressed as 'fluid concepts', quite different from the static abstractions of logic.
  On its own, the intellect's 'spatial' abstraction of things is too deterministic.
  The flow of the actual world without a corresponding logic is too indiscernible, too 'inaudible'.

Wood (2008, p. 172) suggests that life is realised by infusing the intellect with *intuition* and not simply reducing the intellect to intuition. (emphasis added)

Given this overall 'splatter-dash' of ideas on management thought, it is now necessary to take stock.

Reprise

The trajectory of the discussion could continue on and possible engage with topics such as a paradigmatic shift in management thinking informed by quantum mechanics; but this would be indulgence (Rosen, 2015).

For now, it is necessary to return to the beginning and flesh out the fundamentals of the constructivist tradition in order to understand the reasoning of Wood (2008, p. 171) and Bergson (1907/1983).

> ... social constructionism considers *representations of reality* (and the relationships among these representation), rather than reality itself, as the crucial objects of study.

In considering the relationships between representations of (tender) project management, Cicmil (2006, p. 34) concludes:

> ... the complex tensions between [a] rationality and intuition, and [b] between scientific prediction-driven knowledge and the 'feel for the game' in context ... there might not be any final answers to successful [tender] management, nor final methodology for finding an answer.

For Cicmil, the distinguishing feature of (tendering) project management is not control but the ability to operate effectively, and to individually and collectively maintain a sense of self in the presence of uncertainty, lack of control and anxiety.

Cicmil's insight is also reflected in the experiences of an Australian Defence contractor's bid manager who recalls:

> I walked out of that whole thing with a real lesson: in big projects, establish the relationships first. When rumours abound and you have self-doubts, you have to have some form of strength because you go home every night tied up with knots and you have to get out of bed the next day and go right back in, and it's hard to hold the course for well over a year. My role is to really ensure that the relationship is right.

Flyvbjerg (2001, p. 43) elevates this bid manager to virtuoso status 'with perfect command of his "art of living", [a consummate ability] to play on all the resources inherent in the ambiguities and uncertainties of behaviour and situation in order to produce the actions appropriate to each case. The justification of a 'choice' [value-for-money] can be accounted for retrospectively but such virtuosic practice is unlikely to be predictable'.

Sense-making, meaning-making and truth

Cicmil (2006, p. 34) also considers the salience of relationships: 'Intentional goal-oriented actions emerge in the conversations between all parties at the project level, and those conversations function as meaning-making processes'.

Teasing out pertinent terms thus far, produces a concatenated string comprising:

> 'tensions' + 'virtuosic practice' + 'sense of self' + intuition + 'feel for the game' + relationships + 'conversations' + 'meaning-making processes' + 'no final methodology for finding an answer'.

The implication being that organisation reality is no more than what participants construct; there is no ultimate truth of organisational life and there is no deeper structure to expose[201] (Strati, 2000, p. 72). Further, there is a plurality of perceptions of the organisation and a plurality of ways in which to make sense of it (Strati, 2000, p. 74).

The social construction of organisation reality: phenomenology and pragmatism

An organisation is never the same. Its secrets are to be searched for in hidden tensions and connections that simultaneously create patterns of unity and change (Strati, 2000, p. 78). It is only understandable in terms of movement and flux (continuous change). Weick (2005) conceptualises organisations as 'flows of experience'.

Organisation reality is no more than the individual's construction and reading of it (Strati, 2000, p. 72).

Reality is a quality; a characteristic which belongs to phenomena independent of our volition. We can't make it disappear just because we want to (Strati, 2000, p. 65).

Studying the social construction of reality involves conceptions of knowledge, cognition, perception and observation (Strati, 2000, p. 66); hence 'constructionism'.

Constructionism emphasises contingency and negotiation, disruption and discontinuity, heterogeneity and fragmentation of social events and phenomena. In consequence of this social complexity, *constructionism gives salience to the concept of practice*, which comprises the non-verbal, non-textual and even non-human action of the numerous instruments that surround us in everyday organisational lives.

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[201] in contrast to the tenets of critical realism that search for deep hidden structures (intransitive causal mechanisms) (Fleetwood, 2011)

Organisation *per se* is socially constructed by a group of individuals (actors) who negotiate its 'reality' and 'knowledge'. From then on, there is a plurality of perceptions of the organisation and a plurality of ways in which to make sense of it; all of which are influenced by the organisation's 'reality'.

What then might be the relationship between an individual and an organisation? This is the domain of 'hypertext', 'texts' and 'texture'.

Hypertext, texture and texts

Texts

Social science has looked to analogies drawn from the natural sciences to explain social life in terms of laws, forces, structures, and mechanisms (such as a 'differential'). Social theorists now borrow analogies from the humanities to view and explain social action as analagous to moves in a game, performances in a drama, and sentences in a text. Analysis undertaken by ethnomethodological means focus on making sense of talk in *interaction*. (Schwandt, 2007, p. 290) (emphasis added)

According to Geertz (2000), 'the textual analogy is perhaps the most adventurous and least obvious'.

For philosophical hermeneutics, social action can be read like a written text. From this perspective, the object of social science is meaningful social action construed as a whole, just like a written text; or expressed as 'contextually interpreted social interaction' (Galvin, 2014).

From a poststructuralist[202] perspective, issues and concerns at once are seen as blended and intertwined across multiple disciplines and field of thought, and every text is open-ended and indeterminate; hence an infinite number of interpretations. (Schwandt, 2007, p. 289)

Texture

Everyday life in organisations is an intersubjective world and the prototype of all social relationship is an intersubjective connection of motives where each actor designs his or her organisational action and expects it to be both understood by other actors, and to

[202] Whereas structuralism was informed by the constructive science vision of identifying both social and linguistic order, Poststructuralism is resolutely deconstructive in intent. Subjects, authors, and speakers are irrelevant to the interpretation of texts. All texts are interrelated. Meaning is unstable, never fixed, never determined or determinable, never representational (Schwandt, 2007, p. 237).

provoke their reaction. This is a 'game-of-mirrors' whereby individuals and groups believe that they know how other individuals and groups view the world (Strati, 2000, p. 81).

Texture is both connection and action. It is 'connecting in acting', where an infinite series of relations constantly interweave. On this understanding, 'an organisation is only understandable in terms of movement, flux and change; recognising that time is also a sensory perception'. In turn, organising merges environment with organisation, culture with patterns of action, and society with organisation (Strati, 2000, pp. 69-79).

The study of 'texture of organising' requires abandonment of scientific epistemology and the problematic of analytical understanding. 'All knowledge is tacit or rooted in tacit knowledge (Polanyi, 1962).' On this account, theory can only be a temporary, accommodative representation of the 'connectedness in action' which characterises open textures; the interconnected 'simultaneous entangled states' of life and society[203]; an idea that troubled Einstein (Morello, 30 December 2015).

Texture of organising eschews analytical methodologies and employs heuristic procedures based on intuition and evocation; analytical thought becomes a problem to reflect on rather than being the foundation of knowledge about everyday life of organisations (Strati, 2000, p. 79).

Further, texture of organising provides a vision in which an organisation is never fixed and stable but constantly changes (morphogenesis), although it is always the same in terms of its 'game-of-mirrors'. This leads to the process of organisation typification – ideal types – whereby an organisation (such as a fast food chain) reflects a social contract in its game-of- mirrors with its patrons: its context (Galvin, 2014).

This concept of 'texturing of organising' exposes the symbolic terrain of organisational policy, choices, negotiations, and so forth; an idea that may well contribute to theory for tendering.

Hypertext

The key characteristic of a hypertext organisation [agile organisation] is the ability of its members to shift focus and shift contexts. Constructionism, and the hypertext organisation metaphor, ground the concept of 'texture of organising' as a continuous

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[203] In normal computer code, we can write combinations of 0s and 1s: 2bits = 00; 11; 01, and 10. In a quantum computer, we can also write a superposition of 01 and 10 that take their variable status from the first to change. For example, given a defined relationship between a man and a woman, then if one changes sex, the defined relationship ensures that the other also changes sex simultaneously.

interactive process that socially constructs organisational reality; the concept of organisation thereby becomes a 'texture of organising'. (Schwandt, 2007, p. 289)

Organisation as metaphor

Strati (2000, pp. 77, 173) structures his thoughts on organisation in the following:

- Organisation is a metaphor used to understand and communicate a flux of experience.
- Organisational phenomena are in constant flux; it is never the same.
- Organisation is not measurable, for it does not exist as an objective social reality which is comparable with similar social entities.
- Organisation is an invention of individuals variously involved in this flux of experiences, rather than being a deeper-lying social structure to be discovered and described.
- Organisations become institutions by embodying organisational values that set them in relation to the rest of society; that is, to existing centres of power in the community.

The study of organisations as social contexts

Cicmil (2006, p. 73) proffers that 'the process of social construction involves both the participant and the organisation, and both emerge altered from this situation': the essence of structural and agential morphogenesis.

Strati (2000, p. 74) is clear that the task of the organisational analyst working within the constructivist tradition is not to search for the 'true' organisation but to inquire about the ways in which these realities are collectively and socially constructed.

Emotions are socially constructed. They involve specific ethical orders and address situated evaluative patterns. They concern both rights and obligations (Strati, 2000, p. 65)

The study of organisations as social contexts concerns itself with fragments of organisational life; and these fragments change in the course of the knowledge-gathering process. These elements interweave through endless negotiation and are complicated further by 'time' being a sensory perception (Strati, 2000, pp. 53, 78, 127).

Management research and methodology design

This chapter concludes not with a summary but rather, a focus on designing methodology for management research and translating this methodology into the field.

Given the essence of a socially complex project as being interdependent on people and organisations, such reliance brings its own emergent properties and uncertainties (Tavistock Institute, 1966). Collectively, these emergent properties are in a state of flux or constant change and this is the social pathology of a tender campaign and its tender project.

The anthropogenic constructs that are used to bring descriptive statistics to the inquiry, while important for the sake of plausibility, take a secondary status to the idea of 'comparison'; an idea familiar to research guided by Grounded Theory (Bowers, 1988; A. Bryant, 2002; A. Bryant & Charmaz, 2007; Charmaz, 2006; Clarke, 2003; Locke, 2008) and Personal Construct Theory (P. Caputi, Hunter, & Tan, 2009; D. Green, 2005; Norton, 2006; Shotter, 2007; Warren, 2004).

Regardless of metrics chosen, the comparative temporal dimensions of change are processed with respect to 'within case' and 'across cases' data; internal and external perceptions data; phase differentiated behaviours, and cross-indexed (juxtaposed) themes across anecdotes and stories (see Annexure A).

All descriptive statistics based on socially constructed concepts and constructs are of little value without the overlay of anecdotes and stories. Social constructions are not reality, but their descriptive statistics of recalled observations of behaviours might provide vectors of change or key turning points in the life of a project; and when these vectors of change are associated with the anecdotes and stories (texts) involving temporal social interactions, plausible explications might evolve.

Emotion, sentiment and aesthetics should not be seen as marginal aspects of organisational life. They are essential for its comprehension and a focus of this study.

> While the timing of change (phases) is identifiable generally, the texts provide contextual reasoning about contemporaneous social interactions. Together, they explicate the matter-of-fact accounts of others' experiences. Social constructionism demands this of its methodology.

While the cause of management research might be plagued by issues of methodology, flux remains an eternal truth for managers. It then becomes a matter of modelling this flux and giving it a voice as offered in the next chapters.

Chapter 11
Methodology:
Reflecting Social Constructionism

The previous chapter canvassed the idea of management research as reflecting a disposition towards suggestive rather than exhaustive theory, while the companion management research epistemology of social constructionism considers the representation of reality rather than reality itself.

With this philosophical background, the role of the participant is elevated to that of observer and analyst, in partnership with the researcher. Overall, the methodological focus is on process, constant change and patterns of behaviour; and the suggested idea of 'organisation' is no more than a metaphor used to understand and communicate the flux of experience: an ethnographic experience.

Supporting research methodology needs to corral perceptions of temporal behaviours and to complement these perceptions with anecdotes and stories from the experiences of participants and the researcher.

Each management research instance is likely to need a bespoke methodology that draws from a corpus of methodological thought. This suggests that a framework is required within which to reason contextually about the principles of management research and those principles that best support the contextually possible methods and techniques.

Clearly there cannot be a canon for methodology design; rather a framework is necessary from which to inform the researcher about structuring a methodology design, and about the experiences of other researchers who have engaged social constructionism in their research designs.

This chapter offers lineaments for framework design from which to construct a bespoke methodology; and the chapter conludes with a general meta-theoretical guide for the social construction of concepts, and hence sense-making and the meaning of patterns of behaviour.

Framework

McGrath (23 October 1994, p. 152) reflects on methodology that engages with human behaviour in the context of constant change. Importantly, McGrath reasons about the scope of expectations that the researcher could entertain in the course of, 'the

systematic use of some set of theoretical and empirical tools to try to increase our understanding of some set of phenomena or events'.

McGrath introduces an axiom that various scholars, in their respective style, reflect in this chapter:

> The meaning of research evidence, in any area of science, is inherently tied to the means and methods by which that evidence was obtained. Hence, to understand empirical evidence, its meaning, and its limitations, requires an understanding of the concepts and techniques on which evidence is based.

That is, the chosen approach to management research and the methods applied, mediate the understandings that might accrue.

Further, McGrath (23 October 1994, p. 152) proffers a structure for this research endeavour:

- **The substantive domain**: from which to draw contents that seem worthy of study and attention
- **The conceptual domain**: from which to draw ideas that seem likely to give meaning to the results
- **The methodological domain**: from which to draw techniques that seem useful in conducting the research

Levels of phenomena within domains

The respective substantive, conceptual and methodological domains have several levels of phenomena (McGrath, 23 October 1994, p. 153). In this research instance for example, recalled perceptions of a behaviour metaphor are translated into a higher-level 'purposive' construct: hence, the higher-level purposive phenomenon of 'negotiating' is a construct (aggregation) of associated lower-level behavioural concepts.

- **The substantive domain**: The units or elements are called 'phenomena', and the relations among them reflect 'patterns of phenomena'. These 'phenomena' and their 'patterns', are objects of study.
- **The conceptual domain**: The elements of interest in this domain reflect the states and actions of the human systems in focus – properties of 'actors behaving towards objects [ideas and other behaviours] in context'. These might include dispositions and influences such as 'attitude', 'power', 'social pressure', and so forth.

- Relations in the conceptual domain refer to any of a variety of possible ways in which two or more elements can be connected. Some connections might be viewed as 'influencing' relations, some are 'logical' relations, and some are 'chronological' relations. The relations between them can be unidirectional or reciprocal.
- Materials from the conceptual domain – properties and relations among those properties – are the 'ideas' that can give meaning to the phenomena and patterns that are the subject of study in the substantive domain.

- **The methodological domain**: Elements are methods that are more generally identified as 'modes of treatment'. Modes of treatment are the different ways in which the research might deal with a particular feature of the human systems under study.
  - In this research instance, one mode of treatment characterised as 'Sense-making Item' (SMI), ascribes a metaphorical identifier to recalled perceptions of actor behaviour in context. Each SMI is assessed for timing and intensity within a case.
  - Relations in the methodological domain deal with the application of various *comparison* techniques. In contrast with the natural sciences, an interpretive social science looks to the *relative* dispositions of recalled observations of phenomena.

All three domains are present in a research process.

Methods

Methods are the tools – the instruments, techniques and procedures – by which data is collected and analysed. All research methods should be regarded as bounded opportunities to gain knowledge about some set of phenomena in a substantive domain. Such knowledge is based on some combination of substance, concepts and methods.

The meaning of that knowledge, and the perceived confidence in that knowledge, are both contingent on the methods used. Therefore, methods bring both opportunities for gaining knowledge and limitations to that knowledge. All methods have inherent flaws that impact on levels of confidence in interpretations of evidence. (McGrath, 23 October 1994, p. 154)

Evidence, interpretation and social construction

Any body of evidence is interpreted in the light of the strengths and weaknesses of the methodological and conceptual choices devoted to its capture: the strategies; the design; and the techniques for measuring and manipulating.

Evidence is always contingent on all of the methodological choices and constraints. Only by accumulating evidence across studies that involve [a] different, and [b] complementary methodological strengths and weaknesses, that it might be possible to consider the evidence as credible, as probably true, and as a body of empirically-based knowledge, however suggestive rather that exhaustive.

For each set of results to be meaningful and credible, they must be viewed against the accumulated body of knowledge on the same topic. Agreement is not mandatory. In the end, the research process is a social construction resting on consensus (McGrath, 23 October 1994, p. 169).

The politics of methodology

Denzin & Lincoln (2011a, p. 683) consider that:

> We no longer separate ideology and politics from methodology. Methods always acquire their meaning within broader systems of meaning, from epistemology to ontology. These systems are themselves embedded in ethical and ideological frameworks as well as in particular interpretive communities. Our methods are always grafted into our politics.

Further, Denzin & Lincoln (2011b, p. 11) focus this reality on to the researcher.

> The situated researcher approaches the world with a conformed set of ideas from within a distinct interpretive community, a framework (theory, ontology) that specifies a set of questions (epistemology), which are then examined (methodology, analysis) in specific ways. That is, empirical materials bearing on the question are collected and then analysed and written about; [all within a language community].[204]

In a potential research domain of tendering for politicly-sensitive Defence equipment, Denzin's & Lincoln's insights are profound. In the instance of this research inquiry, political sensitivities appear not to come from politicians, senior bureacrats or contractors. Rather, the 'necessary' sensitivities are proferred by peripheral observers,

[204]The evidence-based social movement connected with North American education and the *No Child Left Behind Legislation* (Hatch, 2006) filtered down to Australia and 'constrained' social and management research to positivist foundations; not so much by direction but as a taken-for-granted political correctness that impacted on publications and research proposals.

such as academics or lower level military officers, who believe that these key stakeholders would or should be sensitive. In turn, these peripheral observers appear to behave as if such sensitivities are in place and are to be prosecuted. In contrast, key stakeholders generally welcome the research activity and facilitate its progression; possibly for its potential to offer different perspectives in a wicked problem context, but more realisticaly, it provides a rare opportunity for a senior manager/politician to share their world and wisdom.

Denzin & Lincoln (2011e, p. ix), Flyvbjerg, et al. (2012a), Clegg & Pitsis (2012), Frank (2012) and Griggs & Howarth (2012) all emphasise that a critical framework is now central to this project. That is, a framework that privileges practice, politics, action, consequences, performances, discourses, and methodologies of 'the heart'.

A critical social science seeks to understand how power and ideology operate through and across systems of discourse, cultural communities, and cultural contexts. It asks how words and texts and their meanings play a pivotal part in the culture's framing of research methodology and meaning-making in the field. This is more than just a multi-methodological and mixed methods approach to inquiry: see Flyvbjerg, et al. (2012b) *Introduction: new directions in social science*.

Mode of research

Torrance (2011, p. 577) indicates that the type of research entertained by this inquiry is identified as 'Mode 2' (Gibbons et al., 1994). That is, knowledge deriving from and operating within a context of application. Such knowledge is transdisciplinary and involves the close interaction of many actors throughout the process of knowledge production. In turn, issues of research quality are salient.

Research quality

Research quality is a value judgment determined by a wider set of criteria that reflect the broad social composition of a review system.

Further, there is a research imperative to reconcile the need to investigate and comprehend social complexity with the policy inclination to simplify and act. In essence, Flyvbjerg et al.(2012a) argue that if research is to engage critically with policy and practice, then research and policy making must progress, both theoretically and chronologically, in tandem (Bent Flyvbjerg et al., 2012a).

Torrance concludes (and Flyvbjerg would concur) that: 'The best evidence available is unlikely ever to be definitive; it should inform and educate judgement, but it cannot supplant judgment, nor should it'.

While previously cited authors including Galvin (2014) consider the imperative of context in a social account, Archer (1998) leaves no doubt that the richness of anecdotes and stories should remain *intact* so that motives, intentions and reasons are accessible.[205] Ackroyd (2004, pp. 157-158) expands on this theme.

> A causal account ... will link events in a sequence, and will often implicate data relating to both *ideas* and *acts*, either individual or collective, which might be relevant to a satisfactory explanation. If people believe their situations to be real, they are real in their consequences. This is helpful but insufficient. Clarifying the thinking of individuals and groups suggests the applicability of qualitative methods, as these are indispensable for *illuminating motives, intentions and reasons*. The capacity to formulate and express reasons is a human power ...

Ackroyd is reflecting the idea that *meaning* links events in context. In order to develop ideas about such linking mechanism it is, according to Ackroyd (2004, p. 156) often essential *not* to focus on particular phenomena or isolate them for study. Rather, *focus on the context* that frames relational processes and clarifies the nature of a linking mechanism; hence the relevance of Annexure A with its social constructions of meaning and thematic index.

Taking social constructionism to the field

Gergen (2009) suggests that social constructionism not only encourages researchers to challenge taken-for-granted realities, but also can form the genesis for change by emphasising the *emergent nature of life and knowledge* and therefore the possibility of creating alternative realities. 'Many embrace reflexive approaches to research, seeing them as part of the process of constructing meaning.'

Burningham & Cooper (May 1999) explain that in presenting their research findings, social constructionists do not present them in objectivist terms, but rely instead on the plausibility of their findings. In other words, they set out to have their findings accepted by presenting a convincing argument rather than arguing that their results are definitive. This is consistent with the idea in constructionism that the findings of management research are but one of many discourses.[206] The suggestion here is that far

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[205] hence, a reason for avoiding grounded theory method, but retaining a grounded case method

[206] dispositions discourse; contextualizing discourse; discourse of subjectivity and narrative; process discourse (Young & Collin, 2004)

from being neutral, social constructionism can generate real debate and lead to change: an activist social science.

Denzin & Lincoln (2011b, p. 13) explain that in the constructivist paradigm, findings are usually presented in terms of the criteria of grounded theory or *pattern theories*:

Easterby-Smith et al.(2012, p. 54) suggest that the results of a constructionist research should be believable, and that they should be reached through methods that are transparent. It is very important for the researcher to explain:

- how he/she gained access to the particular organisation
- what process led to the selection of informants
- how the data was created and recorded
- what processes were used to summarise or collate it
- how the data became transformed into tentative ideas and explanations
- how he/she felt about the research

In sympathy with the constructionist approach, Arnoldi (2009, p. 16) considers two focal issues:

- recognition that the understanding of any object of knowledge is influenced by its surrounding culture[207] and meaning; not just its physical qualities
- a strong focus on power[208] and the discursive processes in which reality is (socially) constructed, including:
    - the *idea* that culture and meaning *influence the perception* of reality
    - the *argument* that culture and meaning *determine our conception* of reality

Social construction can both constrain and enable. For example, a bureaucratic 'edict' that social complexity is *not* a character of a Defence tender process implies that while there is technical complexity, social complexity is not evident. The CEO of the DMO commented: 'We are business-like. It's our job to present government with the data'.[209]

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[207] **Culture** is a process of continuous learning, of inventing new linguistic artefacts that in turn change the conceptions of the world of which they have become a part (Krippendorff, 2006, p. 227). Our culture teaches us how to see something and in some cases, whether to see it (Crotty, 1998, p. 55).

[208] Representations of truth do not determine power; it is power relations that determine what becomes legitimated as truth (S. R. Clegg et al., 2014, p. 14).

[209] (Barker, August 2006). During research interviews with the CEO DMO, the proposition of the presence of 'social complexity' drew silence (Gumley, 3 June 2009).

However, social construction has the potential to expose the essential nature of competitive Defence tendering as developing through interaction with changing social processes, assumptions and social constructs.

Further, the empirical data analysis (descriptive statistics) associated with this research project, applies a comparative framework of games-at-play to delineate how similar phenomena are understood and are responded to in similar or quite different terms, at different times, and in different places (cases). Social context is vital.

Objective Social Conditions (context as problem)

Objective social conditions (Galvin, 2014) are of interest, principally in terms of *the assertions made about them*, rather than their actual validity. Burgess (2015) suggests that the general pattern of human problem identification and resolution indicates that a problem (activity) only becomes defined as such, when the possibility of a solution is proposed. Otherwise, such social realities are absorbed or accommodated by legality and legalism confronting, for example, asylum seekers and refugees. The existence of a 'solution' implies the presence of people capable of articulating and facilitating change (morphogenesis); the inherent influential and mediating powers of conferred agency.

Extending the constructionist approach to change in the field

Burgess (2015) explains that social constructionism is sensitive not only to the constructed character of original claims, but also to the transformations (morphogenesis) undergone in the *phased* process of:

1. a 'pre-problem'
2. its 'transition' to a 'wider concern' or 'awareness'

In comparison, the morphogenetic approach (M. Archer, 1995, pp. 89-92) has its cycles with phases of:

1. **Conditioning**: the pre-existing socio-cultural context
2. **Interaction**: the social, socio-cultural and agential interaction
3. **Elaboration**: the outcome of gaming interactions between power positions

Similar cyclic processes of social change can be found in Bhaskar's Transformational Model of Social Action - TMSA (R. Bhaskar, 1998).

The original constructionist 'Social Problems' approach to change is discussed in Spector & Kitsuse (1977/1987). Since then, discussion has turned to the extent to

which *perception* should be treated as independent of *reality* (Burgess, 2015); that is, a *contextual* perspective that recognises certain assumptions about objective conditions (Galvin, 2014); noting that 'contextualism is a social science construct' (S. R. Clegg et al., 2014, p. 14); and so too is social constructionism (Burr, 2015), organisation and institution. Institutions are only 'visible' when enacted by individuals in social settings.

A morphogenetic approach to change

Czarniawska's insights suggest a more nuanced interpretation of the morphogenetic approach. Morphogenesis (transformation) and Morphostasis (reproduction) should not be translated as 'instability' and 'stability' respectively; Czarniawska makes this clear. The *outcome* of any cycle of organisational activity is some *ratio* of genesis to stasis or its converse (Porpora, 31 March 2015).

Fundamentally, the morphogenetic approach offers an analytical mechanism for reasoning about change. Archer (1995, p. 254) refers to the morphogenetic approach as 'practical social theory'. As explored in earlier chapters, such reasoning is founded on an organisation's theoretical tendencies with respect to both its structural and agential dispositions in terms of conditioning, interaction and elaboration.

A Contextual approach to change

The contextual approach to social construction suggests engagement with the *objectivity* of the social problem: the tendering campaign and its tender project in this instance. Clegg et al. (2014, p. 14) explain that:

> The meaning of context, like power in politicly-sensitive areas, is likely to be contested. The context depends on the contested and contesting viewpoints that constitute it. Therefore, knowledge is always partial but at least it is grounded. ... [we] enter the field knowing that all we are going to say [and hear] is contextual.

Nifadkar & Tsui (2007) define contextualisation as 'incorporating the context in describing, understanding, and theorising about phenomena within it' and they highlight that 'the *need for contextualisation* is well accepted'. (emphasis added)

Even if a claim might be fabricated, it remains useful to understand what makes it possible for such a belief to be shared widely. For example, why does the Defence equipment procurement agency 'claim' that there is no political interference in their decision-making processes, while the Defence minister's Political Office offers a contrary opinion? Even if either claim is proven to be without basis, there might still be

a need to locate it within a particular context and associated anxieties. The following are extracts of interviews with the researcher:

> **CEO DMO**: I can confirm there was no political influence on source [tender] selection and have publicly said that in speeches. Indeed, in the five years I have been in DMO, I have not received a single instruction to choose a particular vendor from any politician. I think the 'political environment' is overstated but this is part of the psychology you are picking up through your research.
>
> **Political Office**: There's the black and white technical world of the equipment performance, cost and the analysis of tenders, and then there's the political outcome that I deal with. But DMO are sort of encouraged to get to the 'right' outcome along the way.

Galvin (2014) proffers that: 'At the heart of any context-specific research is an appreciation of heterogeneity at some level; power differential reflects heterogeneity. This idea is central to the morphogenetic approach with its focus on mediated *dialectical relations* (M. Archer, 1995, pp. 195-218).

Galvin (2014) goes further when he considers how context not only shapes our world, but 'it might also shape our view of it [ontology] such that the very act of undertaking context-specific research may give us a novel lens with which to provide new and potentially significant insight into existing issues'.

A Governance approach to change

Dean (2009) reflects on how social control is determined through notions of security (fear) and protection. This 'governmental' perspective is primarily concerned with the social construction of what *vested interests* lie behind the (tender) decision-making processes: the promotion of fear and benevolent protection. Such distributions of vested interests, as a motivating influence, are accounted in the morphogenetic approach (M. Archer, 1995, pp. 204-205).

A socio-cultural approach to change

This approach to social and cultural construction (B. Johnson & Covello, 1987) calls for the inclusion of issues related to familiarity, immediacy and individual framing, together with organisational couplings[210], ideology and institutional presence.

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[210] see Czarniawska (2011, p. 778)

> Based on Nelkin (1989), *narratives of recalled perceptions* of communication behaviours during, for example, a tendering campaign and its episodic tender project, appear to treat such behaviours (reflected in informant narratives) as a surrogate or proxy for many other concerns; possibly beliefs about values, social institutions and moral behaviour; together with familiarity, immediacy, and so forth.

This socio-cultural perspective reflects the social constructionist account as arguably more valuable than any possibility of systematic 'prediction'. That is, the political legitimacy[211] and appropriateness of a tendering organisation – its potential (future) political value and hence, its present 'value-for-money' – is socially and politicly constructed over time, rather than simply given.

Comment

Burgess (2015) considers the views of Arnoldi (2009) above, that 'social construction' is a 'much used and abused term'.

In the context of this research project, technically complicated (requiring expertise to solve puzzles) and technically complex (interacting systems with unknown emergent properties) as well as socially complex processes (such as high cost politically-sensitive Defence equipment tender projects) might be treated as being socially 'constructed' by means of dominating power relations (Hacking, 2005).

For example, a dominant diplomatic alliance might require certain software systems to be present in Australian equipment. Without access to the underlying intellectual property, puzzles and complexities abound; noting that the genesis of these impediments is socially (politicly) constructed.

At play is the difference between 'social construction' as a principle or expression, and 'social constructionism' as epistemology that guides a research methodology.

Also, being primarily reliant on social relations, the tendering enterprise is essentially sociological: hence a 'tendering sociology' or a 'political sociology of tendering'.

The investigative methodologies associated with Ethnographic Naturalism and Social Poetics, support the quest for middle-range theory (theory-building); a 'framework for reflective reasoning' (not prediction) about *changing social influences and changing relational patterns*.

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[211] Legitimacy endorsement is a critical organisational resource, especially in settings where the dominant selection forces are not price or performance based, but rather an 'in-order-to' satisfy political exigencies (Roberts, 2011, p. 564).

In this research project instance, such transformations are associated with the potential organisational institutionalism of tendering enterprises. At stake is their political appropriateness and hence legitimacy: political success or failure of the tender's collaborative effort.

Collaboration and change in organisational fields

An understanding of collaboration, can in general, be informed by philosophies of social action (Fagan, 2013, p. 4). Such analyses focus on the distinctive attitude of joint intention (also referred to as collective or shared intention). Analyses of this attitude vary considerably. For example, a shared intention might be identified with (a) interlocking intentions, or as (b) an irreducibly plural subject. However, together they account for a distinctive attitude of social action.

The minimal consensus view appears to be that collaborative activity involves:

- a shared goal
- the resources of participants that are devoted to this goal (shared or otherwise)
- a coordination effort applied to these resources (individually or jointly)
- ideas and activities that occur in a political context

Shared goal

A shared goal is more than an idea or ideal. It is an outcome that participants in the tendering campaign are trying to achieve together. Fagan (2013, p. 5) offers a 'rock-climbing' analogy in which there are distinctions important for practical reasoning.

Irreducible plural subject

Everyone scaling the rock has the (shared) goal of getting to the top, but they do not share it in the sense of collaborative resourcing or reasoning. Each individual climber has the same goal, but without coordination, resources are duplicated.

An 'irreducible plural subject' is, by design or happenstance, present in synthetic tenders for major Australian Defence equipment. Political involvement is present in the design of an artificial competition in which *inter alia*, geopolitical sensitivities are at play. The outcome can and does produce instances of a 'thin' Australian prime contractor and a large transnational subcontractor (often with state or sovereign equity). Both organisations 'could climb to the top' independently; and the more powerful is always mindful of this opportunity and devotes resources accordingly. Meanwhile, the

less powerful devote resources to sustain the status quo. Attempts to stabilise political intervention is not necessarily effective as governments and politicians change, as do local political exigencies.

Interlocking intentions

Collaborative partners share the goal of reaching the summit jointly. This involves planning and coordination. Each partner participates in the social action of a joint venture. The efficiency and ultimate effectiveness of the joint venture is culturally moderated generally. van den Ende & van Marrewijk (2015) suggest that 'hybridisation' can offer an 'antidote to power struggles and cultural discrepancies'. Their case study is an insight into the ongoing energy required to achieve interlocking intentions.[212]

Resources

A participatory relation mediates between groups and their members, as the collaborative activity, in the tendering sense, brings together individuals from different groups (organisations). As each tender instance is a discrete project within the ongoing tender campaign, such participatory activity is constructed in episodes of joint action. It is socially constructed in the sense of being constituted by negotiations and agreements.

Parallel collaborations with one or more common collaborators

Lawrence et al. (2002) conducted a qualitative study of collaborative activities and focused on multiple instances of collaboration by a single organisation. [Translating to the research context suggests the same DMO in parallel collaborations with different tender enterprises.] This idea is extended to account for 'nominated subcontractors' who are defined in the tender specification, and are to be incorporated in all tender submissions. Nominated subcontractors usually have a unique product or skill.

[212] In their case study, legacy 'Soviet style' project management with its unaccountable collective responsibility and personal preference for a chain-of-command, interfaces with 'Western style' project management with its unconstrained accretion of individual responsibility and self-initiative.

Collaboration and change in institutional fields

Coordination and politics

Lawrence et al. (2002) explore the institutional effects of collaboration, focusing on the immediate local effects of individual collaborations, and the potential for field-level change (p. 281). They argue that beyond a source of change in institutional fields, collaborations offer an important source of innovation from pooled physical and ideational resources.

Collaboration is often entertained as a way to develop new solutions to complex problems; particularly where these problems are grounded politicly. Respective collaborators have their political connections that collectively, might present a critical mass of political influence.

In the context of this research project for example, government mandated protocols for communicating with external parties during a tender might be circumvented partially following the imprimatur of an eminent jurist (Seddon, 2013, p. 347). This solo ideational and political resource was sufficient to silence an existing power position and fundamentally change the institutional field.

Change in institutional fields

Lawrence et al. (2002) explored empirically, inter-organisational collaboration through which change in institutional fields can be initiated.

Despite the emphasis on inter-organisational relationships and interconnections in institutional theory, collaboration as a source of change in institutional fields appears not to have been widely examined.[213] The authors focus on the intermediate and local effects of collaboration as a stage in the change process within an institutional field, and in so doing, they help fill gaps in both institutional theory and collaboration literatures.[214]

In general, *institutional theory* has tended to focus on field-level dynamics – the level of multiple organisations – over relatively long periods of time and has spent minimal time exploring the micro sources of these macro changes. On the other hand, Lawrence et al. indicate that *research on collaboration* has tended to focus on immediate outcomes for

[213] This research project focuses on the quality of collaboration as a source of change in institutional fields; however, the principal intent considers the evolving/changing quality of collaboration as a precursor to according the collaboration with proto-institutional status. This also has not been widely examined.

[214] This research project considers the proto-institutionalisation of the collaboration.

participating organisations while largely ignoring the macro effects of collaboration on the institutional fields in which they occur.

Research methodology

Further, Lawrence et al. (2002) show how qualitative methodology can enhance understanding of institutional theory by using systematic cross-case analysis to develop strongly-grounded theory. According to the authors, qualitative methods have seldom been used in institutional theory literature, and they believe that their study provides an important alternative perspective on institutional processes.

From an institutional theory perspective, Meyer (2011, p. 800) suggests that methodologically, a taste for qualitative and highly interpretive research is sometimes involved.

Lawrence et al.(2002, p. 282) define four steps to their study**:**

1. Draw on the collaboration and institutional theory literature to argue that collaboration can act as a source of change in institutional fields, to describe how that process might work, and develop their research question.
2. Describe the methodology used in case studies of collaborations.
3. Present the results of the analysis of these cases and explore how collaborations can initiate change in institutional fields.
4. Draw some conclusions for the further study of collaboration and institutional theory.

Proto-institutionalism - Methodology - Metaphors - dead metaphors (taken-for-granted)

Powell & Colyvas (2011, pp. 293-294) suggest that by defining one domain in terms of another, metaphors provide a means of shaping the understanding of a new experience. The ubiquity of metaphors renders them taken-for-granted – in many respects invisible, yet very salient in terms of generating and transmitting meaning; for example, the Australian Defence organisation might identify an individual as a ‘Little Hitler’. Metaphors shape perceptions of situations, problems, and analogues for solving them. One might regard proto-institutionalisation as making metaphor dead. If the surprise of metaphor is in its novel application, then language may be understood as a reef of ‘dead’ metaphors – that is, no longer unfamiliar, but routine and taken-for-granted: no surprises.

Proto-institutional methodology

Lawrence et al. (2002, p. 289) advise that their study of institutional phenomena with respect to the processes of change in institutional fields, demonstrated:

- the utility of fine-grained, qualitative approaches with important methodological implications for research[215]
- that organisational institutionalism has important implications for the formation and maintenance of strategic alliances
- that the use of qualitative research methods such as narrative, does not necessarily mean abandoning a systematic and transparent approach to data analysis.

Narrative is about *how*, not *what*

Narrative, according to Holstein & Gubrium (2011, p. 349), is a social process (the *hows*), not a social product (the *whats*). Storytellers not only tell stories, they do things with them. The challenge is to capture narrative's active, socially situated dimensions by moving outside of story texts to the occasions and practical activities of story construction and storytelling.

That is, a move to the communicative conditions and resources surrounding how narratives are assembled, conveyed, and received, and to storytelling's everyday consequences. This links the story to its contextual interactional and institutional moorings that mediate conditions of narrative occasions.

Hence, the methodological intent guiding this research inquiry through its case studies.

The idea of a case

Instrumental case study in general[216] is a case of some phenomenon (a case of something) of interest. It is not so much about, for example, the superficial description of a project, but more about the deeper phenomena of the social, cultural, and institutional presence and influences on individuals.

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[215] In addition, this research project applied a causer-grained qualitative approach to the evolution of the political legitimacy of the proto-organisation (the tender enterprise).

[216] Stake (1995) delimits instrumental case study (in contrast to intrinsic and collective case study) whereby a case is studied because it can shed light on a particular issue, concept or problem rather than the prima facia case per se (Schwandt, 2007, p. 55).

The main units of analysis (Yin, 2009, p. 31) are likely to be organisations, conceptual sub-units of communication behaviours, and overlay constructs of these sub-units, all of which might be difficult to access and complex in structure[217] (Easton, 2010).

Case comparison

Ackroyd (2004, p. 157) advises that case comparisons are particularly relevant for *illuminating the characteristics of generative mechanisms* (Eisenhardt & Graebner, 2007, p. 27; Yin, 2009, p. 59).

Across-case middle range theories lead to improved generalisability because they consider additional contextual mechanisms in addition to the internal (project) mechanisms present in just one case (Bygstad & Munkvold, 2011). Across-case middle range theories are more abstract and therefore more portable than within-case theories. ('Middle range' because it is a *generalisable proposition* that can potentially be tested empirically (M. Easterby-Smith et al., 2012, p. 69).)

Analytic induction and grounded data

Superficially, analytic induction involves scanning the case data for categories of phenomena, for developing working typologies, and for indicating potential relationships among such categories. It involves arguing from particular facts or data to a general theme or conclusion. It seeks to capture aspects of the social world from the perspective of the actors[218] involved. According to Teddlie & Tashakkori (2009), these themes or theoretical criteria are 'grounded in the data, and are not given a priori' (p. 251). However, what does the oral perspective of an informant represent?

Transaction

In the context of *practice-centred research*, Antonacopoulou (2008, p. 166) argues that (recalled) action is not so much the product of inter-actions, but rather, *action emanating from trans-action*, where the relations and entities *co-evolve* in ongoing negotiation as constitutive of each other, and of the possibilities that their interrelationships can create productively.

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[217] Such access and complexity are discussed in the Methods chapter.

[218] **The person**: corresponds with the individual human being. **Agency**: refers to the various collectives to which an individual human being belongs and the personal powers and liabilities that the person accrues. **The actor**: refers to the social self of an individual that emerges from the person's social interaction as an agent. Thus, for example, agency is emergent from a person repositioning themself between different collectives (Thursfield & Hamblett, 2004, p. 125). That is, agents are purposive (Fleetwood, 2005, p. 203).

Recollection

In order to deepen the discussion, Wood (2008) reflects on *process philosophy*. He suggests that rather than the informant's recollection of an action being an abstraction from an actual experience devoid of duration, the *recollection* actually 'brings together into one real context of diverse perceptions, diverse feelings, diverse purposes, and so forth. It includes the perception and conceptualisation of a situation whose actuality only exists at that moment: its permanence is constituted in its passage' (p. 171).[219]

Together, these perspectives suggest that communication behaviours relate to a co-evolving relationship replete with diverse perceptions, feelings, and purposes including survival, and that any recollection of an observation of communication behaviours reflects evolving relationships, and the emotions of an informant: Picasso's *Guernica*.

Polar, atypical or negative case

The presence of a 'negative case' is not suggestive of recalcitrant tendencies or noisy data (Teddlie & Tashakkori, 2009, p. 251). However, Teddlie & Tashakkori appear to confuse potentially the discussion, on the one hand, by referring to grounded data that assumes no preconceptions, and on the other hand, by referring to cases that 'do not fit the *expected* pattern in qualitative data' (p. 251, emphasis added).

Flyvbjerg (2011) offers an alternate perspective in terms of cases with unexpected attributes. 'Atypical or extreme [polar[220]] cases reveal more by their propensity to activate the *basic* mechanisms in a situation' (pp. 301-316, emphasis added). In addition, atypical cases, particularly a dyad of polar cases, have the potential to identify one or more *absent* mechanisms in companion cases otherwise thought to be typical or normative. The presence of an atypical case[221] might expose latent influences, contrasting patterns in the data, and key constructs, thereby enhancing the emerging theory (S. L. Brown & Eisenhardt, 1997; Eisenhardt & Graebner, 2007, p. 27; Teddlie & Tashakkori, 2009, p. 251).

Case selection

Intensive (idiographic) case studies examine the effects of the environment, context, structure, and individual influences: their grounding.

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[219] with respect to what happens before and after

[220] attributed to Eisenhardt & Graebner (2007)

[221] Teddlie & Tashakkori (2009, p. 251) refer to *negative* cases and expected patterns but Flyvbjerg's (2011) use of *atypical* or *extreme* implies that an "expected pattern" is not a prerequisite and that an atypical case has a potential positive contribution to theory.

Grounded Theory vs. Grounded Study

Grounded Theory

According to Smithson (2010, p. 91), grounded theory and related approaches fall under the general heading (rubric) of interpretive research, which is oriented towards uncovering local, specific, context-dependent meanings and understandings of concepts and constructs.

Smithson offers the following observations:

- These approaches usually involve so-called qualitative methods, such as unstructured interviewing *or* textual analysis.
- The core of grounded theory reflects inductive procedures, first systematised by John Stuart Mill (Smithson, 2010, p. 91) as the 'constant comparative' method.
- These procedures sit at the opposite end of the deductive-inductive spectrum, from mathematics and analytic philosophy.
- Grounded theory research is well suited to identifying and describing 'sense-making'.
- Grounded theory can uncover the sense-making process that leads to the discovery, recognition, and identifications of communication behaviours.

Grounded theory is a methodology for inductively analysing qualitative data (Teddlie & Tashakkori, 2009, p. 251). Suddaby (2006) describes grounded theory building as, '... most suited to efforts to understand the *process* by which actors construct meaning out of inter-subjective experience' (p. 634 emphasis added).

The essence of grounded theory is theory development rather than theory testing; being iterative data acquisition with inductive and abductive data analysis. Charmaz (2006) argues that categories emerge (are grounded) from the researcher's interaction within the field and questions about the data.

Grounded Study

Grounded theory and a *grounded study* can be the same or quite different. As a methodology with various personified canons, grounded theory can provide architecture for conducting both an inquiry and data analyses (Charmaz, 2006; M. Easterby-Smith et al., 2012; Glaser & Strauss, 1967; A. L Strauss, 1978; A.L. Strauss & Corbin, 1998).

Ethnographic methods[222] and the case method in particular are, according to (Schwandt, 2007, p. 93), 'methods for generating and analysis qualitative data that are *grounded* in a commitment to firsthand experience and examination of some particular social or cultural phenomena'. (emphasis added)

Following such reasoning, this inquiry is 'grounded in the data' without following the *data fracturing* procedures associated with personified[223] grounded theory variants (Charmaz, 2006; Midgley, 2000; Partington, 1998).

Intertwined (mixed) methods with descriptive statistics

Asking 'how' and 'why' (*theory-building research*) can lead to explanations and policy considerations, while the 'what' and 'when' (generally *theory-driven research*) provides indicators of frequency, regularity and quantum, but little insight into policy options. Together, they have a potential to develop powerful insights and explanations (not predictions) of a reality; being a methodological objective of social constructionism and an expression of the analytical power of intertwined qualitative and quantitative (mixed) methods.

Fundamentally, mixed methods research questions are concerned with unknown aspects of a phenomenon and 'answered' with information that is presented in both narrative and numerical forms (Teddlie & Tashakkori, 2009, p. 129).

Fleetwood & Ackroyd (2004) address the scope of such a research task, and they explicate the qualitative and quantitative aspects of data:

> Complete explanations will implicate both the *context* in which events take place and the *meanings* attributed to events by key actors and groups of actors. The context of events is often best accounted for by *summarising or by description* [qualitative], and by establishing *how widespread* particular contextual features are [quantitative]. This points to the relevance of descriptive statistics[224] (p. 131 emphasis added).

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[222] **Ethnomethodology**: How individuals in everyday situations construct and maintain the social order of those situations (Strati, 2000, p. 98).

[223] methods attributed to particular scholars and their adherents

[224] Descriptive statistics are simply concerned with summarising the main characteristics of a dataset, particularly highlighting any patterns (and anomalies) that might not immediately be obvious. In contrast, inferential statistics goes beyond the data as given, recognising that it is likely to be only a sample of all possible values (the population), to draw inferences from the sample to its underlying population.
The purpose of descriptive statistics is to generate a compact representation of the patterns of relationships of the data themselves, without going beyond that to try to explain the underlying causal mechanisms at play (Mingers, 2004, pp. 168, 187).

Where there is no strong theoretical foundation for a research inquiry (this study), Venkatesh, Brown, & Bala (2013, p. 38) advise the use of:

- a qualitative study to inductively develop a theoretical perspective in terms of constructs and relationships, followed by
- a quantitative study to validate this theory

However, in the absence of a theoretical foundation for tendering, I argue that rather than a sequential validation of theory using quantitative data, an alternate grounded strategy *intertwines* the quantitative study (extensive survey) with the qualitative (intensive interview) study over a number of qualitative/quantitative iterations.

Teddlie & Tashakkori (2009, p. 207) describe this *within-strategy* for mixed methods data collection as involving the gathering of both qualitative and quantitative data using the same data collection strategy. They identify the ongoing data collection/data analysis as *crossover tracks* analysis where the qualitative and quantitative tracks 'talk to each other'. Findings from the two methodological strands *intertwine* and inform each other (Teddlie & Tashakkori, 2009, p. 269).

Indeed, Mingers (2004, pp. 181-182) advocates the use of multi-methodology in dealing with real-world situations, and which Wynn & Williams (2012) add:

> In accordance with the epistemological principles of [culturally, socially, politically, and physically] mediated knowledge, unobservability, and the possibility of multiple mechanisms, we as researchers should endeavor to approach the underlying reality from multiple viewpoints in order to overcome our perceptual limitations (p. 803).

In contrast, Smithson (2010) cites Wagner & Berger (1985): 'Any topic regarded as a "field" has "orienting strategies" that incorporate widely agreed-upon core concerns, goals, meta-theoretical concepts and presuppositions, research standards and methodological prescriptions. [Therefore], mixing methods is less stable and is continually debated and reassessed (p. 95)'.

Denzin & Lincoln (2011f, p. 716) also appear troubled with these commentaries on methodological pluralism, but, in a respectful gesture, they remain 'keen observers'. This might reflect an adherence to foundational philosophies with a singular ontology, in contrast to an engagement with multiple ontologies (Aaltonen, 2009). Meanwhile, Ackroyd (2004, p. 138) ponders the potential cultural bias of critics, but he does not elaborate. Perhaps the contrast between Civil Law and Common Law cultures is a point of departure.

Zachariadis, et al.(2013, pp. 864-865) conclude this topic by recognising the necessary research pragmatics of mixing methods, as well as the need to 'deploy the conjoined intensive [qualitative] and extensive [quantitative measurement] processes systematically'.

Measurement

Strati (2000, p. 171) reasons that the theoretical paradigm used to approach an understanding of organisations will influence the mechanics of measurement.

Further, Strati (2000, p. 167) explains that measurement does not yield unimpeachable evidence about the organisational aspect being investigated, but it does assign a value and affords the illumination of patterns. The result often brings out a problem which requires further investigation.

An analogy of relevance for this research inquiry considers a jigsaw puzzle of some 200 pieces lying randomly on a table. Over time, family members both individually and in *ad hoc* groups, ponder the puzzle and make some progress with connections. Regular snapshots offer a visual chronological statement reflecting a pattern of progression towards a joint consciousness of the puzzle in terms of the geometry of pieces, the shapes being searched for, and the gaps of insight (known unknowns). At different times, family members become aware of the unpredictability of the amoeboid enterprise representing their joint cognition; while keenly aware of the required rectilinear image on the front of the box. Such is the nature of competitions for high cost politicly-sensitive Defence equipment.

How might a non-communicating tender 'collaboration' with the same puzzle but presenting different chronological 'amoebic' progressions be interpreted? What can be said about group consciousness and joint cognition? In a competition, which team affords greater confidence in terms of its joint enterprise? And what can be said about a team where the 'amoeba' shrinks in size (unknown unknowns)? All these questions remain pertinent in the following chapters on case-data analysis where the emphasis is on the changing chronological patterns of perceptions rather that testable evidence.

Measurement in organisation research often seeks to quantify the influence of one organisational aspect on overall organisation dynamics and processes. They are mainly *used for comparative analysis* of organisations. Structuralist models[225] of organisations

[225] **Structuralism**: a way of thinking about the world and a methodology for investigating the world that is concerned with identifying and describing its underlying structures that cannot be observed but must be inferred. The idea of 'structure' might be grammar in a language, ceremonies, laws etc., that are structures in a larger whole, such as culture. The organisation of culture becomes intelligible through an analysis of its relational structures (Schwandt, 2007, p. 278).

look for variables that can influence the organisational structure and it measures the strength of this influence (Strati, 2000, p. 169).

In this research project, Bayesian Belief Networks (Agena, 2004; de Waal & Ritchey, 2007; Nicholson, Twardy, Korb, & Hope, 2008) are used to gain an insight into the 'jigsaw puzzle teams' and their changing situational awareness – 'their chronological amoebic progressions'.

Researching an organisation

Organisation *per se* is not measurable, for it does not exist as an objective social reality that is comparable with similar social entities.

An organisation is defined as a corpus of thought, so that analysis of the organisational actors' thinking is crucial.

However, the researcher can only know what the participant says what they think. They will reveal only part of it in the course of the relationship established between the researcher and the subject. The search for meaning might be obstructed without effective personal relations that are established over multiple engagements between researcher and participant.

Researching tendering organisations: a search for meaning

Researching organisations does not suggest a 'search for law'. It is a search for meaning. This includes issues of plausibility and truth; the distinction between exact representation and simulation; between subjective reinvention and objective reconstruction (Strati, 2000, p. 203).

The study of tendering organisations as socio-political contexts reflects a collective social construction by a variety of participants – including the researcher – who interweave through endless negotiation; hence the idea of an ongoing tender campaign ('endless negotiation') with its episodic tender opportunities. Both missions are searching for meaning and proffering meaning.

A methodology schema for the social construction of concepts

The search for meaning might begin with the social construction of domain and case specific concepts, and Strati (2000, p. 135) proposes a schema in Table 11.1 following:

<table>
<tr><th colspan="3">METHODOLOGY SCHEMA FOR THE SOCIAL CONSTRUCTION OF CONCEPTS</th></tr>
<tr><td colspan="2">FIRST ORDER
SUBJECTS (PARTICIPANTS)
• CONCEPTS RELATE TO THE PARTICIPANTS WORKING WITHIN THE ORGANISATION AND THE WAY THEY MAKE SENSE OF ORGANISATIONAL FACTS.</td><td rowspan="2">SECOND ORDER
RESEARCHER
• CONCEPTS ARE USED TO UNDERSTAND AND DESCRIBE THE MEANING, PATTERNING AND RELEVANCE OF FIRST ORDER CONCEPTS.
• CONCEPTS AND CONSTRUCTS ARE THE WAY THAT RESEARCHER MAKES SENSE OF THE ORGANISATION AND CONTEXT AS ORGANISATIONAL PHENOMENA DO NOT SPEAK FOR THEMSELVES.
• THE RESEARCHER DEALS WITH FIRST ORDER FACTS: THE SITUATIONAL, THE HISTORICAL AND THE MEDIATED INTERPRETATIONS USED BY PARTICIPANTS.
• SECOND ORDER CONCEPTS ARE THEREFORE INTERPRETATIONS BY THE RESEARCHER OF THE INTERPRETATIONS BY THE PARTICIPANTS.</td></tr>
<tr><td colspan="2">DATA</td></tr>
<tr><td>PRESENTATIONAL
• ABSTRACT AND IDEOLOGICAL IN NATURE.
• CONSTRUCTED BY PARTICIPANTS</td><td>OPERATIONAL
• RUNNING EVENTS</td></tr>
</table>

Table 11.1 Methodology: Schema for the social construction of concepts, constructs and meaning. Adapted from (Strati, 2000, p. 135)

Strati (2000, pp. 175-203) provides the following guidance:

- use interviews to identify variables or concepts and return aggregate results back to participants for validation; then process the structured interviews
- illustrate ‘influence relations’ among the variables in a causal map
- pooling [not aggregating] of data can cause contradictions and illogicality
- ambiguities will arise from recalling the same issue from different participants
- past experiences have to be evoked [from participants]
- making sense requires the introduction of incoherence (lacking logic) into beliefs

The move from the individual ‘behaviour map’ to the organisation ‘purpose map’ derives from the epistemological foundation of the cognitive approach, where cognition is:

- a subjective activity that is individual as well as mental
- an activity where the individuals determine the attribution
- an individual activity which occurs and can be analysed only in its interdependence with the other participants’ individual activities

- aggregate measures are attributed to the individual first and then translated to group 'purposes'
- global measures [such as perceived organisational legitimacy] are attributed directly to the group holistically

Concluding comment

This chapter reflects guidance for designing a framework for methodology in the context of management research drawn to social constructionism. It presents experiences rather than a canon.

In the practice of establishing and maintaining a project culture, physical models and/or images of the end product (deliverable) are displayed liberally. The objective is to promote a common mission focus. Strati (2000, p. 171) does the same for a management research methodology.

He presents the meta-theoretical level of management research – its model – comprising four groups of assumptions revised frequently:

- **Ontology** - the very essence of organisations
- **Epistemology** - the grounds of organisational knowledge
- **Human Nature** - conceptions of the researcher and participants in organisational life
- **Methodology** - as employed in organisational analysis.

There is no such practical entity as a 'plan' but there is 'planning'. So too, Strati's meta-theoretical model requires continuous revision as the research program progresses in a politicised context.

The paradigm and the meanings of presented research results stand side-by-side. They do not present reality. They are interpretations that make momentary sense.

Summary

Management research methodology is challenging as it needs to guide research into human behaviour presenting in a context of constant change. The framework guiding research deals with reflective reasoning (not prediction) about changing social influences and changing relational patterns. Some key points have emerged from this chapter:

- Contextualism is a social construct and so is social constructionism. Context itself can shape our view of the world. At play are the motivating influences of vested interests.
- Social construction as a principle or expression is delimited from social constructionism as epistemology.
- Meaning is mediated by ideology and politics and the manner in which evidence is obtained. Evidence can only inform and educate judgement but not supplant it.
- Even if a claim is fabricated, it remains useful to understand what makes it possible for such a belief to be shared widely.
- Meaning links events in context.
- Comparative patterns of behaviour are the object of study.
- The constructivist paradigm research findings present in terms of the criteria of pattern theories.
- This particular research project is characterised as 'Mode 2' in that knowledge is derived from operating within a context of application.
- Ideally, research and policy making should progress both theoretically and chronologically in tandem.
- The use of quantitative research methods does not necessarily mean abandoning a systematic and transparent approach to data analysis. Descriptive statistics can expose patterns and relationships in the form of co-relations.
- Analytical induction involves scanning the case data for categories of phenomena for developing typologies and for indicating potential relationships among such categories.
- Human action is not so much the product of *interaction*, but rather, action emanating from *trans-action* where the relations and entities co-evolve in ongoing negotiations as constitutive of each other, and of the possibilities that their interrelationships can create productively.
- A recollection brings together into one real context of diverse feelings, diverse purposes, and so forth.
- Atypical cases might expose latent influences, contrasting patterns in the data, and key constructs, thereby enhancing the emerging theory.

- Ethnographic methods and the case method in particular, are methods for generating and analysing qualitative data that are grounded in a commitment to first-hand experience and examination of some particular social or cultural phenomenon. This contrasts with the data fracturing associated with 'grounded theory'.
- Mixed methods research questions are concerned with unknown aspects of a phenomenon and 'answered' with information that is presented in both narrative and numerical forms.
- The within-strategy form of mixed methods data collection involves getting both qualitative and quantitative data using the same data collection strategy. The qualitative and quantitative tracks 'talk to each other'. Findings from the two methodological strands intertwine and inform each other.
- Measurement does not yield unimpeachable evidence about the organisational aspect being investigated, but it does assign values and affords presentation of patterns.
- Organisation is not measurable *per se*, as it does not exist as an objective social reality. However, an organisation is defined as a corpus of thought so that analysis of the organisational actors' thinking is crucial. Only certain aspects will be revealed; hence the need to establish effective relations between researcher and informant.
- The study of tendering organisations as social contexts reflects a collective social construction by a variety of participants – including the researcher – who interweave through endless negotiations.
- Researching organisations is a search for meaning where concepts are used to (a) make sense of organisational facts and (b) to understand patterns of perceptions and behaviour.

Next chapter

Making sense of the disposition or social pathology of organisations and understanding patterns of perceived behaviours is essential for theorising about the tender enterprise and its companion tender campaign. In tandem with this chapter, the following chapter brings focus to the methodology's operational schema. While underwritten by participant anecdotes, stories, and recalled-perception surveys, the methods and techniques combine to juxtapose aggregate measures of internal perceptions of purposive behaviours with global perceptions of organisational legitimacy; noting that social constructions of 'perceptions' are, for practical purposes, prevailing 'reality'.

Chapter 12
Methodology:
Operational Schema

In the previous chapter, the case is argued for a framework of methodological thought that might guide the design of a bespoke methodology for inquiring into the social pathology of a tender enterprise; of its collaborating organisations and its companion tender campaign. Objectively, a methodology is sought that might inform and enhance a social constructionist epistemology of management research focussed on the process of politicly-sensitive Defence equipment tenders.

This chapter provides a methodological schema with which the subsequent methods chapters might operate; recognising that discussions on methodology and methods tend to overlap. In particular, the chapter divides the methodological exposure into *global* measures of organisational legitimacy and *aggregate* measures of purposive behaviours that reflect external and internal perspectives respectively.

Global measures: external perceptions of organisational legitimacy

From Chapter 8. *Epistemology: Morphogenetic Reasoning*, Table 12.1 replicates the systemic outcomes for four ideal-type organisations.

2ND ORDER RELATIONS:	CONTRADICTIONS (INCOMPATIBILITIES / LIABILITIES)		COMPLEMENTARITIES (COMPATIBILITIES / BENEFITS)	
	NECESSARY CONTRAD'G INTERNAL RELATIONS	CONTINGENT CONTRAD'G EXTERNAL RELATIONS	NECESSARY REINFORCING INTERNAL RELATIONS	CONTINGENT REINFORC'G EXTERNAL RELATIONS
3RD ORDER SYSTEMIC OUTCOMES:	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOGENESIS	CULTURAL MORPHOSTASIS / STRUCTURAL MORPHOSTASIS	CULTURAL MORPHOGENESIS / STRUCTURAL MORPHOGENESIS
ORGANISATION CHARACTER : IDEAL-TYPES SITUATIONAL LOGICS	REACTION [COUNTERACTING]	ELIMINATION [COMPETING]	PROTECTION [DEFENDING]	OPPORTUNISM [CAPITALISING]
KEY STAKEHOLDERS:	C. DEFENCE MINISTER'S POLITICAL OFFICE	B. CONTRACTOR	C DMO	D LOBBYIST

Table 12.1: Morphogenetic disposition of four ideal-type organisational social pathologies. Extreme cases of pure structural and cultural stasis (C) or pure genesis (D) in the right-hand frame

Rao & Kenney (2011, p. 352) (previously referenced) suggest that from an institutional perspective, proto-organisational 'forms' arise when actors (collaborators) with sufficient resources, see an opportunity to realise interests that they value highly (such

as winning a tender), but first they must legitimate both the theory and values (manifesto) underpinning the form of the proto-organisation; and in so doing, begin the quest for proto-organisational institutionalism.

Table 12.1 presents the two extreme ideal-type organisations (**C**) and (**D**), where (**C**) presents a 'pure' *reproduction* of both Culture and Structure (Ideational Power Structure and Positional Power Structure) and (**D**) presents a 'pure' *transformation* of both power structures.

Further, the concept of 'ideal-types' in Table 12.1 needs to give way for a more rational practical outcome for any organisation that is going to have tendencies towards a proportional mix of stasis and genesis[226]; both with respect to ideational power structures *and* positional power structures (M. Archer, 1995, p. 140; Bakken & Hernes, 2008, p. 35; Porpora, 31 March 2015).

The ideational (policies) power structures of the focal organisation in the field, such as the contracting client – DMO (**C**), are likely to be emulated by others such as Contractor(s) (**B**) who rely on being perceived as culturally similar (Cultural Reproduction of language, culture, and so forth); particularly as these two organisations are potential signatories to a long-term contract.

Meanwhile, the DMO (**C**) and the Defence Minister's Political Office (**A**) rely on positional power for influence – Structural Reproduction; the unelected (**A**) purporting to exert influence on the bureaucratic (**C**) (see Owen-Smith & Powell, 2011, p. 598).

The lineaments of extreme forms of pure reproductive stasis (**C**) and pure transformational genesis (**D**) in Table 12.1, are re-presented in Table 12.2 (below).

Both organisations experience instability. The difference is that the case of 'pure reproduction' aims to sustain known positional and ideational power structures, while 'pure transformation' aims to be 'perfectly' agile in its ideas about positional and ideational power. Both organisations apply energy to this objective. A hermit existence would ensure that an organisation degenerates naturally (entropy).

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[226] **Autopoiesis**: Such issues of continuity and change are not seen as mutually exclusive, for organisations are both reproductive of their basic features while being open to change (Bakken & Hernes, 2008, p. 35).

- An organisation conceptually sustains theoretical 'morphogenetic' process cycles (influences) on its 'Structure', 'Culture' and 'Agency', but presents ***actual blended outcomes*** of Institutional and Resource-dependence identities.
- When 'Ideational Power' is more consequential for 'Positional Power', there is an *outcome* tendency towards genesis (overcoming obstacles).
- When 'Positional Power' exerts more temporal influence over 'Ideational Power', there is an *outcome* tendency towards stasis (retaining benefits) (M. Archer, 1995, pp. 308, 323-324).
- **Exploitation**: involves a search directed towards the better utilisation of existing competencies:
- **Exploration**: involves a search directed towards new knowledge and competencies (Haunschild & Chandler, 2011, p. 637).

		DISPOSITIONS OF ORGANISATIONAL IDENTITY	
		IDEAL-TYPES IMPLY THE POTENTIAL FOR BLENDED ORGANISATIONAL IDENTITY	
		PROCEDURAL DISPOSITION (EXPLOITATION)	**RESOURCE-DEPENDENCE DISPOSITION (EXPLORATION)**
		C TENDENCY TOWARDS MORPHOSTASIS	**D TENDENCY TOWARDS MORPHOGENESIS**
		○ BIAS TOWARDS CONFORMING TO EXTERNALLY IMPOSED CRITERIA OF ACCEPTABLE BEHAVIOUR	○ BIAS TOWARDS THE INSTRUMENTALITY OF LEGITIMACY
		○ TENDENCY TOWARDS CLOSED-SYSTEM FRAME OF REFERENCE	○ TENDENCY TOWARDS OPEN-SYSTEM FRAME OF REFERENCE
		○ MEASUREMENT & REACTION	○ PREDICTION & CONTROL
		○ PASSIVE ACQUIESCENCE	○ STRATEGIC ADAPTATION
EXPLANATORY FACTOR	**EXTERNAL PRESSURES AND EXPECTATIONS**	○ **SETTLED CULTURE**	○ **UNSETTLED CULTURE**
CONTEXT OF ORGANISATIONAL BEHAVIOUR	• Organisational choice [decision-making] is constrained by multiple external pressures	• Institutional environment • Non-choice behaviour	• Task/activity/project environment • Active choice behaviour
	• Organisational environments are collective and interconnected	• Conforming to collective norms and beliefs • Invisible pressures	• Coping with interdependencies • Visible pressures
	• Organisational survival depends on responsiveness to external demands and expectations	• Isomorphism • Adherence to rules and norms	• Adaptation • Management of scarce resources
MOTIVES OF ORGANISATIONAL BEHAVIOUR	• Organisations seek stability and predictability	• Persistence & explicitness • Habit and convention	• Reduction of uncertainty & ambiguity • Power and influence
	• **Organisations seek legitimacy**	• Social worthiness • Conformity to external criteria	• Resource mobilisation • Control of external criteria
	• Organisations driven by vested interests	• Interests are institutionally defined • Compliance is self-serving • **Organisation is understandable**	• Interests are political and calculative • Noncompliance is self-serving • **Organisation is vital**
PHILOSOPHICAL HERITAGE		**Socrates**	**Plato**
ONTOLOGICAL PREMISE *It is worth noting here that Archer's morphogenetic [approach] is perfectly compatible with Chia's (2003) 'becoming' Ontology and the Heraclitian notion of continual flux – with one important caveat. There is no reason why the phenomena that are in flux are only linguistic constructs. For critical [and social] realists, material, ideal, artefactual and social entities are all, typically, in a state of becoming.* (Fleetwood, 2005, p. 13)		"The gods only love something if it is pious itself." Because the organisation's **∗OPERATION∗** is understandable, then it is desirable, proper, or appropriate.	"What makes something pious is that the gods love it." Because of the holistic **∗ESSENCE∗** of the organisation, then it is desirable, proper, or appropriate.
ONTOLOGICAL COROLLARY As Archer's (1995, p. 140) morphogenesis is always an imperfect transformation of morphostasis, it is also perfectly compatible with Chia's (2003) 'being' Ontology and the Parmenidean notion of continual reproduction.		**Parmenides** Reality is permanent and unchanging – a '**being**' ontology.	**Heraclitus** Reality is an evolving process of change – a '**becoming**' ontology.
MORPHOGENETIC REASONING	• **EXTREME OUTCOMES** (C) & (D) OTHERWISE STASIS AND GENESIS OCCUR PROPORTIONALLY	• **STASIS** (REPRODUCTION ONLY) A CONSTRAINED RULE-BASED ORGANISATION (C)	• **GENESIS** (TRANSFORMATION ONLY) A CREATIVE INTEREST-BASED ORGANISATION (D)

Table 12.2: Extreme organisational identities. Informed by: Aaltonen (2009); Archer (16 June 2014, 1995, 1998); Chia (2003); Oliver (2012, pp. 271-274); Scott & Meyer (2012, p. 119); Suchman (2012, pp. 5-6); Thursfield & Hamblett (2004, p. 117).

In Table 12.2 (above):

- (**C**) (pure reproduction) seeks legitimacy by expending energy in conforming to expected external criteria; thereby being recognised as socially worthy
- (**D**) (pure transformation) seeks legitimacy by demonstrating an ability to mobilise financial, material, political and diplomatic resources engaged with ongoing policy development for the benefit, in this instance, of the tender project and its political value-for-money
- Such pure dispositions might be considered as extreme cases, and therefore, (**C**) and (**D**) should be understood as dispositions with *tendencies* towards their respective aims.

Underscoring these positional ideas are the cosmologies of Parmenides and Heraclitus (Robert Chia, 2003). For Parmenides, reality is unchanging; a *being* ontology. For Heraclitus, reality is an evolving process of change; a *becoming* ontology. Non-extreme case organisations will have a proportional co-existing mix of dispositions.

Institutional theories about the social pathology of organisations have included regulative perspectives, normative perspectives, and cultural-cognitive perspectives; with respective legitimacy claims of being legally sanctioned, morally governed, and recognisable, comprehensible, and supported culturally (W. Richard Scott, 2012b). Just how these perspectives and claims play out in the pathologies of organisational institutionalism is considered in the next section.

The consitution of organisational dispositions

Suchman (2012) explains how the categorical assumptions in Table 12.3 (below), founded in open systems theories, have reconceptualised organisational boundaries as porous and problematic – hence, socially complex; the implication being that within an organisation, these categorised assumptions might *co-exist* in varying proportions.

Organisational legitimacy

Suchman explains how institutional theories have stressed that many of the dynamics in the organisational environment stem not from technological imperatives, but rather, the *concept of organisational legitimacy* that reflects an amalgam of cultural norms, symbols, beliefs, and rituals. (emphasis added)

Deephouse & Suchman (2011, p. 49) promote organisational legitimacy as a central concept in organisational institutionalism. Of methodological importance for this study, their research indicates that, 'Much of the new literature has been highly theoretical, invoking legitimacy as an explanatory concept rather than examining it as an empirical property'.

DIFFERENT ASSUMPTIONS ABOUT THE NATURE OF SOCIAL REALITY AND THE WAYS IN WHICH ACTORS UNDERSTAND LEGITIMACY AND MAKE CHOICES IN SOCIAL SITUATIONS			
PRINCIPAL DIMENSIONS OF SOCIAL STRUCTURE ALONG WHICH, ASSUMPTIONS VARY	**REGULATIVE:** The rules of the game, which constrain, enable and regularise behaviour. Emphasis on conformity	**NORMATIVE:** Rules that introduce a prescriptive, evaluative and obligatory dimension into social life. The concept stresses a deeper, moral base for assessing legitimacy. Normative controls are much more likely to be internalised than are regulative controls, and the incentives for conformity are therefore likely to include intrinsic as well as extrinsic rewards.	**CULTURAL-COGNITIVE:** The shared conceptions that constitute the nature of social reality and the frames of meaning making. Internal (personal) interpretive processes are shaped by external social reality. Legitimacy comes from conforming to a common definition of the situation, frame of reference, or a recognisable role or structural template: cognitive consistency. The cultural-cognitive mode is the DEEPEST LEVEL because it rests on preconscious, taken-for-granted understandings.
BASIS OF COMPLIANCE	Expedience	Social obligation	• Taken-for-grantedness. • Shared understanding
BASIS OF ORDER	Regulative rules	Binding expectations	Constitutive schema
MECHANISMS	Coercive	Normative	Mimetic
LOGIC	Instrumental	Appropriate	Orthodox
INDICATORS	• Rules • Laws • Sanctions	• Certification • Accreditation	• Common beliefs • Shared logics of action
AFFECT	Fear, Guilt/Innocence	Shame/Honour	• Isomorphism • Certainty/Confusion
CLASSES OF LEGITIMACY	Legally sanctioned	Morally governed	• Comprehensible • Recognisable • Culturally supported

Table 12.3: Distinct perspectives of organisational legitimacy. Adapted from Scott (2012b, pp. 223, 231).

Table 12.3 presents Scott's (2012b) delimiting of 'regulative', 'normative' and 'cultural-cognitive' dispositions towards the legitimacy of organisational institutionalism. In practice, an organisation's 'theoretical account of itself'[227] might be expressed with 'phenomenological intentionality' as it 'reaches out' in a quest for

[227] Fleetwood (2004, p. 67) posits that a legitimate organisation must *offer* an 'acceptable theory' of itself.

knowledge and legitimacy. Green & Li (2009, p. 13) reflect on this phenomenological tradition, and make the point that institutionalism is inherently a linguistic process[228] (interaction) that *inter alia*, employs institutional logics for reasoning about legitimacy.

Further, Kraatz & Block (2011, p. 247) offer a high-level understanding of legitimacy as a generalised perception or assumption that the actions of an entity are *desirable, proper, or appropriate*.

Overall, securing legitimacy requires a strategic trust-building modality. What is 'acceptable' is a matter of *external perception* about the adequacy of the *entire* (global) package (S. E. Green & Li, 2009, p. 13); a global lens on an organisation's perceived appropriateness and hence, legitimacy (R. Greenwood et al., 2012, p. xx).

These ideas reflect in the central tenets of the methodology guiding this research project:

1. The organisation seeks to evince legitimacy from stakeholders; its 'reaching out' as 'phenomenological intentionality' in a quest to share information; that is subsequently reflected in the research data analysis of aggregate measurements.
2. Based on perception of affordances[229], external stakeholders accord legitimacy to the organisation using global assessments that are analysed holistically.

Empirical limitations

Within the limitations of this research project, three empirical streams of case-based data are addressed:

1. participant recollections of temporally perceived behaviours and atmospherics restricted to the dyad of Contractor (**B**) - DMO (**C**) Client: two cases

[228] In contrast to the institutional idea of prevalence, Glynn & Abzug (2002) suggest that, 'The degree of isomorphism—that is, the prevalence of a particular organizational form or feature—is an index of consensus about such boundaries, which are themselves socially constructed. Such rules delineate the salient attributes that codify and *constitute* identity to create an essential organization self. Further, conformity to these constitutive rules appropriately and legitimately *categorizes* an organization into referent fields.'

[229] **Affordances**: the concept concerns what the environment offers its inhabitants – what it provides, furnishes or affords. The materiality of objects and artefacts afford or is made available to certain users and not others. **Dynamic affordances**, be it an artefact, technology or discourse, dynamically changes with human interaction. From the *social constructionist* perspective, material aspects of organisational environments and artefacts tend to be given a secondary role. In contrast, *materialist realism* highlights the specific ways in which particular artefacts and environments are materially constituted and how this may affect different users in both physical and social terms (Thanem, 2008, pp. 26-28). Mingers, et al. (2013, p. 799) suggest that affordances have the prospect of operationalising realism. Within a long piece of string, the intertwined short fibres offer 'affordances' to end users.

2. holistic mutual perceptions of organisational legitimacy enjoining the Defence Minister's Political Office (**A**), Contractor (**B**), DMO (**C**) and Lobbyist (**D**): the collaboration: two cases
3. over 150 hours of participants' anecdotal stories and narratives mediate the first two streams of data analysis: two cases

Empirical classes of legitimacy

Suchman (2012, p. 9) explains how the classes of legitimacy (see 'Organisation disposition' in Table 12.4 below) reflect different behavioural dynamics. These organisational dispositions of legitimacy incorporate and expand on the perspectives in Table 12.3 above.

- **Pragmatic legitimacy** (incorporating 'Regulative' from Table 12.3): claims about the *self-interest* of proximate organisations with whom information is exchanged, but accounting for a power-dependence relationship (M. C. Suchman, 2012, p. 10)
- **Moral legitimacy** (incorporating 'Normative' from Table 12.3): summoning *collectively-valued* ends based on normative approval, that is, moral legitimacy is 'sociotropic' – it rests *not* on judgments about whether a given activity benefits the evaluator, but rather on judgments about whether the activity is 'the right thing to do' (B. Flyvbjerg, 2001, p. 130; Russell, 2010, p. 52)
- **Cognitive legitimacy** (incorporating 'cultural-cognitive' from Table 12.3): based on 'comprehensibility'[230] and 'taken-for-grantedness'[231] and is concerned with satisfying collective standards of appropriate behaviour by explaining or justifying the social order in a way that motivates actors to enact actions within a comprehensible, meaningful world (Berger & Luckmann, 1966; S. E. Green & Li, 2009, p. 13)

For Suchman (2012, p. 3), legitimacy has become an anchor-point of a vastly expanded theoretical apparatus addressing the pragmatic, moral, and cognitive forces (see Table 12.4) that constrain and empower organisational actors with agency (M. Archer, 1995, pp. 118, 130).

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[230] The social world as a chaotic cognitive environment, in which participants must struggle to arrange their experiences into coherent, understandable accounts (M. C. Suchman, 2012, p. 14).
[231] The social world depicts a more sedate scene of cognitive coherence and glacial, integrative change. According to this view, institutions not only render disorder [complexity or chaos] manageable, they actually transform it into a set of inter-subjective "givens" that submerge the possibility of dissent (M. C. Suchman, 2012, p. 14).

These dispositions of pragmatic, moral and cognitive legitimacy, as understood in Table 12.3 above, together with the extreme or terminal dispositions of organisational identity described in Table 12.2 above, combine into the conceptual model of Table 12.4 below.

At the bottom of Table 12.4, the archetypal organisations and their signalling characterisations are indicative rather than definitive (Donath, 10 May 2007); each ideal-type organisation displays its silo of grammatical elements of legitimacy. Indeed, Donath (26 October 2011) makes the point that the design of non-wasting signals[232] as collective energy, and the disposition of their temporal deployment might provide a reliable indicator of organisational legitimacy.

Signalling

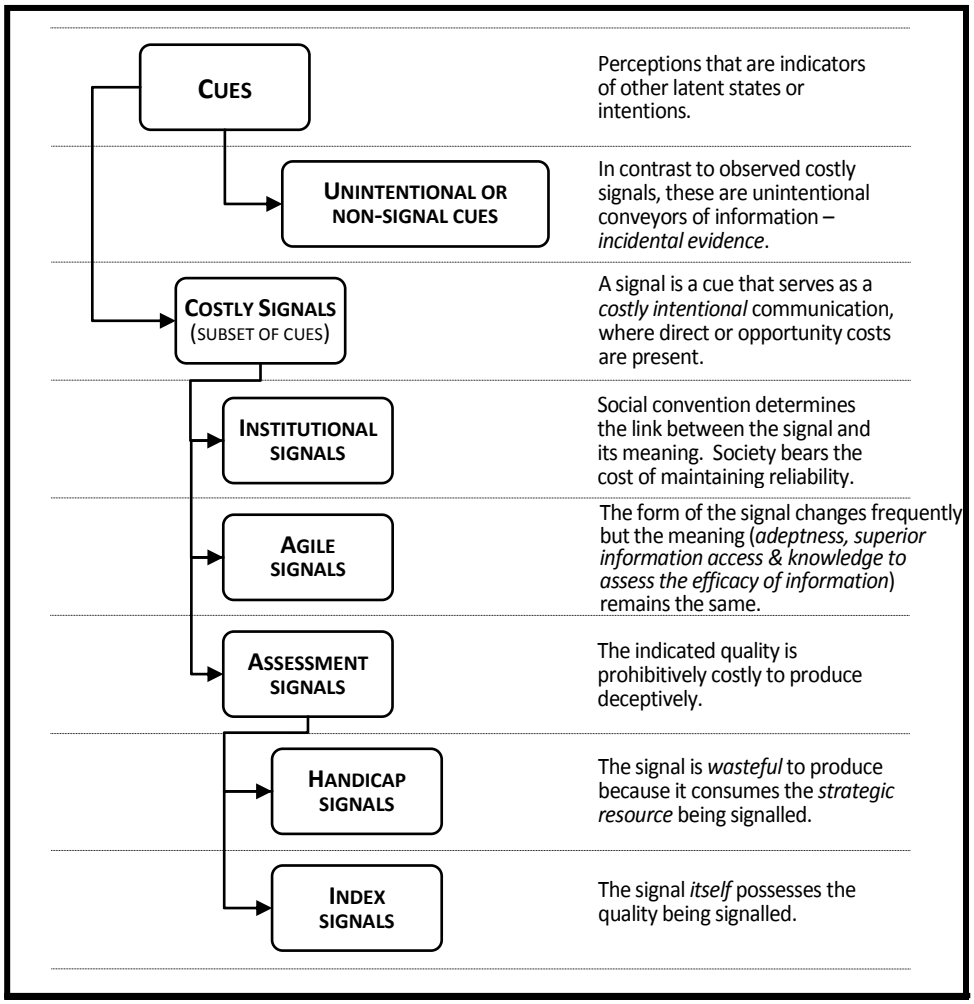

Figure 12.1: A structured lexicon of costly signals. Engineered and adapted from Donath (26 October 2011)

[232] not using up the resource that is being displayed, such as burning cash to indicate that the owner has surplus cash

GRAMMATICAL RUBRICS OF ORGANISATIONAL LEGITIMACY: RESEARCHER-IMPOSED HETEROGENEOUS CATEGORIES REFLECTING CONTINGENT GLOBAL PERCEPTIONS

A TEMPLATE FOR REGISTERING PERCEIVED LINEAMENTS OF ORGANISATIONAL LEGITIMACY.		THE OPERATIONAL 'BEING' OF AN ORGANISATION IS PERCEIVED AS DESIRABLE, PROPER OR APPROPRIATE WITH ITS BIAS TOWARDS THE REPRODUCTION OF INSTITUTIONAL PROCEDURES, CULTURE AND SOCIETY		THE 'BECOMING' ESSENCE OF AN ORGANISATION IS PERCEIVED AS DESIRABLE, PROPER OR APPROPRIATE BECAUSE IT TRANSFORMS ITS PROCEDURES, CULTURE AND SOCIETY TO CHANGING STRATEGIC RESOURCE REALITIES	
		MORPHOGENETIC OUTCOME BIAS TOWARDS CONSTRAINED RULE-BASED STASIS		MORPHOGENETIC OUTCOME BIAS TOWARDS CREATIVE INTEREST-BASED GENESIS	
CLASSES OF LEGITIMACY	**TEMPORAL TEXTURES**	**EPISODES OF SHARED OPERATIONAL INTERESTS**	**ENDURING TRUST-BASED RELATIONS**	**EPISODES OF SHARED OPERATIONAL INTERESTS**	**ENDURING TRUST-BASED RELATIONS**
PRAGMATIC LEGITIMACY - ACCORDED BY STAKEHOLDERS THE SELF-INTERESTED CALCULATIONS OF AN ORGANISATION'S MOST IMMEDIATE STAKEHOLDERS.		**A1. ELEMENT OF PRAGMATIC EXCHANGE LEGITIMACY:** Is based on the expected value of the organisation's policies.	**B1. ELEMENT OF PRAGMATIC INFLUENCE LEGITIMACY:** Is based on a perception that the organisation will be responsive to their strategic interests.	**C1. ELEMENT OF PRAGMATIC INTEREST DISPOSITION:** Personification of the organisation occurs in response to holistically aligned interests and values.	**D1. ELEMENT OF PRAGMATIC CHARACTER DISPOSITION:** Personification of the organisation occurs in response to evinced honesty and trustworthiness.
MORAL LEGITIMACY - ACCORDED BY STAKEHOLDERS A POSITIVE NORMATIVE EVALUATION (DOING THE RIGHT THING) OF THE ORGANISATION AND ITS ACTIVITIES.		**A2. ELEMENT OF MORAL CONSEQUENTIAL LEGITIMACY:** Is based on the instrumentally-rational pursuit of particular goals and the organisation's past performance.	**B2. ELEMENT OF MORAL PROCEDURAL LEGITIMACY:** Is based on the value-rational fulfilment, by the organisation, of temporal rules for proper behaviour against politically acceptable policies and procedures.	**C2. ELEMENT OF MORAL PERSONAL LEGITIMACY:** Is based on the transitory and idiosyncratic wisdom and experience of the organisation's (charismatic) leadership.	**D2. ELEMENT OF MORAL STRUCTURAL LEGITIMACY:** Reflects the organisation's traditional authority based on the longstanding designation of certain actors being worthy of exercising defined powers.
COGNITIVE LEGITIMACY - ACCORDED BY STAKEHOLDERS • **COMPREHENSIBILITY LEGITIMATION – AN EPISODIC COGNITIVE DYNAMIC:** CULTURAL MODELS FURNISH PLAUSIBLE EXPLANATIONS FOR THE ORGANISATION AND ITS ENDEAVOURS WITHIN A COMPLEX COGNITIVE SOCIO-POLITICAL ENVIRONMENT.		**A3. ELEMENT OF COMPREHENSIBLE PREDICTABILITY:** Is based on available cultural models that provide a frame for meaningful predictability about the organisation's operations.	NOT APPLICABLE	**C4. ELEMENT OF COMPREHENSIBLE PLAUSIBILITY:** Is based on available cultural models that provide a frame for plausible explanations of the organisation's holistic essence.	NOT APPLICABLE
• **TAKEN-FOR-GRANTED LEGITIMATION - A MORE LASTING FORM OF COGNITIVE SUPPORT:** INSTITUTIONS RENDER SOCIO-POLITICAL COMPLEXITY MANAGEABLE AND TRANSFORM IT INTO A SET OF INTER-SUBJECTIVE "GIVENS" WITHOUT QUESTIONING.		NOT APPLICABLE	**B5. ELEMENT OF TAKEN-FOR-GRANTED INEVITABILITY:** Is based on the organisation's operations being exposed to prudential oversight and government audit.	NOT APPLICABLE	**D6. ELEMENT OF TAKEN-FOR-GRANTED PERMANENCE:** Is based on the organisation being recognised in Acts of Parliament or in the Constitution of States.
ORGANISATION DISPOSITION:		**[A1+A2+A3]** ORGANISATION ENGAGES WITH VALUED TRANSACTIONS, HAVING A RECOGNISED TRACK RECORD WITH OUTCOMES THAT ARE PREDICTABLE.	**[B1+B2+B5]** ORGANISATION ENGAGES WITH STRATEGIC NEEDS WITHIN SOCIAL AND POLITICAL CONSTRAINTS, REGULATIONS AND ACCREDITATION.	**[C1+C2+C4]** ORGANISATION ENGAGES WITH STRATEGIC NEEDS AND VALUES BY OFFERING EXPERIENCE, GUIDANCE AND WISDOM.	**[D1+D2+D6]** ORGANISATION ENGAGES WITH A PANOPLY OF SOCIAL AND POLITICAL STRUCTURES WHILST MAINTAINING IMPECCABLE ETHICAL STANDARDS.
ENTERPRISE EXAMPLES:		**FAST FOOD FRANCHISES AND PETROL STATIONS**	**MEDICAL CLINICS AND SCHOOLS**	**POPULAR POLITICAL MOVEMENT**	**THE HIGH COURT**
SIGNAL CATEGORIES:		**INSTITUTIONAL SIGNALS**	**INDEX SIGNALS**	**AGILE SIGNALS**	**ASSESSMENT SIGNALS**

Table 12.4: Grammatical elements of a pattern language of social engagement legitimacy. Informed by: Archer (1998), Donath (26 October 2011), Scott (2012b, pp. 228-230), Suchman (2012, pp. 13-16), Thursfield & Hamblett (2004, p. 119), Volkoff & Strong (2013, pp. 819-834) and Wynn & Williams (2012, pp. 799-800).

The works of Donath (4 February 2005, 10 May 2007, 26 October 2011, 1998, 2014) delimit various categories of signals that are explicated in Figure 12.1.

However, any one organisational activity in the Defence domain might span across two or more silos as it entertains elements of multiple social pathologies.

The model presented in Table 12.4 (above) is translated into an operational template for data collection and analysis (see Figure 12.3 below).

Figure 12.3 is an annotated copy of the operational template used during this research inquiry. It presents a vignette of the mutual perceptions of the lineaments of organisational legitimacy as offered by the collaborators in the tender enterprise.[233]

In contrast to the archetypal institutionalised organisations (the silos above the signal categories at the bottom of Table 12.4 and Figure 12.3), the bar graph data at the top of Figure 12.3 ③ present an ensemble of summative affordances of organisational legitimacy across all institutional ideal-types. That is, each collaborator in the bar graph ③ accounts for a nominal social aggregate[234] of the data across the silos ②.

Simply stated, every organisation in the tender enterprise presents with characteristics of legitimacy from all silos.

While the detail of Figure 12.3 is analysed and discussed in later chapters, it illustrates how, notwithstanding individual collaborator weaknesses, the tendering campaign's coalition of (key) stakeholders support holistically[235] the symbolic value of an organisation's legitimacy[236] (W. Richard Scott, 2012b, p. 230; M. C. Suchman, 2012, p. 5). We 'know' this because the 'ensemble of the lineaments of organisational affordances related to engagement legitimacy' (③ the bar graph at the top of Figure 12.3) results in a successful tender campaign; a 'politicly appropriate' outcome in the presence of fallible collaborators that includes politicians.

Further, a problematic tendering campaign tends to become engulfed in positive feedback loops, as social networks recoil to avoid guilt by association (Aldrich & Fiol, 2012, p. 62; M. C. Suchman, 2012, p. 29). Logically, the matrix in Figure 12.3 would

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[233] This coalition of stakeholders is associated with a conclusive tender campaign case study.

[234] In Figure 12.3, the organisational lineament of DMO1-6 presents 4 morphostatic grammatical elements of legitimacy and 2 morphogenetic elements. The body of the matrix displays exactly which elements are present and absent. Fleetwood (2004) reflects on Pfeffer & Salancik (1978) assertion that, 'Legitimacy is known more readily when it is absent than when it is present' (Fleetwood, 2004, p. 51). Refer to Table 12.4 for elemental definitions.

[235] Holistic analyses allow phenomena to be seen as emergent properties of whole systems.

[236] If successful, the resulting coalition of organisations might be described as autopoietic in the sense that it acts to maintain its internal organisation and, when it interacts with its environment to maintain itself, the actions it takes are determined by its current structure (Maturana & Varela, 1980; Midgley, 2000, p. 53).

be populated sparsely. Later, the case-data analysis will illustrate a tender enterprise in which the weaknesses in one organisation were so extensive that other collaborators appeared disinclined to offer covering support; preferring to 'walk away'.

Even though there might be individual organisational weaknesses in terms of their institutionalisation, other organisations might have the capacity to cover for that perceived weakness. For example, weaknesses in the bureaucratic DMO (parent) might be compensated by the DMO Tender Project Office with its commercial project culture.

The inherent complexity of Figure 12.3 (over) is supported by a schematic reference guide in Figure 12.2 (below).

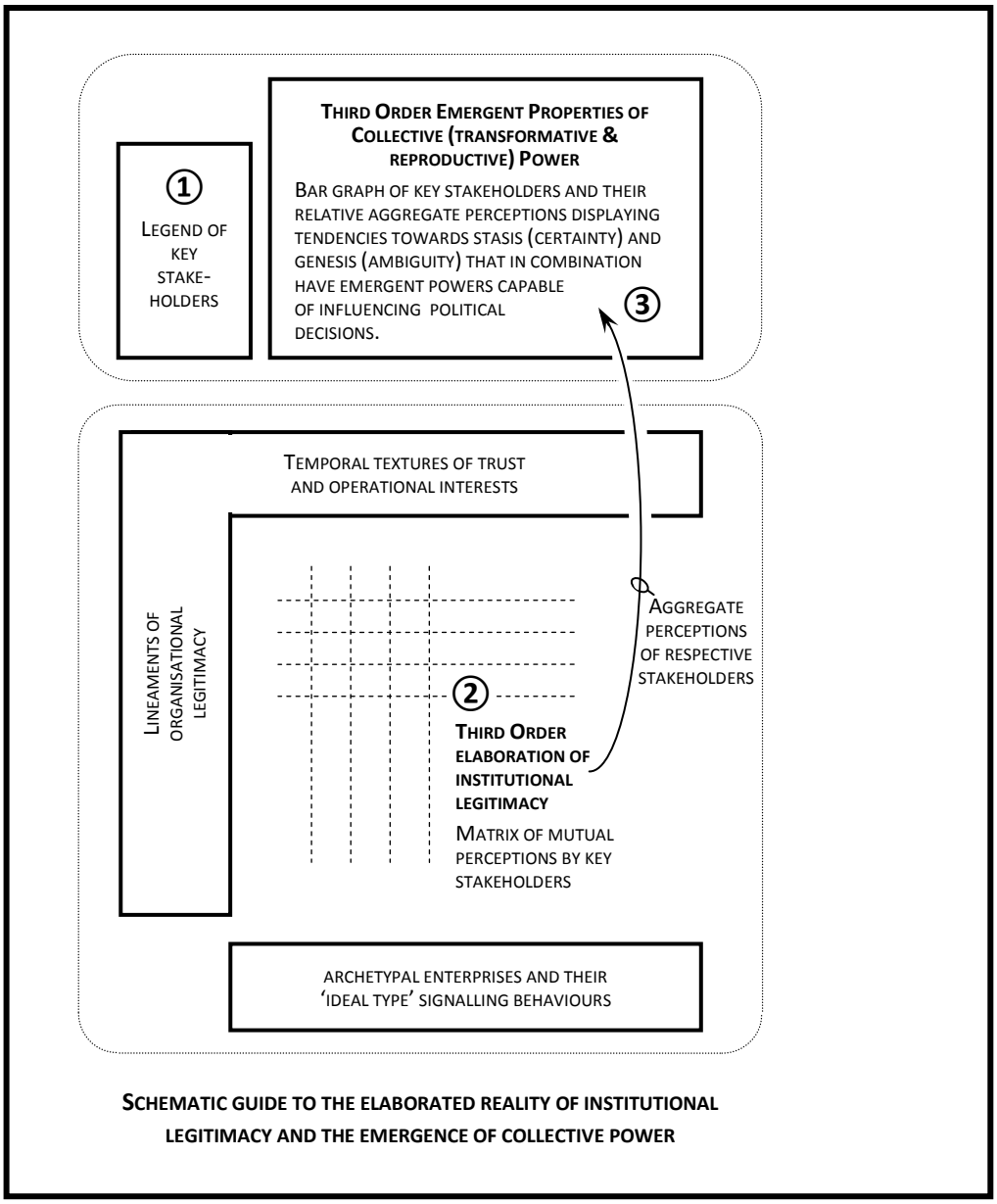

Figure 12.2: Schematic guide for Figure 12.3 showing the vector of data aggregation

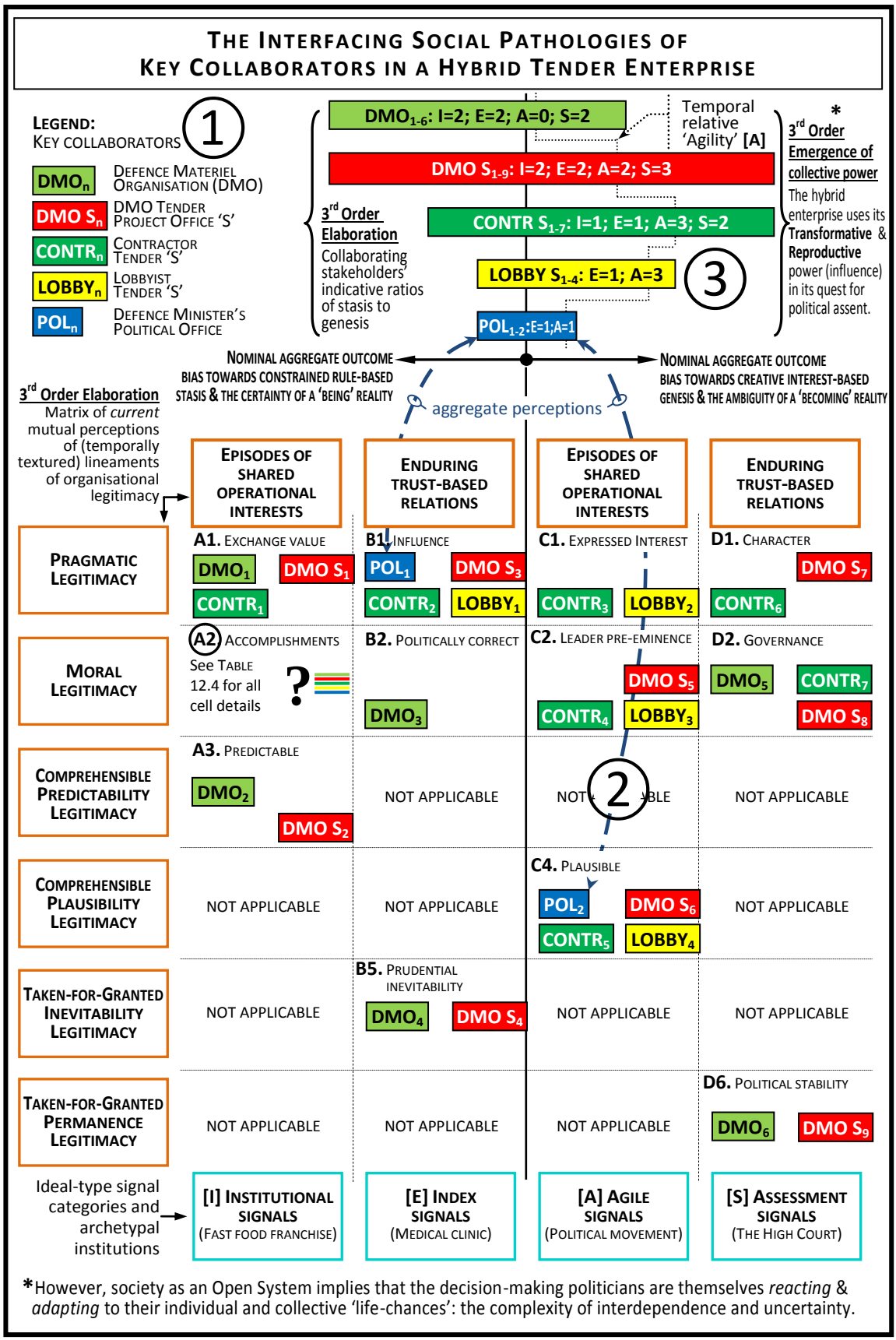

Figure 12.3: Based on Table 12.4, ideal-type signalling behaviours perceived by the collaborators of a hybrid tender enterprise: see M. Archer (1995), D. Archer & Cameron (2009), Donath (26 October 2011, p. 7), Lawrence, Hardy, & Phillips (2002) and Suchman (2012).

Holistically, the tender enterprise has the potential of 'appropriateness' from the perspective of politicians. Figure 12.3 should be read in conjunction with Table 12.4.

Figure 12.3, cell A2 (see Table 12.4, cell A2 for details) presents a purported instance of an absence of signals relating to past performance and their potential irrelevance for the idea of political 'appropriateness'.

Reflection

The morphogenetic process cycle (M. Archer, 1995, p. 248) reflects a state of changed (elaborated) agency for actors in terms of enhanced or diminished capacities. Such an interim state, in an otherwise theoretical cycle, is presented in Figure 12.3 ③ above. From this situational capacity, actors commence the next round of interactions, but they do so from their group (tender enterprise) disposition; individual actors inculcate the temporal collective powers of the enterprise.

Figure 12.4 illustrates the integration of the temporal social pathologies of the collaborating organisations: the tender enterprise's haecceity. For a cycle of morphogenesis, this instance of haecceity is the revised 'reality of externally perceived legitimacy' facing agents at T_1. Arguably, there are other 'realities', but ultimately they reflect in the appropriateness or otherwise of the tender enterprise.

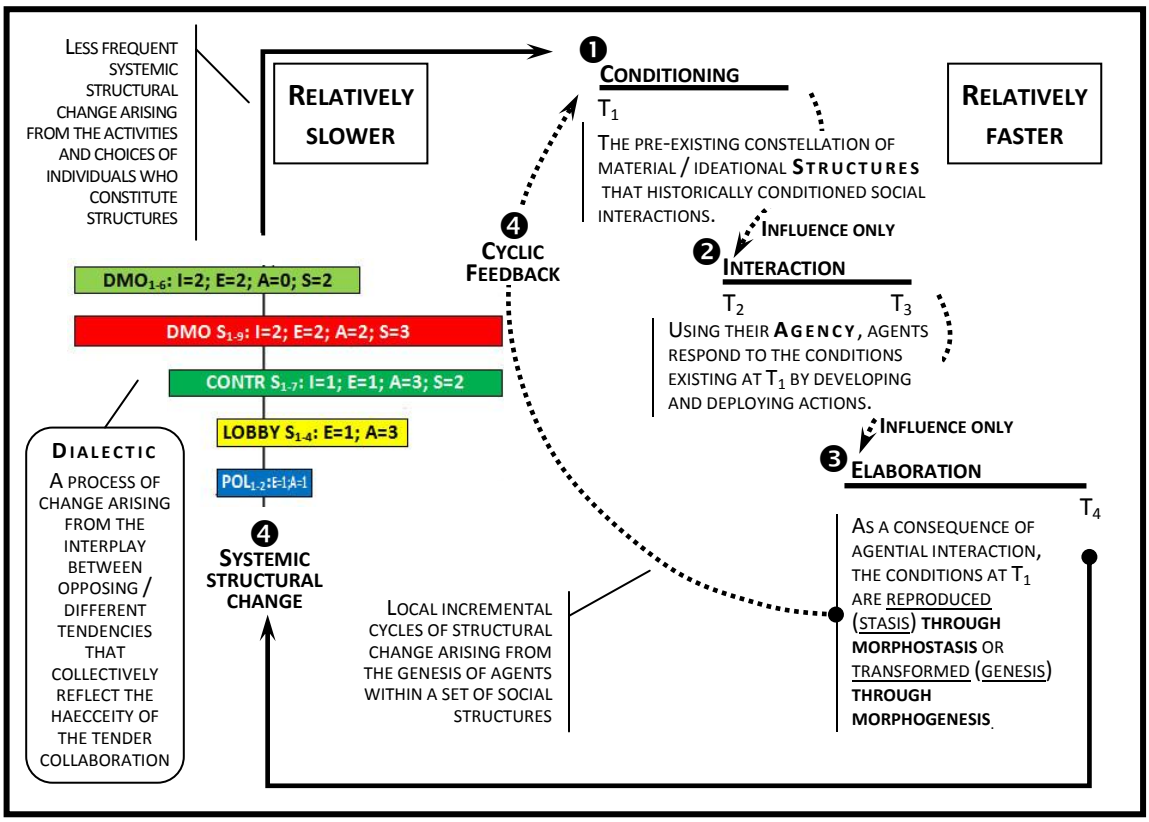

Figure 12.4: The social world of tendering as morphogenesis where social actions and social structures are reciprocal and inseparable but reflect respective cycle times.

Aggregate measures of internal perceptions (interpretive phenomenological analysis)

For the purpose of this inquiry, internal perceptions occur within a collaborator's organisation. The data are the recollections of observations or perceptions of participants.

Resource dependence and network theory perspectives

Williams & Karahanna (2013, p. 934) consider *coordination* to be a central (core) concept in organisational *design* theory.

In Table 12.2 above, the heading of 'Resource-Dependence Disposition', relates to *process*[237] rather than *organisation design*. A *resource-dependence organisation design perspective* generally treats *coordination* as a reified social process of *integrating* information, while a *network theory perspective* generally treats *coordination* as an activity of *transferring* information, nuanced with the alignment of ideas and understanding (Gittell & Weiss, 2004, p. 132; Jarzabkowski et al., 2012; Williams & Karahanna, 2013, p. 936). Arguable, both the integration and transfer of information are present within the processes of a tender enterprise.

During any Australian tender project, a resource-dependent process mechanism of 'coordinating' – is governed by the Law of Contract in the form of a judgment describing an implied *process contract* between a client and an aspirant contractor ("IPEX ITG Pty Ltd (in liq) v State of Victoria [2010] VSC 480," 2010; Seddon, 2009).

The law establishes rights and responsibilities between a client and a contractor during a tender process, even if the process terminates prematurely. However, the law appears to take no interest in the private information-transfer networks that occur extra to the process contract and that are kernel to organisational legitimacy. The DMO client might state explicitly that their relationship with a contractor does *not* form a process contract. Given that relationships are between a monopsonistic client and an oligopolistic contractor, a legal challenge might be problematic.

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[237] The basic principle of process philosophy or process thought is that what is real is change (a process) itself. Process research aims to develop an understanding of how and why phenomena evolve over time. Process theories provide superficial explanations in terms of the patterns of events leading to an outcome over time (Wood, 2008, pp. 171-173). Jarzabkowski, et al. (2012, p. 907) view *process* coordinating mechanisms not as reified standards, policies and procedures, but rather as a dynamic social practice .

Establishing a framework for data capture

While 'coordinating' is recognised in management-theory and practice, 'aligning' might be tacitly understood, but its articulation appears less common.

Actors iterate between a) the abstract implicit concept of interacting social structures with an inherent intent towards the alignment of ideas, and b) the resulting communication events; coordination behaviours that 'reach out'.

Within this tangle of purposive behaviours, Jarzabkowski, et al.(2012, pp. 907-908) identify five ostensive cycles that actors enact as a coordinating *process* mechanism responsive to a project's life cycle. These ostensive cycles, and the relationships between them, constitute a logical *process model of coordinating and negotiating.*

Jarzabkowski, et al. define a pattern language grammar of: (1) enacting disruption, (2) orienting to absences, (3) creating elements, (4) forming new patterns, and (5) stabilising new patterns.

For a tendering campaign, I moderate and augment this grammar to incorporate front-end client-directed engagements that occur prior to the release of the tender documents. The resulting pattern grammar (Alexander et al., 1977; M. Archer, 16 June 2014; Schuler, 2008) reflects logically as:

- value propositions and positioning238, (2) co-evolution239, (3) enforced disruption240, (4) orienting to absence241, (5) issuing legitimacy242, (6) enacting negotiating games243, and (7) stabilising negotiating patterns[244].
- Items (3) to (7) represent generally the tender preparation, submission and negotiation.
- Items (1) and (2) represent a government-inspired and DMO-directed *process* mechanism, while the remainder continue as a *coordinating process* mechanism.

---

[238] Throughout the tendering campaign, the plethora of technical and political exigencies translates into a matrix. The initial phase of the tendering campaign integrates data from all potential suppliers (cherry-picking superior components). Later, data is restricted to the final two competitors and their major subcontractors.

[239] A government inspired courtship and "marriage" between an Australian prime or lead contractor and a major foreign subcontractor whose capitalisation often exceeds that of the local prime. "Consummation" occurs during co-evolution.

[240] The DMO client withdraws from general communications.

[241] Contractors prepare their bids isolated from the DMO client except for formal technical clarifications.

[242] Contractors present a theoretical account of themselves in order to evince legitimacy.

[243] DMO client and contractor initiate instability with tit-for-tat gaming and unexpected rule changes.

[244] DMO client initiates a remote conclave for negotiating.

> Based on the work of Williams & Karahanna (2013, p. 961), it might be argued that the focus moves away from political 'objectives' *per se*, to the *process of governing* that frames and capitalises on affordances in order to deliver the political objectives**.** Hence, politicians are involved with the definition of the tender strategy, and ongoing revisions and final selection.
>
> *On this account, the idea of value-for-money becomes a justification for a governing process-model strategy.*

Overall, this process logic reflects how the context of an inquiry contributes to the creative design of a management research methodology requiring mixed methods.

Methodologies of interest

Prior to this dissertation, two studies were sufficiently similar to warrant close attention to their methodologies.

[#1] Lawrence, T. B., Hardy, C., & Phillips, N. (2002). Institutional effects of interorganizational collaboration: the emergence of proto-institutions.

For Lawrence et al.(2002, p. 288) inter-organisational collaboration may or may not incubate the development of proto-institutions. For collaborations to contribute to the first stage of institution creation, two elements are needed:

- high levels of involvement among participants
- high level of embeddedness

This suggests that should an organisation wish to affect change in an institutional field, it must pay attention not only to their relationship with their collaborating partners, but also to how the collaboration embeds them in the wider institutional field (domain) of major Defence equipment procurement.

Their study illustrates the potential for an inter-organisational collaboration to act as a catalyst for the initial stages of change in an institutional field and in consequence, the potential for the collaboration to work together to overcome instances of a collaborator's size or resource access limitations, and thereby begin to shape their institutional field.

Lawrence et al.(2002, p. 283) adopted a qualitative, multi-case, comparative research design similar to this current research project.

- They chose a qualitative methodology because they needed rich data that could facilitate the generation of theoretical categories that could not be derived satisfactorily from existing theory.
- In comparing cases, their unit of analysis was *the collaboration* (the tender enterprise), rather than a collaborator's organisation.
    - I used both, as the internal analyses considered dyadic organisation (collaborator) cases and the external (global) analysis examined the collaborators' mutual according of perceived organisational legitimacy.
- They examined multiple instances of collaboration by a single organisation in order to assess the impact of different characteristics of collaboration, without the confounding – mingled elements that cannot be untangled – impact of organisational characteristics.
    - I had to work at the subordinate project level as each organisation assigned a project team to participate in the collaboration.
    - Each project team has pathological differences.

Lawrence et al.(2002, p. 284) undertook data analysis within the following stages:

- **Stage 1**. Construct chronological descriptions of each collaboration:
    - My chronological descriptions are inducted from the participant narratives of recalled observations of behaviours and significant events.
- **Stage 2**. Code events with respect to characteristics and affects:
  This is an iterative process.
    - In my research instance, behaviours and atmospherics inducted from the narrative are coded with metaphors as conceptual categories; some metaphors, such as 'Little Hitler', 'The Scorpion', and 'The Beauty Contest' are supplied by participants.
- **Stage 3**. Higher first order conceptual categories corral congruent stage 2 codes (categories).
- **Stage 4.** Cross-case comparative analysis of the relationships among the theoretical categories:
  The authors were specifically interested in the relationships between the characteristics of collaboration and its effects. They then collapsed the various categories describing characteristics of collaboration into two broader dimensions, which they termed 'involvement' and 'embeddedness'. From then on, they applied scaling and qualitative analyses.

Against **Stage 2** as described by Lawrence et al., the methodology applied in the current research instance relates to temporal internal perceptions of behaviours and atmospherics and external perceptions of lineaments of legitimacy.

Lawrence et al.(2002, p. 285) invoke aggregate constructs of 'Involvement' and 'Embeddedness':

- **Involvement**: the internal dynamics of the collaboration - the ways in which the participating organisations relate to each other
- **Embeddedness**: the degree to which collaboration is enmeshed in inter-organisational relationships. In contrast to involvement, this dimension of embeddedness highlights the connection between the collaboration and the broader inter-organisational network (the field)

Lawrence et al.(2002, p. 286) categorise each collaboration according to its degree of involvement and embeddedness (high; medium; low).

The relationship between the level of involvement, the degree of embeddedness of a collaborative enterprise, and the degree to which it was associated with the development of proto-institutions produced the following conclusions:

- **Low institutional creation** is associated with both low levels of involvement and low levels of embeddedness.
- **Medium institutional creation** is associated with high levels of involvement and low or medium levels of embeddedness.
- **High institutional creation** is associated with both high levels of involvement and high levels of embeddedness.

They argue that both a) the level of involvement among collaborating organisations and b) the level of collaborative embeddedness in the institutional field have significant effects on the degree to which the collaboration is likely to initiate the production of new institutions; that is, the likelihood of organisations forsaking their existing institutional arrangements and establishing a new institution or, maintaining the existing arrangements and establishing a better targeted new institution, or establish a new institution in the absence of an existing arrangement.

The authors appear silent on the idea that only when new understandings of legitimate behaviour become reproduced outside of the collaboration, can this initiative towards a new institution be recognised.

However, Lawrence et al.(2002, p. 288) suggest that:

- high involvement facilitates the inter-organisational learning necessary for the invention of new practices, rules, and so forth
- embeddedness does facilitate their transmission (practices, rules, etc.) beyond the boundaries of the collaborative relationship
- deep operational ties, two-way information flows, and partnering characterises the high involvement necessary to form the basis of proto-institutions
- diffusion depends on the way the collaboration is connected to third parties and involves flows of information out from the primary collaborating partners to others in the field

In contrast to Lawrence et al. (2002), Dunworth, F. (2008) adopts 'Interpretive Phenomenological Analysis'. Aspects of both approaches inform the methodological approach adopted for the present research inquiry.

[#2] Dunworth, F. (2008). Interpretative Phenomenological Analysis (IPA)

Dunworth (2008, p. 115) explains that such phenomenological approaches tend to be concerned with the ways particular individuals experience the work in their particular contexts rather with abstract generalisations about the objective nature of the world (Giorgi, 2003).

IPA methodology incorporates the following guidance:

- Participants are selected purposively to provide a sample that is homogeneous with regard to their experience of a particular phenomenon such as a major Defence tenders.
- Participants are asked to describe their experience.
- The interviews are recorded and transcribed.
- The researcher attempts to methodically identify and record themes which seem to capture the gist of what is being said by the participant.
- The next stage involves looking for connections and similarities between themes and grouping them into a more manageable number of super-ordinate [a higher level of generality] themes.
- The table of themes from the first participant is used as a template to code the material from the next participant. The template undergoes development and

> revision as each participant's account is analysed. The final integrated list of themes and their groupings should aim to capture the quality of the participants shared experience of the focal phenomenon and to reveal something about the nature of the phenomenon.

The IPA report aims to provide a coherent account of the participants' experience using quotations to illustrate that account and distinguish between the participant report and researcher interpretation.

On reflection, the influence of these published research exercises is already evident in the dissertation thus far.

Summary

This chapter provides a methodological schema within which the subsequent methods chapters might operate.

The chapter divides the methodological scheme into *global* measures of organisational legitimacy and *aggregate* measures of purposive behaviours that respectively reflect external and internal perspectives.

Arguments are offered for organisational legitimacy to be elevated as a central concept in organisational institutionalism. Legitimacy has become an anchor-point of a vastly expanded theoretical apparatus addressing the pragmatic, moral, and cognitive forces that constrain and empower organisational actors with agency.

Opinion suggests that recent literature has been highly theoretical, invoking legitimacy as an explanatory concept rather than examining it as an empirical property.

Institutionalism is inherently a linguistic interactive process that *inter alia*, employs institutional logics for reasoning about legitimacy.

A high-level understanding of legitimacy as a generalised perception or assumption is that the actions of an entity are *desirable, proper, or appropriate.*

Securing legitimacy requires a strategic trust-building modality. What is 'acceptable' is a matter of *external perception* about the adequacy of the *entire* (global) package: a global lens on an organisation's perceived appropriateness and hence, legitimacy.

1. The organisation seeks to evince legitimacy from stakeholders; its 'reaching out' as 'phenomenological intentionality', in a quest to share information. Qualitative research data tends to be aggregated into nominal characteristics.

2. Based on perception of affordances, external stakeholders accord legitimacy to the organisation using global assessments that are analysed holistically.

Notwithstanding individual collaborator weaknesses, the tender enterprise supports holistically the symbolic value of their organisation's legitimacy.

Internal perceptions from within a collaborator's organisation are participant recollections.

These recollections are structured chronologically into a tender pattern language grammar of: (1) value propositions and positioning, (2) co-evolution, (3) enforced disruption, (4) orienting to absence, (5) issuing legitimacy, (6) enacting negotiating games, and (7) stabilising negotiating patterns.

The focus moves away from the political 'objectives' of a tender project *per se*, to the *process of governing* that frames and capitalises on the affordances of a tender in order to secure future political capacities**.**

The necessary qualitative, multi-case, comparative research design incorporates descriptive statistics and interpretative phenomenological analysis.

Next chapter

In the following chapter, methodological pluralism is accommodated with a variety of methods and techniques that explicate a process of governing a tender process in a socially complex and politicised context.

Chapter 13
Methods

The previous chapters on methodology made the case for a creative approach to a bespoke methodology that embraces methodological pluralism; being a reflection of epistemological openness.

In turn, this chapter on methods gives voice to the methodology and together, they contribute to epistemological thought supporting management research into the process of governing politicly-sensitive Defence tenders.

The purpose of this chapter is to translate and adapt published guidance to a variety of context-specific methods and techniques that provide a logical progression towards putative interpretations. It is precisely this field context that enables and constrains the conformation of epistemology.

While the idea of methodology has a strategic research focus generally, this chapter on operational methods enjoins discussions on methodology and epistemology occasionally, as appropriate; they are wholly interdependent.

Qualitative and quantitative techniques interweave as they are mutually informative. The richness of anecdotes, stories and commentaries remains intact, and in contrast to numerical data, these texts appear to offer endless opportunity for insight and interpretation of human endeavour[245] (see Annexure A).

All the data are a snapshot in time and there is nothing sacrosanct about the methods chosen; they too are reflective of their era and research resources. However, the narrative, as a social construction, remains alive in its history.

A number of definitions are now brought forward; some are referenced frequently while others have contrast value in delimiting the discussion.

Concepts and putative definitions

Explanation: why something happened

- Human actions are intentional and meaningful. They cannot be explained nomologically by laws of science.

[245] This is why certain anecdotes or opinions are repeated in the dissertation.

Interpretation:

- While human actions cannot be explained, they can be interpreted.

Meaning:

- Meaning is not discovered; it is socially constructed.

Understanding:

- The meaning of language and action is possible only if there is an understanding of the different language games-at-play, or social practices in which human activity takes place.

Retrodiction: between prediction and understanding

- Retrodiction is the conceptual 'space' between *prediction* (where knowledge becomes a product that the knower comes to possess about lived experience) and *understanding* (as reflected in the language games-at-play of *Verstehen*). Between *prediction* and *understanding* lies a vast tract of social phenomena that are amenable to explanation through *retrodiction*. In contrast to prediction (laws of science), retrodiction's explanatory format provides analytical *histories of emergence*[246]; the *narrative account*[247] of their processual and dynamic character (see M. Archer, 1995, p. 327; Holstein & Gubrium, 2011, p. 20).

Pragmatism: the logic of abduction

- Pragmatism suggests that scholars and organisational participants are both trying to understand and live in an ambiguous and unfolding (open system) world (Kraatz & Block, 2011, p. 265).
- Pragmatism provides a foundational philosophy for mixed methods (Teddlie & Tashakkori, 2009, pp. 77, 96), grounded theory (Mark Easterby-Smith et al., 2008, p. 76) and case method (Easton, 2010).
- According to (Schwandt, 2007, p. 1), the *logic of abduction* embraces 'the whole of our conception', which includes the rhetoric, symbolism and dialectic that envelops the observations of life in society as an open system.

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[246] **Emergence**: the realm of generative effects and causal 'mechanisms' (influences) (M. Archer, 1995, p. 178).

[247] Narrative inquiry is a particular type of qualitative inquiry that is a field in the making. Rather than narrative focussing on retrospective meaning making, narrative is now seen as meaning making through the shaping and ordering of experience. Narratives are socially constrained forms of action, socially situated ways of acting in and making sense of the world (Denzin & Lincoln, 2011c, p. 415).

- The process of pragmatic abduction, 'leads' the inquirer's grounded observational data to a 'social cauldron' where it mixes with relevant aspects of social and political life so that the prospect of plausible explanations of the data might be considered within its socio-political context and contingent arrangements. Through this *rhetorical* process, one or more plausible explanations are given salience until a better explanation materialises (Brandi & Elkjaer, 2008, pp. 169-171); hence, theory-building evolves and contributes.
- Brandi & Elkjaer (2008, p. 169) explain:

> Pragmatism [abductive redescription] regards [existing] theories as tools or instruments in the human endeavour to cope with situations and events in life and to construct meaning by applying concepts [and existing theories] in an experimental way.

Redescription and retroduction (compare: 'retrodiction')

- Pragmatism's abductive logic, in the form of 'redescription', is a suggested research activity in the search for causal mechanisms.
- The retroduction of causal mechanisms does not produce variables capable of verification or corroboration. Rather, the retroductive process seeks a deep insight into the structures and contingent arrangements influencing decisions to act, and hence, the inference of causal and generative mechanisms: morphogenetic reasoning.

Redescription:

- Abductive logic is otherwise known as redescription (Midgley, 2000). In order to understand this 'social cauldron', it is necessary to redescribe 'the component parts of [a] structures and [b] their *relationships in terms of* ***existing*** *theories and frameworks* that provide leverage for explanations' (Wynn & Williams, 2012, p. 799 emphasis added).
- The purpose of redescription is to use existing theories for the purpose of explanation: theory-guided 'true accounts' of what happened (abductive logic). If an existing theory is generally congruent or sympathetic with the case data and its analyses, then the theory informs an approach to thinking about causal mechanisms and consequential generative mechanisms. That is, how a plausible world *would need to be conformed* for its collective influence to be the cause of the observed event or outcome. Redescription requires a reconfiguration of the field data in ways amenable to a particular existing theory.

- Wynn & Williams (2012, p. 799) recognise the excessive [or impossible] resource demands required to test existing theories in an open system. There is a potential danger that such testing of existing theories might consume the avaliable research resources and not, if ever, contribute to theory building, being lost to the endless testing.

Quasi-closure (and Demi-regularities)

- In the context of an open system thinking, Midgley (2000, p. 7) suggests that boundaries of inclusion and exclusion [sources of applied data] are vital for management research. For purely pragmatic research reasons, some kind of bounding of objects and units of analysis is necessary (Ann Langley, 2008; Van de Ven & Poole, 1989).
- Sayer (1992) advises that 'partially closed systems that enjoy 'quasi-closure' can be studied separately if we restrict our research spatially and temporally, based on specific contextual factors that affect our conditions'. There appears to be no way of rationalising this against the realities of open systems. Other than the constraint of limited research resources, how might such quasi-closure be determined?
- In focussing this idea, Downward & Mearman (2006) explain that the *degrees* of extrinsic and intrinsic conditions of closure and the specific information available within these conditions, are tractable matters of epistemology. This, they suggest, appears to pave the way forward if *the details of the conditions of extrinsic and intrinsic closure accompany the case report*; epistemology lives like a Greek chorus. However, there are costs to epistemology and this is the domain of demi-regularities.
- Where exactly the boundaries are drawn will determine how issues are seen and the relative merits of the research (Midgley, 2000, p. 36).

Demi-regularities

- In tandem with the idea of quasi-closure is the praxis of *demi-regularities*. That is, the treatment of data contained within the synthetic and arbitrary limits of the study.
- Demi-regularities have three main functions (Zachariadis et al., 2013, p. 862):
    - to focus the research design, which inter alia, might find value in describing the temporal persistence of certain partial events (event

traces)[248], or the temporal *co-relation* of the ensemble of partial events (event traces) identified by the study

  - to help assess and explain the results in the analysis phase with comparative indicative patterns: polyrhythms[249]
  - to produce plausible results indicating that the boundaries of inquiry (quasi-closure) are rational

- Lawson (1997) and Mingers (2006) appear to find the idea of quasi-closure and demi-regularities problematic. The reality of open systems and the praxis of closure reflected in bounded or delimited research models, requires a consequential downgrade data 'regularities' to the status of demi-regularities with associated descriptive statistics. Also, Flyvbjerg (2011, pp. 301-316) is sceptical about erasing phenomenological detail (rich data) in favour of conceptual closure.
- Demi-regularities are limited generally to temporal descriptive statistics (polyrhythms) in contrast to large-sample probabilistic statistics.

Descriptive statistics

- Even though (social) structures are comprised of situated interactions between organisations, institutions and contingent arrangements – which are better understood qualitatively – it is useful to employ quantitative measures of certain characteristics.
- Descriptive statistics are regarded as helpful simplifications, which serve as a quantitative measure of the numbers of objects belonging to some class or a statement about certain common properties of objects (Sayer, 1992, p. 100).
- Even though these descriptive statistics might suggest a necessary relationship or correlation, they do not say anything about the causal status of the relationships (if any) and thus, should be seen as descriptive summaries rather than predictive tools (Zachariadis et al., 2013, p. 862).
- Hence, descriptive (quantitative) statistics complement the qualitative analysis by *being reciprocally responsive* and thus afford the research process an

[248] Only *some* of the *impacts* of an event might be observable rather than the hidden event itself.
[249] The term 'polyrhythm' might be preferred to 'demi-regularity' as observed human behaviour tends to be polyrhythmic rather than regular.

opportunity to pursue meta-inferences[250], the 'what' and 'when' together with the 'how' and 'why' that would otherwise be difficult to uncover using a single method.

Case studies

The field data

Contrasting polar case studies[251] are deployed by intertwining intensive stories and anecdotes with extensive surveys. The survey questions are conceptual metaphoric idioms arising from behaviours inducted by the researcher from the collective narrative. This results in cycles of mutually-informing induction and deduction. Against these *inducted* conceptual idioms of communication behaviours (termed 'Sense-Making Items' (SMIs)[252]) that are listed on a blank chronological template, respondents draft timelines of recalled perception of behaviours and atmospherics. The data are not reality but rather, recalled perceptions that are social constructions.

On completion of the cycles of interviews and timeline surveys, SMI-based temporal data are transformed into categories of *purposive* social *constructs*; gerunds such as 'Finding Direction', that merely reflect a higher-level overlay on the temporal SMI data.

Redefinition

These transformations of the temporal conceptual data – the overlay constructs – redefine the problem from multiple perspectives, such as an overlay of 'purposive emergent and controlling behaviour', being a *redefinition* of the problem. Patterns in the data are no more than demi-regularities arising from observations of event traces. Such data are amenable to descriptive statistics, with mean values and distributions around the mean, but no more. Clear pattern *changes*, the essential tenet of 'difference', are a source of information. That is, change grounds sense-making and meaning making. For the purpose of this study, *redefinition* operates on the conceptual

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[250] a unified body of valid concepts and theoretical mechanisms; the meta-inferences.

[251] a successful tender project and a problematic tender project

[252] A Sense-Making Item is a 'diegesis'; the imaginative representation of the actions, motives, or natures of humans or their environments (Butler, 2009). The SMI describes a game that is used between the players and those whose behaviours they seek to influence (Simon, 1998, p. 153).

Sense-Making Item (SMI) and its transformation into higher-level constructs inducted from the ‘grand’ narrative.

Redescription

In contrast to the redefinition of conceptual data, *redescription* applies the pragmatists’ logic of abduction that utilises existing theories (studies of patterns of human behaviour) applied to the SMI data in order to identify expected patterns or to enhance existing theory with moderated patterns. However, the SMI data needs to be congregated into constructs of the existing theory: such as practice theory perspectives of coordinating and negotiating process mechanisms, communication pattern practices, and leader complexity capability. As Archer (16 June 2014) found, such patterns of perceptions help to understand potential intentions influencing the outcome. *Redescription* takes its constructs for pattern recognition from existing theories (J. Bryant, 1997; Cornelissen, 2006; Hogler, Gross, Hartman, & Cunliffe, 2008; Karl E. Weick, 1989).

Operationalising the idea of morphogenesis through 'Systemic Intervention'

Elements of Archer’s idea of *morphogenesis* and Midgley’s *systemic intervention* (Midgley, 2000) appear to have sufficient complementary for a methodology to explore agency and change . Both authors recognise that social actions and social structures are reciprocal and inseparable (Midgley, 2000, p. 35). Both authors ‘relate’ to the idea that it is valuable to ‘move upwards’ towards more comprehensive social structures and ‘downwards’ towards more refined understanding of action and interaction. Midgley uses a ‘Russian doll’ analogy with bidirectional (internal) influence (p. 35).

Midgley suggests that a variety of boundary judgements (scope of the investigation) might be facilitated by ‘looking out towards the world’, which he terms ‘First Order’. Conversely, ‘looking back’ to identify the knowledge generating system that enabled the First Order assessment is termed ‘Second Order’ (Midgley, 2000, p. 80).

In citing Bateson (1978, 1979), Midgley (2000, p. 52) restates that ‘“Data” are not events or objects but always records or descriptions or *memories of* events or objects’. (emphasis added). In this research inquiry, recollections of agent information seeding or seeking behaviours are proxies for agents’ temporal contextual *agency* (First Order) (see Figure 13.3 and Chapter 14), and ‘looking back’ (Second Order) at the temporal structural regime of organisational legitimacy is a proxy for *structure* (see Figure 12.4).

In the context of a social world as morphogenesis, Figure 13.1 traces the process of data collection, data redefinition and data redescription occurring in this study.

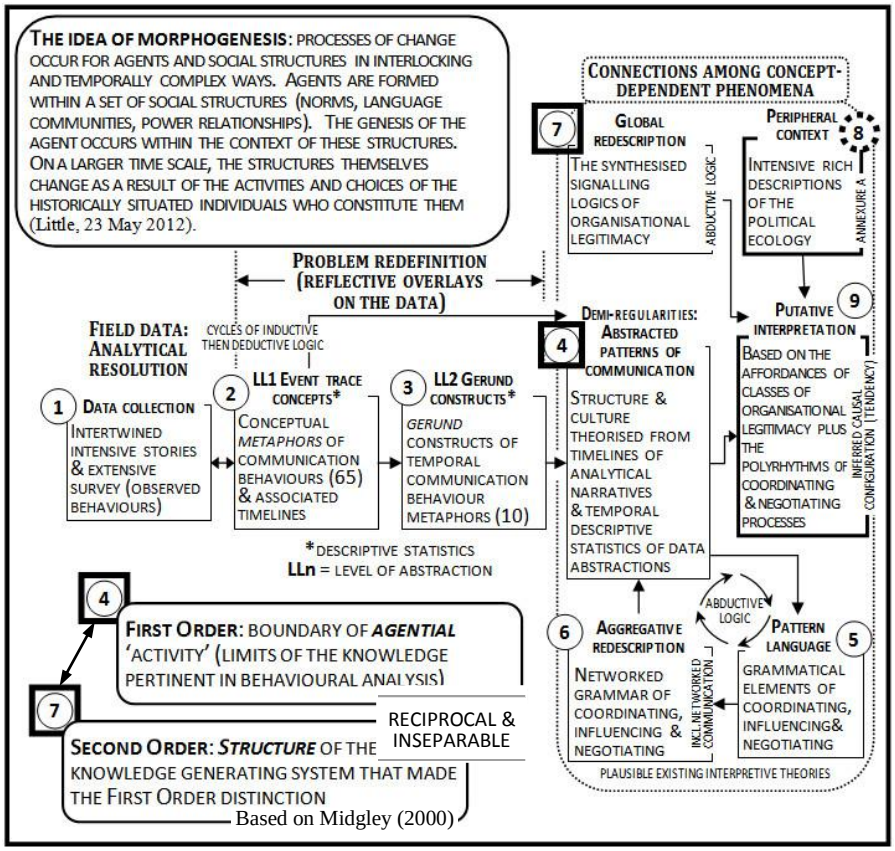

Figure 13.1: A methodology for a limited exposition of structure (7) and agency (4) in a case study.

Textual data

Overall the research inquiry represents the anecdotes and stories of participants and stakeholders. External stakeholders in general, offer insights into the pressures, influences, and cultural history that might offer rational reasons for observed behaviours during the tender process. Their body of evidence comprises Annexure A.

Research participants working within the tender enterprise have their own anecdotes and stories and these might be more reflective of organisational and inter-organisational relationships. Equally, they might also have profound insights into local political and geopolitical exigencies.

However, the next section deals with external stakeholders and commentators, some of whom contributed to the research program on multiple occasions.

The data for this contextual landscape (Node 8 in Figure 13.1) receives first consideration.

Contextual landscape: Node 8 - Field strategy

Partington (1998) draws on narrative methods, particularly the literary theory work of Tsoukas and Hatch (2001), which presents a view that the verbal medium is crucial to understanding behaviour within organisations (see also Browning & Boudes, 2005). While the focus is on the informant, Easterby-Smith, Thorpe, & Lowe (2002, p. 50) place equal responsibility with the analyst.

Partington advises that senior managers are not generally candidates for questionnaires but they might respond candidly when asked to offer their oral history and wise counsel. The experience from this research concurs with Partington; resulting in over 150 hours[253] of 'stream-of-consciousness' voice recordings from a panoply of political, commercial, industrial, bureaucratic, academic, and diplomatic contributors.

Further, the digital recording durations vary between 1½ to 2½ hours: significantly longer than predicted, but the majority of occasions last between 1½ to 1¾ hours[254]. Some respondents maintain an ongoing conversation.

Recording does not occur during introductions and conclusions; noting that important information is often offered at the exit door.

Software support is available for interview transcriptions.[255]

Following an interview, an informant receives a copy of the mp3 file: a CRDOM with a verbatim transcription as a text file and a Hansard-like translation[256]. Occasionally, the informant sanitises the transcript as a benign comment might affect on-going negotiations. The overall efficacy of contextual impression remains generally uncompromised as multiple informants address similar issues from their different perspectives (Cox & Hassard, 2005; Strati, 2000). Directions from senior management to change an informant's expressed opinion are, of themselves, incisive. In essence, Annexure A is an 'immersive experience' and a source of anecdotes that illuminate the discussion holistically.

The remaining exposures, based on Figure 13.1, are restricted to the case studies.

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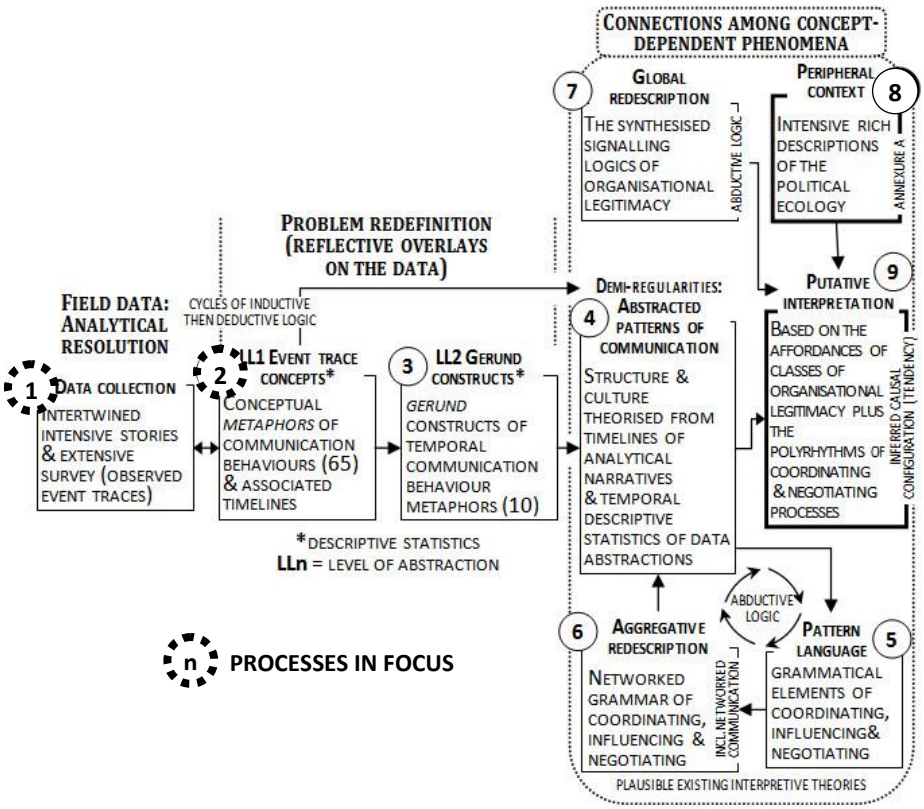
[253] Including cycles of interviews with the case study informants.
[254] van den Ende & van Marrewijk (2015) had a similar experience.
[255] HyperTranscribe (Researchware, 2005)
[256] The translation method used to document the proceedings of Parliament entailing obvious mispronunciations, repetitions, pensive interjections, and similar.

Case S and case L

Sample size

Case S and Case L respectively, comprise two sub-cases being a government client organisation, and a commercial contractor organisation with its major subcontractor organisation. Both Case S and Case L offer five participants including their senior or chief executive responsible for the tender project (the bid manager who might be the CEO). Each informant participates in five iterations of open-ended recorded interviews. This is remarkable given the frenetic activity associated with the procurement of major Defence equipment and is a testament to the goodwill of the senior management of the DMO and the contractors.

Case-based data collection: Nodes 1 & 2



Round 1 Interviews

The methods employed are developed and applied to Case S and then applied to Case L following a phased delay. The first round of stream-of-consciousness anecdotes and

stories produces a set of grounded conceptual categories inducted from the transcripts. Metaphors characterise the researcher-inducted communication behaviour (or game) recalled by an informant. While this is not a study applying the data fracturing tenets of one or more of the personified variants of grounded theory[257], anecdotes and stories from a complete round of interviews form a collage from which to identify behavioural themes (Charmaz, 2006; Saunders et al., 2003).

Every identified metaphoric behavioural theme[258] translates to a survey question requesting the temporal awareness of that theme. During this first phase of data acquisition, executives might be reticent to give voice to certain issues. Conversely, senior executives are generally more fulsome. However, personality traits or functional position might override this impression. The mere existence of a survey question appears to be confidence-building, particularly if previous respondents had offered a response to a behavioural theme. Indeed, the process works in both directions with senior executives receiving some 'feedback' that might be categorised as *inattentional blindness* (Mack & Rock, 1998).

These inducted behavioural themes, with their characteristic metaphoric idiom identifiers (such as the Beauty Contest), are the research Sense-Making Items (SMIs). The unique numeric identifier assigned to each SMI relates to only the order of thematic identification of an SMI. A small number of SMIs exist in the economics, political economy and political science literature. 'Winner's Curse' (Amyx & Luehlfing, 2006; Grosskopf, Bereby-Meyer, & Bazerman, 2003) is an example.

The use of idioms to indicate gaming communication behaviours during a tendering process is described by Dick (2005). Dick sought to catalogue the gaming rules according to the type of tender under consideration, rather than conceptualising the evolution of gaming behaviours during the life of the tendering process, as with this study.

In the order of thematic identification, Table 13.1 lists the conceptual SMIs[259] inducted from the first round of interviews. Ultimately this list extended beyond 65 items.

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[257] Glaser, Strauss, and Corbin (M. Easterby-Smith et al., 2012, pp. 58-60)

[258] In different ways, participants might indicate that they were witnessing a slick presentation by impeccably presented company agents or lobbyists. For the purpose of this inquiry, they were witnessing a metaphoric 'Beauty Contest'. The survey question to all participants requested an indication of when they witnessed a Beauty Contest.

[259] Smithson (2010, p. 92) suggests that the literature on organisational sense-making reflects the idea that 'active thinking' is motivated by the identification of a discrepancy or gap in current knowledge - a

Sense-Making Item (SMI): Idiom and Explanation
01. Beauty Contest: A party's behaviour concentrates on its presentation values.
02. Smart Thinking: Attention is focused on a party's business-model (and potential risks).
03. Gold Miner: A party uses this project to advance another project's objectives.
04. Cargo Cult: A party's behaviours result from a history of receiving guaranteed non-competitive work.
05. Cock Fight: Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.
06. Fool's Gold: A party is willing to offer anything that is requested, regardless of the commercial implications.
07. Masquerade: A party displays a 'crafted' pretence for a period of time (particularly in the presence of competitors).
08. Vanity Fair: A party feels pressure to participate because of the project size and/or its political importance.

Table 13.1: Initial induction of Sense-Making Items (SMIs) from the anecdotes and stories.

Baily (1987) reflects on how people make sense of indexical expressions. These particular SMIs are context dependent. Whereas the SMI idiom 'Beauty Contest' has near universal meaning in the domain of competitive contracting, the SMI idiom 'Kashmir' – *a party behaves apprehensively as it perceives that other involved contractors might try to appropriate its current &/or future contract share* – has existing currency in the DMO lexicon, as does 'The Scorpion' [260] and 'The Snake'[261].

Round 2 Interviews

The second round of interviews present the case respondents with a time-lined matrix (Figure 13.2), incorporating the identified (rubric) SMIs to date (from Table 13.1).

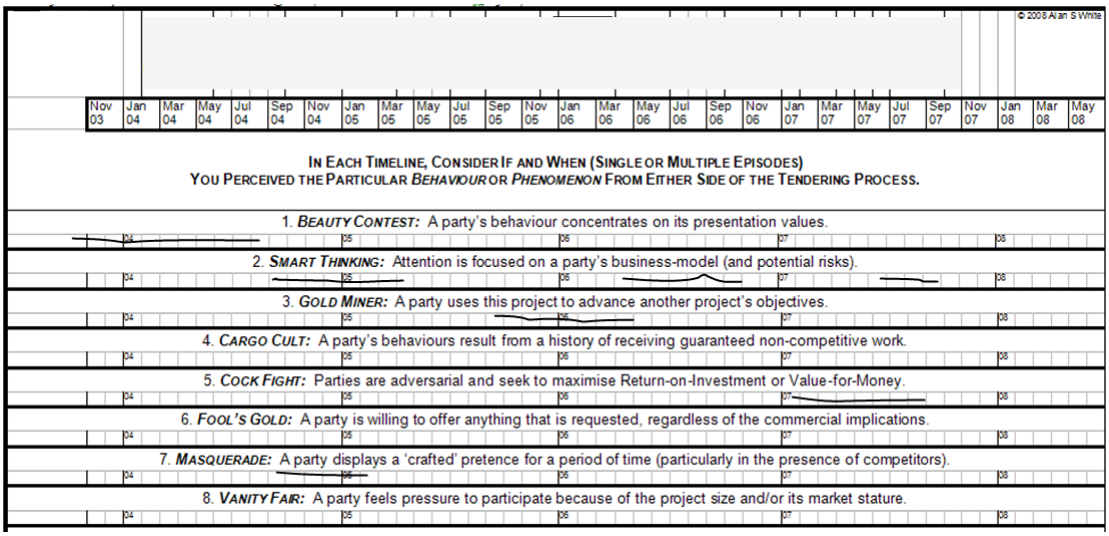

Figure 13.2: Rubric of Sense-Making Items related to the project timeline template.

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type of ignorance (risk) and how these might be addressed. Ignorance might be used by both the client and the contractor as a proxy indicator of risk.

[260] **The Scorpion:** The project is implanted with a toxic human agent (common foe) whose presence unites opposing parties or drives them apart.

[261] **The Snake:** Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

The survey respondents draw irregular lines reflecting their recollections of observations of communication behaviours: being indicative of a game-at-play or prevailing atmospheric. For some respondents, the SMI triggers recollections, or eschews previous reticence. At times, there is genuine belief that certain behaviours never occurred, but as with all idioms, individuals differ.

Several outcomes arise from this exercise. Each participant offers additional anecdotes and stories as they ponder the reality of an SMI or its timing. On analysis, this addition to the evolving narrative, sometimes described as an *ante-narrative* (Barge, 2002; D.M. Boje, 2006; P. H. Dalcher & Drevin, 2003) delivers additional SMIs.

For respondents, the effect of recalling periods of questionable behaviour, appears cathartic, however, there is a risk of 'gifting' information. The contrast between senior executives and line executives is significant. The idea that senior executives have consummate awareness would appear problematic and 'witch-hunts', arising from the presence of an SMI in the survey, are an indication of a risk-averse defensive organisation.

Round 3 Interviews

The third round of interviews provides all informants with an expanded timeline matrix incorporating the additional SMIs inducted from the round 2 interviews. Respondents address the new SMIs and, *ab initio*, rework the previous SMIs. Additional anecdotes and stories ensue. The protocol of providing audio files and transcripts continues.

Round 3 introduces a new dimension to the inquiry with the presentation of interim results in the form of polar (radar) charts (see Figure 13.3).

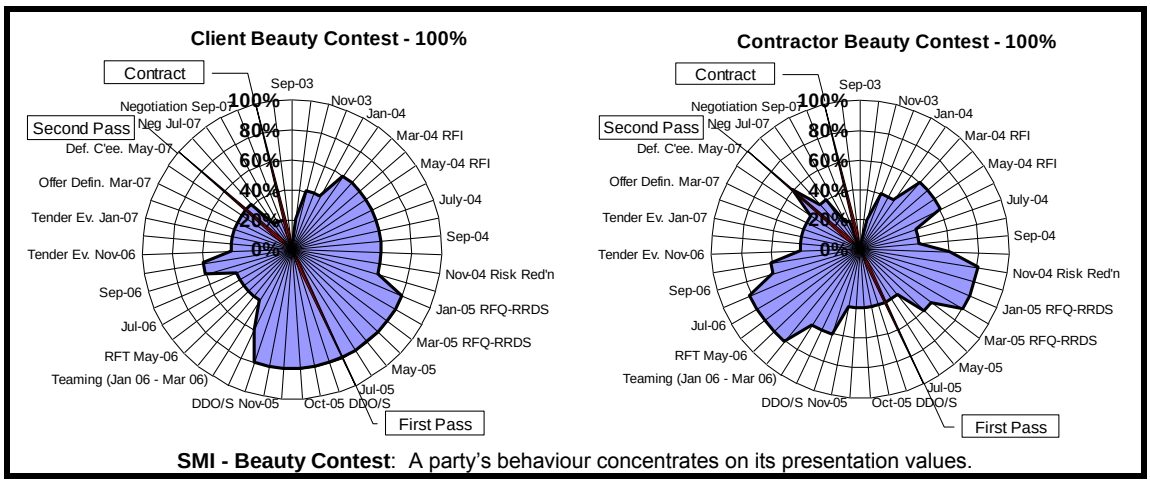


Figure 13.3: Illustrative polar charts of one SMI exposing client and contractor (dyadic) data.

Polar charts have inherent distortions as the timescale contracts physically towards the origin. After viewing the more robust bar graph options, the participants demonstrably preferred the comparative visual qualities of polar presentations. Euphemistic 'MRI scans' appear on office walls, particularly as the number of SMIs approaches 65.

Non-participants take interest in the mounted graphics, and a turning point occurs in the acceptance of the study as it takes on a normative status. Importantly, the richness of respondent anecdotes and stories is enhanced with additional interpretations and deeper insights arising from the presence of the contrasting polar charts.

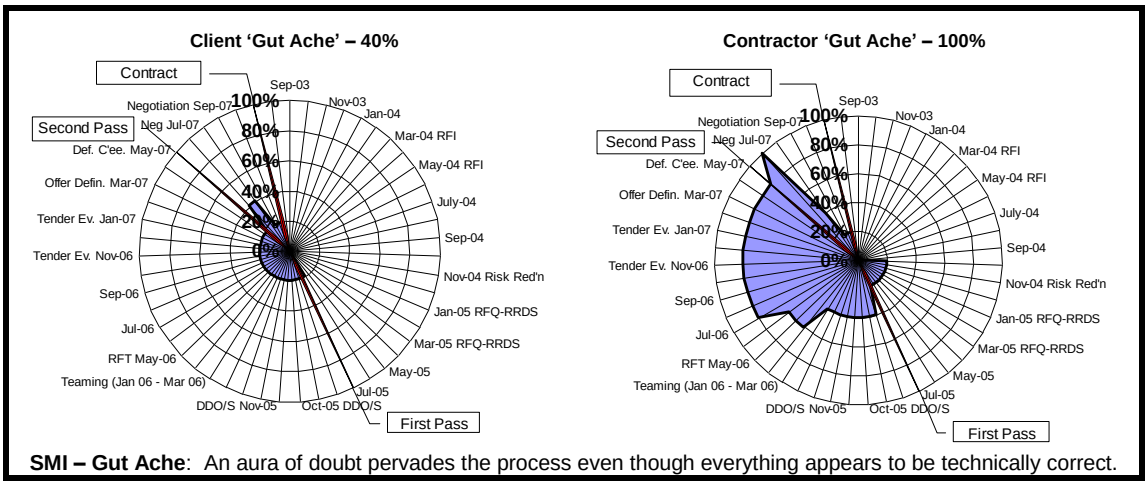
There is an abundance of constructed histories (Aaltonen, 2007b; J. W. Johnson & LeBreton, 2004; Martin, 2002).

For example:

> **CONTRACTOR:** We were flying by the seat of our pants 99% of the time. And I kept trying to get some sort of guiding signal from the DMO and it never came. They said it would be based on value-for-money. And I wanted to understand, well, how will they evaluate that? They would not reveal anything other than to say, you've got to go and work that out yourself. If I hadn't had a bit of a relation with them, it would have just pissed me off right there.[262]

> **CLIENT:** At the end of the [tender] project, I signed a contract with the successful contractor and then we went out to dinner with our partners. The first question he asked me was, "What was your game?" I knew he'd never made sense of it…

Figure 13.4 illustrates how this sensitivity played out.



SMI – Gut Ache: An aura of doubt pervades the process even though everything appears to be technically correct.

Figure 13.4: Case S – Dyadic reflections on the idiom 'Gut Ache'.

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[262] All narratives are case and time specific. No generalisation should be implied.

There is no single explanation[263], but the comments of the two bid managers and the data supplied by all the respondents (see Figure 13.4), corroborates a general theme: that of a knowing and dispassionate but ignorant (in the knowledge sense (Smithson, 2007, 2010)) client team on the left, and an aware and concerned contractor team on the right.

Rather than 'triangulating' with its precise mathematical nuances, the terms 'corroborating' and 'complementing' appear relevant (Bazeley, 2004; Cox & Hassard, 2005; M. Easterby-Smith et al., 2002; Jick, 1979; Tashakkori & Teddlie, 2003).

Round 4 Interviews

With saturation approaching, there is a reduced rate of new SMIs. Giorgi (1975) is reported to have stayed with one case at a time until the meaning units[264] were exhausted (Tesch, 1990, p. 34). Similar states of diminishing returns occur in Grounded Theory (Saunders et al., 2003, p. 398) and Personal Construct Theory's search for deeper meaning with the use of *laddering* (Baker, 2003; Bourne & Jenkins, 2005; Peter Caputi, Foster, & Viney, 2006; Kelly, 1955). Time is the limiting resource in this study.

Round 5 Interviews

Round 5 is reserved for an audit of results by respondents (see Annexure H). For the respective bid managers and some subordinate executives, round 5 comprises multiple interviews with each participant. They have ownership of the results and their interpretative language uses the SMI lexicon.

Interim summary (Nodes 1 & 2)

The induction of conceptual thematic metaphors of communication behaviours and atmospherics follows intensive open-ended stream-of-consciousness interviews. Deduction follows by applying the conceptual thematic metaphors to a date-scaled pro forma. The resulting extensive survey of participants delivers the recalled timings of perceived observations of communication behaviours and atmospherics. Qualitative and quantitative data are thereby intermixed.

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[263] In varying ways, participants suggested that this was the first time that both parties understood how each other felt.

[264] The idea of a 'meaning unit' and a Sense-Making Item appears to be similar.

Aside from the first round of interviews, respondents receive interim results at the commencement of an interview.

- The process of stream-of-consciousness interviews appears to have a cathartic impact in the sense that someone is interested in the respondent's life.
- The use of polar charts, although inherently distorted, is the participant-preferred means of receiving interim descriptive statistics.

The validity of recalled perceptions of observations, the differing cognitions of an SMI, the desire to 'gift' answers to every question, and the degrees of engagement with a research project that incurs into daily routines, are questions of concern. Figure 13.5 is an illustration of how a client organisation and a contractor organisation, in different parts of the country, respond to two SMIs in the same tender project.

While Figure 13.5 (below) builds confidence in the method, Weick (1995b) argues its rationale. He suggests that events, (such as recalled perceptions of observations of temporal communication behaviours and atmospherics), are causally relevant because they lead to the identification of structure, culture and context.

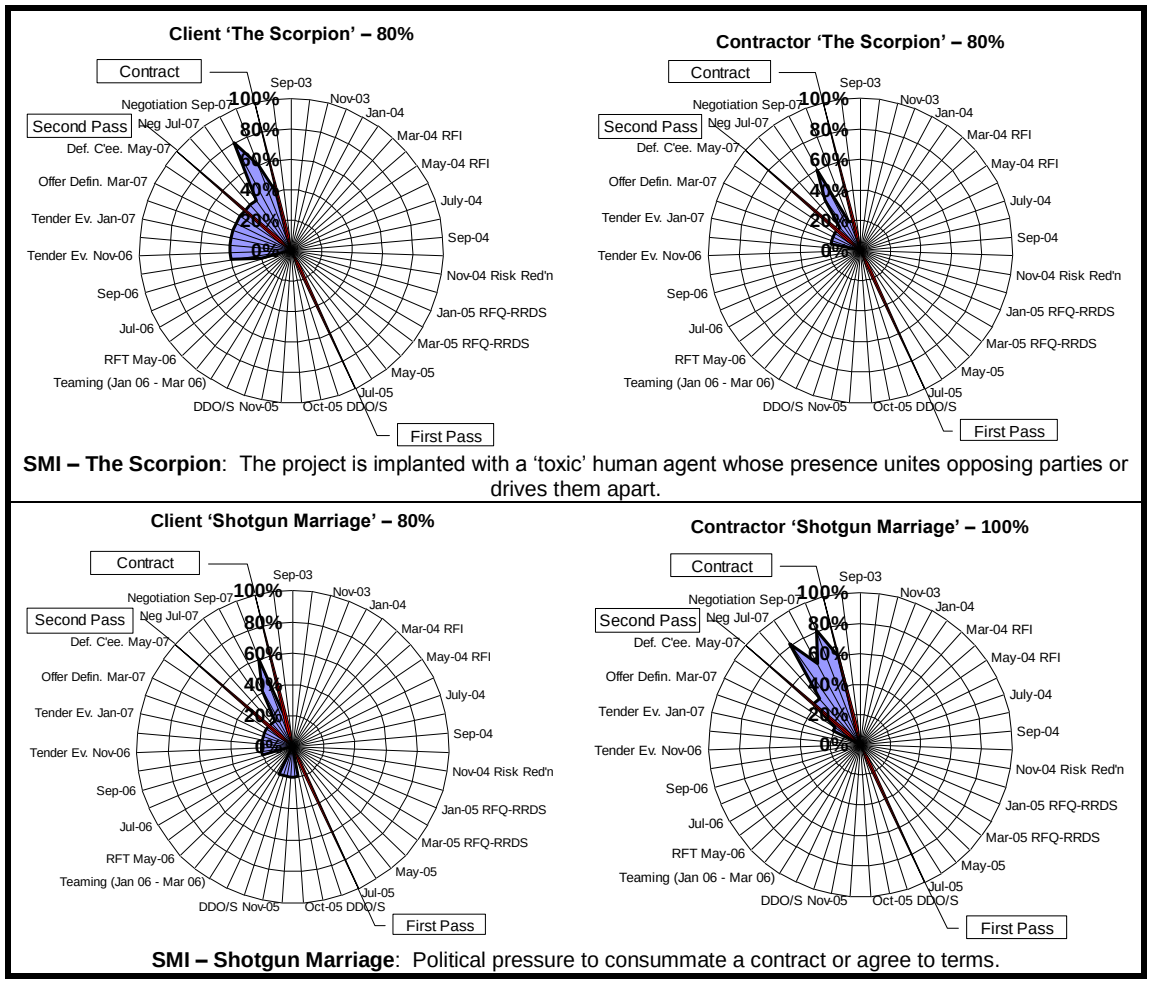
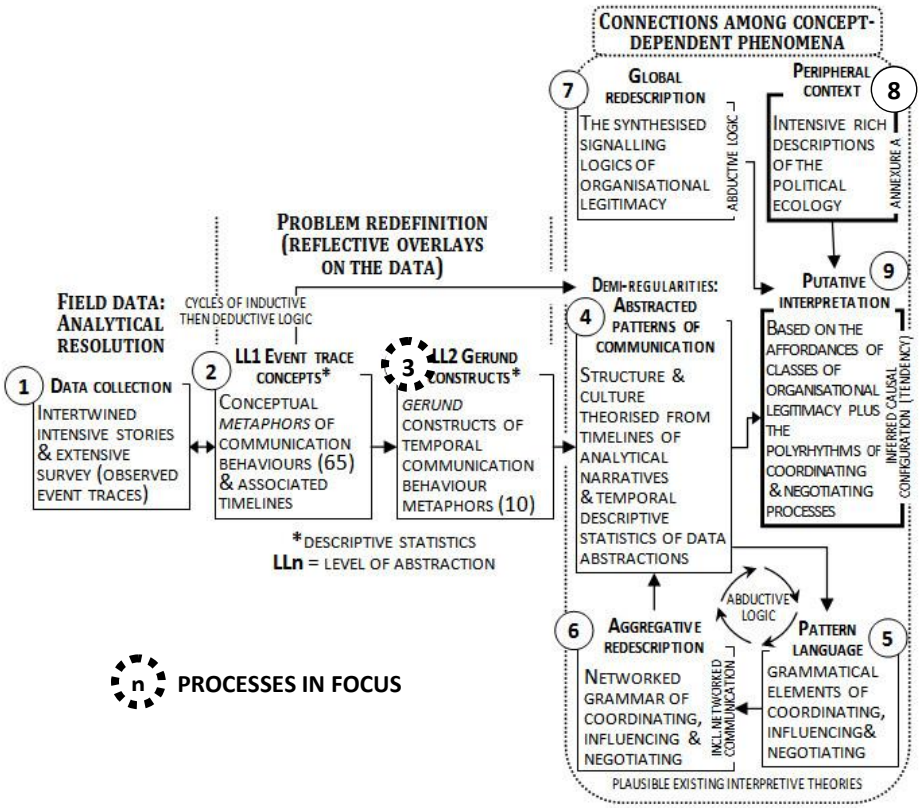


Figure 13.5: Case S – Dyadic complementarity of SMI observations towards the close of the tender process.

As such, events do not of themselves comprise theory but rather, provide the tools for theorising about organising (Karl E. Weick, 1995b); such as with pattern changes of behaviour.

The next section brings Node 3 into focus. While nodes 1 & 2 provide information about 'what' is happening and 'when', the challenge is to construct the unseen (intransitive) purposes reflected in behaviours; with the caveat that an SMI is a socially constructed concept, not reality.

SMI concepts transformed into Gerund (purposive) constructs: Node 3



The idea of a Sense-Making Item (SMI) is no more than a conceptual diegesis used to characterise thematic behaviours in the data. While the SMI represents the visible experience, what type of construction can *represent* (not explain) the unseen purposes? In principle, Marshall (2009, p. 13) suggests that a deeper analysis might consider *similarities and harmonies* (themes) in the chronological record of SMI observations.

The idea of unseen purposes refers to the intentionality of communication behaviours and atmospherics. Ontologically, observed clapping with its intensity and rhythm communicates a purpose, but for what?

Experience and/or theory assists in characterising potentially the latent purpose. This is the function of abductive logic. It uses existing theory (and experience) to provide an understanding of an unexpected phenomenon.

Individuals are different. Each respondent's world view might have an idiosyncratic knowledge culture, together with institutional, cultural, and personal influences on sense making (Colville, 2008; Dervin & Naumer, 2010) that lead collectively to an association of a recalled communication behaviour or atmospheric with any idiom in a lexicon of SMIs. This might not be predictable.

Incommensurable paradigms

Dervin (2003d) advances the discussion to consider how *similarities and harmonies* from the individuals' different and incommensurable paradigms (Kuhn, 1996) are juxtaposed within a specific (tendering) context. She reasons that they have in common:

- the need to participate in *meta-purposes* (pragmatism)
- are *influenced* by their disparate knowledge cultures (abductive logic)

'Meta-purposes' in this instance is defined as a constructed overlay on the data.

At this overlay level, Dervin (2008) proffers the *purposive* gerund 'verbing'. She is referring to gerund-like meta-purposes such as: comprehending; confronting; creating value; finding connections; finding direction; impacting trust; influencing; mediating; negotiating; obstructing, and so forth. In companion, Molloy (2008, p. 163) reiterates Karl Weick's injunction to employ (purposive) verb rather than noun forms, such as 'organising' instead of 'organisation'.

Franzosi (2010, p. 40) prefers to use the term 'gerundive-verbs', and is more explicit about what is to be achieved by transforming (conflating) tactical (SMI) data into groups of purposive constructs (the strategic Tendering Purposes (TPs)):

> ...to assist the researcher in understanding and observing certain patterns in the data without breaching some of the more fundamental epistemological premises that separate qualitative research from quantitative research.

Coincidental purposes

Wittgenstein (1978) provides the next logical step in this argument by proposing that *purposes* exist in coincidental presence; they are conjoint and therefore amenable to a

hierarchical network model representation; similar to Alexander et al. (1977) and their open system. For example, the quality of 'negotiating' might be bound up with 'impacting trust'.

In this study, the conformation of this hierarchical network describes the degrees of co-relation (degrees of discontinuity of persistence) between the conjoint presence of such purposes.[265] 'Negotiating' activities might vary from persistent to ad hoc to infrequent. Activities relating to the maintenance of 'Impacting Trust' might vary from high priority to low priority. With coincidental presence, both the 'negotiating' and 'impacting trust' behaviours might be mutually influential.

Informed by Jang et al. (2008), I constructed meta-purpose variables[266] (TPs) comprising unique congregations of loyal SMIs.

The construction of Tendering Purposes (TPs)

According to Bazeley (2010, p. 13), this transformative change in the SMI data facilitates additional perspectives of analysis. Therefore, rather than abduction's *redescription* that introduces new theory (Nodes 6 & 7), the transformative process (Node 3) operates as a reflective overlay on the data. The process *redefines* a problem into purposes. That is, the primary purpose (TP) that might be associated with a loyal group of SMIs is the subject of an analysis of significant temporal changes in the TP chronological data. Redefinition maintains the granularity of the SMI data and does not impose explanatory theory on a phenomenon.

In their own way, Wynn & Williams (2012) concur: '...abstraction[s] of experiences [that] might take the form of an aggregation [congregation] of micro actions [the SMIs] to highlight higher level factors [purposive constructs]' (pp. 797-798).

An SMI contributes to only one TP congregation.

Table 13.2 (below) illustrates the ten meta-Tendering Purposes[267] (TPs) applied in this study, together with only one constituent SMI from the congregation of SMIs associated with a TP.[268] In fact, a complement of SMIs uniquely comprise a TP.

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[265] For convenience only, this study uses Bayesian Belief Learning Networks to process the network data.

[266] Bazeley (2010) makes the point that, 'When presented with divergent results the first step in achieving an integrated and reconciled analysis is to determine the sense strand of the analysis [the Tendering Purposes in this study]'.

[267] Smithson,(2010, p. 94) considers a rationalist question as to whether there 'really' are different kinds of purposive behaviours? 'Really', in the realist sense of the nature of reality, being grounded in an appropriate ontology (chaos vs randomness).

In Table 13.2, one such SMI is 'Cargo Cult' and it contributes to the TP 'Comprehending'.

TENDERING PURPOSE (TP)	SENSE-MAKING ITEM (SMI) – IDIOM AND EXPLANATION (BEHAVIOURS AND ATMOSPHERICS PERCEIVED BY AN OBSERVER)
Comprehending	**Cargo Cult:** A party's behaviours result from a history of receiving guaranteed non-competitive work.
Confronting	**Masquerade:** A party displays a 'crafted' pretence for a period of time (particularly in the presence of competitors).
Creating Value	**Smart Thinking:** Attention is focused on a party's business-model (and potential risks).
Finding Connections	**Speed Dating (in a shrinking sample):** Potential participants must mate before entering the game.
Finding Direction	**Auntie Mame:** Obtaining high-value insights from a non-contracting party.
Impacting Trust	**Beauty Contest:** A party's behaviour concentrates on its presentation values.
Influencing	**Fool's Gold:** A party is willing to offer anything that is requested, regardless of the commercial implications.
Mediating	**Gone to Grandma:** A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.
Negotiating	**Haughty Opportunist:** A temporal situation fortuitously affords one party enhanced power.
Obstructing	**Star-Gazing 'Iron Colonel':** A non-aligned bureaucrat focuses on procedural detail to avoid contentious issues which might degrade promotion prospects.

Table 13.2: Typology relating an example Sense-Making Item to a meta Tendering Purpose

Charting the chronology of Tendering Purposes

Figure 13.6 (below) previews the temporal progression of the four dominant Tendering Purposes as analysed from the client data during Case S. For standardising[269] purposes, Figure 13.6 displays the tendering campaign divided into four events that characterise the sequential case-study epochs. The logic of such data presentation requires a chart to display as a histogram or bar graph. However, the polyline licence offers visual clarity.

Figure 13.6 is normalised. 100% accrues to the TP with the highest number of observations in each epoch. All other values are relative to 100%. In this instance, the dominating TP is 'Impacting Trust' appears at ordinate 100% (see arrow).

[268] The 'meta' prefix is relinquished.
[269] Variations in epoch duration are removed.

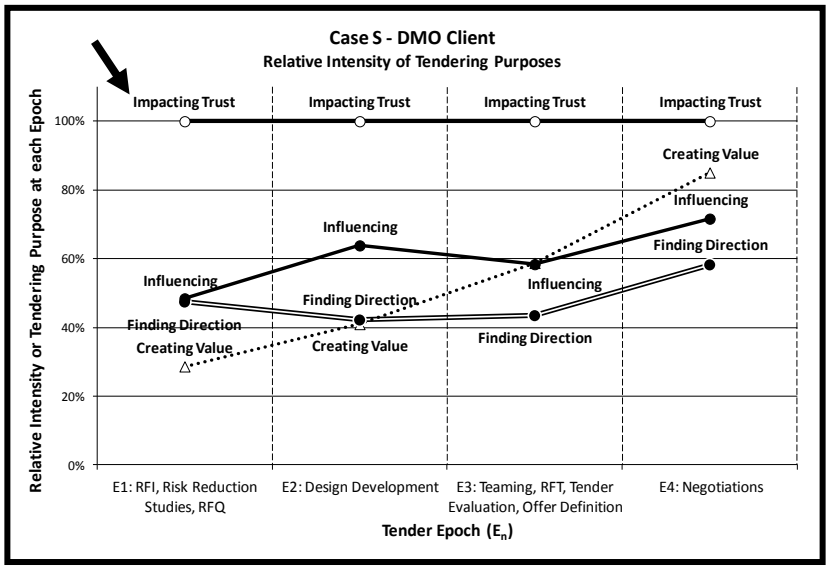

Figure 13.6: Preview of the charting of normalised Tendering Purposes across the sequence of epochs (phases) that comprise the Case S tendering campaign from the DMO client perspective

The loyal SMIs of one TP

Table 13.3 (below) considers the TP 'Impacting Trust'.

Its congregation comprises 15 loyal SMIs. Individually and jointly, these SMIs have purportedly, the purpose of trust building, trust sustainment, or trust erosion.

TENDERING PURPOSE OF "IMPACTING TRUST" – CONGREGATION OF SMIS
01. Beauty Contest: A party's behaviour concentrates on its presentation values.
10. Jungle Jitters: A party is keen for the work but apprehensive about untested relationships.
12. Decree Discordare: A party believes that another party plays the dual (ambiguous) roles of a team-player while retaining final decision-rights.
14. Transponders: Individuals seeking attention by hovering around the project or communicating their importance.
19. Eats Roots and Leaves: A transient bureaucrat institutes change and avoids on-going accountability by leaving.
21. Once Bitten, Twice Shy: Previous experiences have led to ambivalent or negative feelings.
25. Ring-a-Ring-a-Rusey: A party resents being gamed.
28. Ménage à Trois: A client and subcontractor are negotiating.
31. Popcorn Machine: A negotiator has an unstable authority base.
37. Gut Ache: An aura of doubt pervades the process even though everything appears to be technically correct.
50. Pissing in the Wind: One party's negotiator does not have his principal's approved baseline positions.
51. P Platers: A negotiation team is comprised of rookies.
53. Spinning Bow Tie: I don't trust the middle-man.
57. Included Out: Some potential suppliers receive disproportionate welcoming attention.
58. Refilling the Honey Pot: Enticed participants need constant maintenance.

Table 13.3: The constituent SMIs of the Tendering Purpose 'Impacting Trust'

A measurement model of coincidental Tendering Purposes: Bayesian Belief Learning Networks

This section deals with a method known as Bayesian Belief Learning Networks (BBLN). Tabachnick & Fidell (2007) describe a number of other techniques that might deliver equivalent analytical outcomes.

Figure 13.6 displays Tendering Purposes (TPs) against a segmented timeline. The actual timeline has fours epochs of variable duration (see Figure 13.10 for an accurate definition of each epoch). However, for the analytical purposes of Figure 13.6 and similar, the epoch durations are equalised (standardised) to enable a comparative assessment of the observations of communication behaviours and atmospherics across epochs.

In Figure 13.6, the TP 'Impacting Trust' appears to dominate consistently. Nothing indicates the persistence of TPs: be it continuous, ad hoc, or highly concentrated at a point in time. In this study, Bayesian Belief Learning Networks (BBLN) (Jensen, 2001) provide one approach to measure the discontinuity of persistence within Wittgenstein's (1978) hierarchical network of coincidental TPs.

The idea of degrees of discontinuity of persistence recognises the vagaries of social interaction and the reality of cognitive limits (T. Deacon, 1998; Szulanski, 2003). Figure 13.9 (below) illustrates a preview analysis of 'discontinuity of persistence'.

Bayesian networks can *learn*[270]: a feature shared with neural networks (Castellani, Castellani, & Spray, 2003). There are two types of learning: structure learning and parameter learning. Parameter learning computes the conditional probability of occurrence for every event. However, in contrast with neural networks, there is no need to structure the BBLN problem (design the hierarchical network) into a stimulus-response scheme. All Bayesian network software applications can compute and update the conditional probability[271] of an event (variable) in the network. Only some software products can *learn* the topological structure (*structure learning*) of the network of relationships purely from a data table (Murphy, 2005), that is, the software designs (learns) the network model of the coincidental presence of purposes.

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[270] Network learning is a process that takes a matrix of data and computes the properties of a graph that links the variables.

[271] **Conditional probability**: The probability of one event occurring given that another event has or will occur.

Figure 13.7 introduces this exposure with an illustration of the network of TPs in a plexal formation (Biletzki & Matar, 2009; Lindberg, 2001). The computational objective is to generate a *correlation-based* network that reflects the overall degree of discontinuity in the persistence of coincidental TPs. Different software products apply a variety of algorithms, and the documentation accompanying these products (Madsen, 2006) tend to be more accessible than earlier texts (Pearl, 2001).

A simple algorithm selects a TP – 'the purpose-in-focus'[272] – and then arranges all other TPs, according to their relative strengths of correlation, into a hierarchical network.

Figure 13.7 presents a computational iteration where 'E2_Finding_Direction' is the purpose-in-focus. On completion, another TP rotates into focus. The objective is to find the network with the highest overall correlation[273]. The automatically generated network structure (structure learning) suggests that if 'Finding Direction' is in focus, then 'Creating Value', 'Confronting', 'Influencing', and 'Impacting Trust' have similar correlations with Finding Direction. The logic arrows indicate that some variables have degrees of correlation with several other variables.

'Finding Connections' remains disassociated, as its data are relatively constant during Epoch 2. The degree of correlation between 'Comprehending' and 'Influencing' is less than that between 'Influencing' and 'Finding Direction', hence the network topology of a hierarchical network ordered by pair-wise correlation (Korb & Nicholson, 2003; Madsen, 2006; Murphy, 2012; Ramoni, 2000).

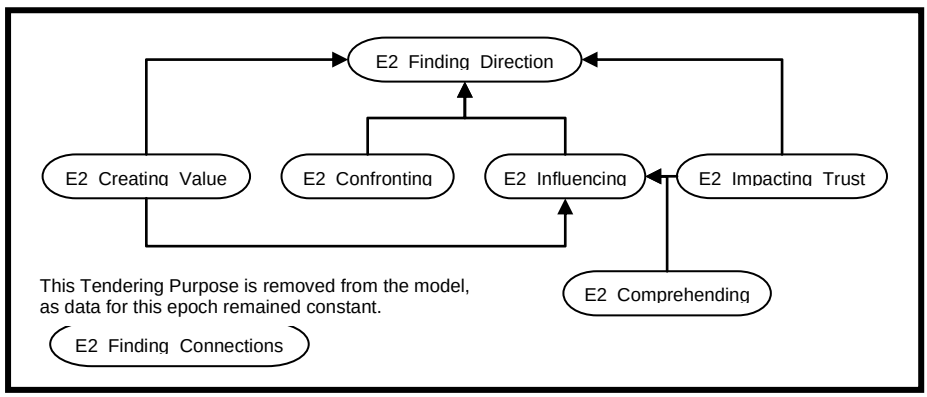

Figure 13.7: The hierarchy of TP correlations (see Figure 13.8 PART A below).

[272] illustrated with a rectangle of broken lines in Figure 13.8

[273] By way of explanation, assume that the purpose-in-focus was of short duration and is present in the data as short erratic instances. The algorithm then searches the data for a variable that has the highest correlation with the purpose-in-focus. The end result is a network with low overall correlation quality.

The objective is to locate the computational iteration that demonstrates the highest level of overall correlation. For example, if the correlation strength with the purpose-in-focus is low, then correlations with the next level down are even lower.

For this study, the metric of network robustness is renamed 'Complexity Factor'.

Figure 13.8 presents two illustrative Bayesian Belief Networks, each highlighting their respective purpose-in-focus (the rectangle with broken lines). On the left, the network describes the influences in Epoch E2, and on the right, for Epoch E4. Changing the purpose-in-focus can have a significant impact on the (network) relationships between the Tendering Purposes.

On the left-hand side of Figure 13.8, Epoch E2 has a Complexity Factor = 0.2. This factor reflects the goodness-of-fit (robustness) of the model to the data in terms of cascading correlation values. Epoch E2, with 'Finding Direction' as the purpose-in-focus, offers the most robust network of all possible networks.[274]

Its accuracy[275] approaches 80%. This represents a relatively robust model and the Complexity Factor (1-0.8) = 0.2 (low complexity).

Figure 13.8 (right-hand side) Epoch E4 illustrates a network model of only 47% accuracy and the Complexity Factor (1- accuracy) is a relatively high 0.53. Higher discontinuity of persistence in the data reflects in higher contextual complexity.

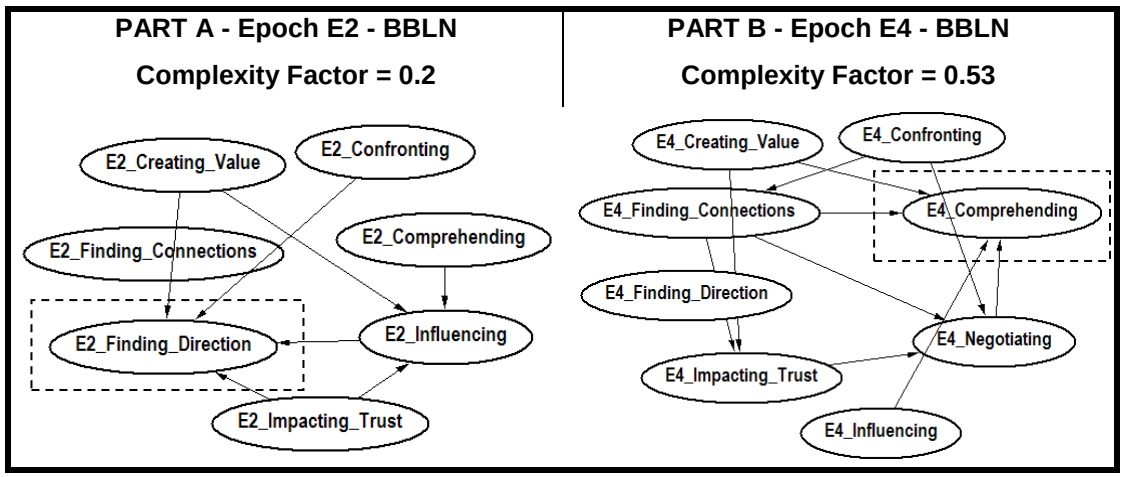

Figure 13.8: Examples of the 'purpose-in-focus' orchestrating the plexus of purposes.

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[274] The BBLN software product "Bayesware Discoverer" (http://www.bayesware.com/) iterates through numerous possible model structures. The purpose-in-focus is fixed for an iteration and all other variables (purposes) take on different parent-child relationships. Discoverer offers the choice of three algorithms. The objective in this research is to determine the *relative* accuracy of all models throughout all epochs. Therefore, the choice of algorithm is not material, particularly as they produced similar results in this study.

[275] While the term 'accuracy' appears in Discoverer's reports, the better term is 'robustness'.

Organisational or contextual complexity is characterised by an inability to predict the outcome of actions. Often described as 'non-linearity', the outcome from an input stimulus cannot be predicted (McKelvey, 1998). This is the realm of emergent patterns of behaviour. However, there can be *degrees* of contextual complexity and this is the function of the Complexity Factor in Figure 13.8. Indeed, seeking to understand contextual complexity in real-time, involves a temporal spiral of probing, sensing and responding: observed as SMIs (Cilliers, 2007; Price, 2004; Shaw, 1997; Snowden & Boone, November 2007; Stacey & Griffin, 2006; Thomas & Mengel, 2008).

A perception of high model robustness is not necessarily 'good'. It just means that the congregation of behaviours correlate well with the purpose-in-focus. It also means that an instrumental measure of the discontinuity of persistence, based on the recollection of observed communication behaviours and atmospherics, is low. However, the non-linearity of behaviours in complex contexts implies that 'weak signals' (such as a whisper that an election might be called) can have a disproportionate impact on a tendering strategy (Snowden & Boone, November 2007, p. 72).

The Complexity Factor says something about the conceptual data, not reality. Both high and low values are informative. (However, once the TP 'Finding Direction' enters the researcher-informant linguistics, the TP becomes an Ideally Real Entity that has an existence in its own right, is the subject of belief, and makes a difference.)

Accuracy (cross validation)

The term 'accuracy' appears in the literature as it relates to the intrinsic randomness within any one TP, and to the global accuracy of the overall Bayesian Belief Network model. Less randomness in the data produces higher accuracy models. However, in personal communications, the software developer expresses a preference for the term 'robustness' even though the (Bayesware Discoverer) software displays the term 'accuracy' (Ramoni, 2008, October 14). The robustness (accuracy) of the model is computed using the 'cross-validation' technique (Tabachnick & Fidell, 2007, pp. 140-142).

In cross-validation, the entire database is compartmentalised into partitions known as 'folds'. For each fold in turn, the software predicts the values of its variables from the rest of the database. By comparing the predicted values in a fold with its known value in the database, an accuracy value is be calculated for every TP and then for the entire network. Repeated cross-validations address different partitions and the mean of all the robustness estimations becomes the network's mean global accuracy with its associated

standard deviation (Institute for Genomics and Bioinformatics - Graz University of Technology & Department of Information Design - FH JOANNEUM - Graz University of Applied Sciences, 2006; Pourret, Naim, & Marcot, 2008, p. 106).

Comment

In this study, Bayesian Belief Networks can do little more than process data about the correlation of the TPs collectively across epochs. The results contribute to an understanding of relative differences in organisational structures within the cases studied. The objective of this capsule overview of a computational procedure is to deny any allusion to a 'black box' requiring unquestioning faith. For users of Microsoft Office Word, Bayesian Belief algorithms are behind the 'Help' function. The algorithms are essential for *inter alia*, self-guiding weapons and medical research (Harrell & Peruggia, 1998; Zhang, McAllister, Scotney, McClean, & Houston, 2006).

Lineage of ideas and data analysis

The Biletzki & Matar's (2009, p. 4) digest of Wittgenstein's early work: *Tractatus* (Tractatus Logico-Philosophicus), and Kurt Lewin's appreciation of the 'games-at-play' (Cartwright, 1952, p. 68), enjoin with the more recent computer-based algorithms applying Bayes' Theorem (1761) in an inference network (The Economist, 30 September 2000; Woolley, 2004). In this study, the 'games' are the SMIs and the TPs are teleological, for they serve a conjoint *purpose* rather than being causal (hence, middle-range theory).

Wittgenstein explains how a picture comprises constitutive elements. Interpreting any one element is dependent on the presence and purpose of all other elements. By removing any one element, all remaining elements take on a different purpose in collectively evoking the emotion of the picture. So too, the strategic purpose – the Tendering Purpose – of a communication behaviour (SMI), 'can only be understood if one understands the different language games [SMIs] and social practices in which that language and action occur' (Schwandt, 2007, pp. 175-176). Therefore, understanding the meaning of any one element in the picture requires an understanding of the interdependence of all the purposive elements in the picture: an example of holistic redescription, which in this study, *inter alia*, applies the grammatical elements of organisational legitimacy.

The research project uses the BBLN software-based algorithms to compute the overall correlation of the coincidental Tendering Purposes and the discontinuity of persistence

in their observations. High levels of persistence might be indicative of say, a machine operator in a factory. Periods of low discontinuity of persistence, followed by high discontinuity of persistence, might describe police operations. In complex contexts, the discontinuity of persistence is non-linear in that its dispositions are unpredictable. Hence, the degrees of discontinuity of persistence offer a *de facto* metric of social complexity, and is utilised in this study accordingly.

Software

The 'Bayesware Discoverer' software is free and has a history of use by researchers. There are published case studies from commercial and institutional research organisations (Beauregard, 2005; Bulashevska, Szakacs, Brors, Eils, & Kovacs, 2004; Pourret et al., 2008, pp. 63, 98, 106, 156; Pyle, 2003, p. 354; Ramoni, 2000). In addition, support is available from the developer.

Preview analysis

The capacity of a leader to deal with a complex (non-linear) social context reflects in the changes in the 'discontinuity of persistence' of observed communication behaviours congregated into Tendering Purpose constructs.

Figure 13.9 illustrates the metric of 'discontinuity of persistence' (see Annexure E). During Epochs E1 and E2, the client (DMO) *directs* the participation of the contractor. General communications with the contractor ceases during Epoch E3 (the production of the tender submission) and is reinstated during the negotiations occurring during Epoch E4. The problematic Case L struggles to regain focus during Epoch E4, and the project registers on the defence minister's 'projects of concern list'. Such outcomes reflect coincidental influences of structural, cultural, contextual, and contingent arrangements.

For this study, the statistics are grounded in the informants' recalled observations of temporal communication behaviours and atmospherics.

For a preview of the BBLN data analysis, see Figure 13.9 below.

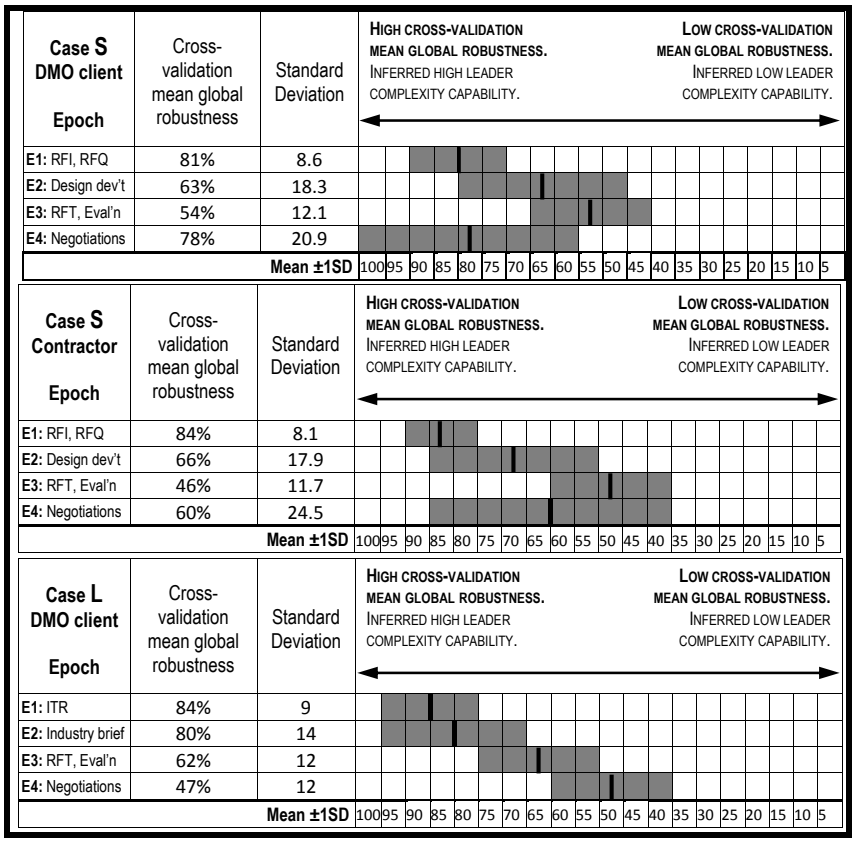


Figure 13.9: Preview: The 'discontinuity of persistence'
A measure of the cross-validation of co-existing Tendering Purposes.

Measures of the 'discontinuity of persistence' – Standard Deviation (SD) – relate to the duration of bands of observations, their contiguity (persistence), and the degree of coincidental temporal correlation of Tendering Purposes.

Interim summary (Node 3)

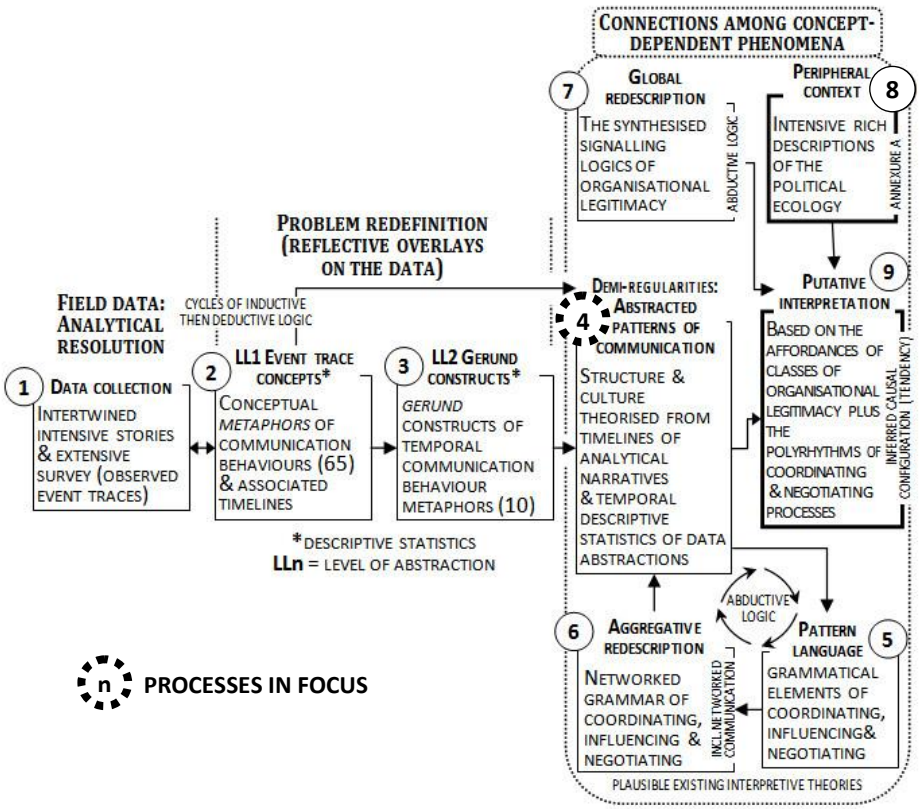
Conceptual SMI metaphors congregate/transpose into gerund-like purposive constructs (TPs) that provide a reflective overlay on the SMI data. This layer represents a *redefinition* of the problem or phenomena while retaining the original data granularity.

The purposive constructs (TPs) exist in each other's presence and are therefore amenable to *description* using hierarchical network logic (see Nodes 6 & 7).

Bayesian Belief Learning computes the parameters of the network that, in turn, translate into posited structural properties of organisations, such as those properties contributing to, 'leader complexity capability' – just one *redescription* of the problem, as illustrated in the preview Figure 13.9.

The next section considers Node 4, which functions as a junction of data analyses that might assimilate into one or more putative interpretations at Node 9.

Problem redescription and demi-regularities: Node 4



The data for identifying the temporal demi-regularities come from Node 2 – the raw SMIs in their chronological aggregates that display in example Figure 13.10.

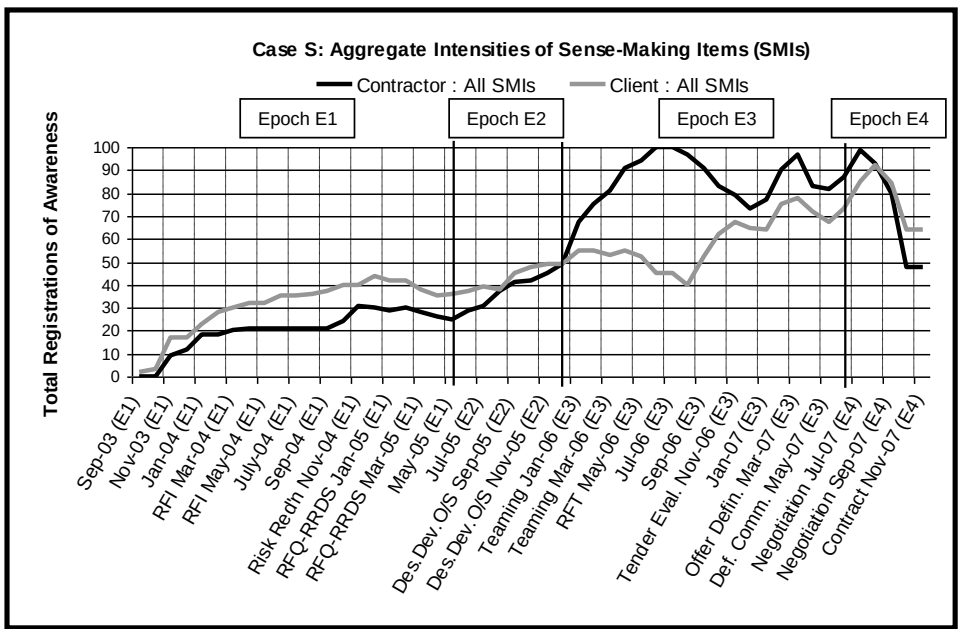


Figure 13.10: Case S: Dyadic aggregate chronological (SMI) communication behaviours and atmospherics

In the case of Figure 13.10 (above), polylines plot the course of the polyrhythms of perceived signalling behaviours: the 'reaching out'. Donath (26 October 2011, p. 5) suggests that signallers and receivers continuously adjust the signal form within an economy of costs and benefits. Further, this ongoing interaction of itself, leads to a project-specific acculturation. Such is the existing theory.

The purpose of redescription (at Nodes 5 & 6) is to use existing theories for the purpose of explanation: theory-guided 'true accounts' of what happened (abductive logic). 'What actually happened' contrasts with the recalled perceptions of observed (signalling) behaviours. What actually happened in Epoch E3, is that government procurement policy requires the DMO client (light shade) to only engage with the contractor (dark shade) through formal communications restricted to technical matters of the tender form; hence the reduction in perceived behaviours. Within the economy of 'costs and benefits', the contractor has lost a vital source of political 'interpretation', and engages in extensive and costly non-DMO communications in an attempt to cover the information gap: real or imaginary.

Problem redefinition

At Node 3, the problem is redefined in terms of congregations of Tendering Purposes. This requires the transformation/allocation of each SMI to an appropriate congregation of purposive intent such as 'Finding Direction'. The timescale is bracketed into epochs, which affords further aggregation (see example Figure 13.6 above).

Problem redescription

In contrast to redefinition, *redescription* of the entire problem occurs at Nodes 6, where the same raw SMI chronological data are transformed into the constructs of existing theory. The confluence of analyses at Node 4 enables an insight into the structures and cultures – what the world would need to be like – for the observed behaviours and atmospherics to have occurred.

Figure 13.11 is illustrative of a transformation of SMIs to constructs of 'Controlling' and 'Emergent' behaviours (Annexure F).[276] This temporal disposition of perceptions of communication behaviours offers an insight into the organisational culture and its

[276] SMIs are assigned logically to the categories of 'Order' and 'Unorder' (Disorder). For this discussion only, 'order' is reflected in 'Controlling' communication behaviours and 'unorder' is reflected in unpredictable 'Emergent' communication behaviours (see Annexure F).

leadership style. At segment E in Figure 13.11, the tender project enters the Defence minister's 'projects of concern list'. The short-term 'fits' and 'starts' of leader-directed controlling communication behaviours tends to destabilise rather than stabilise (see Figure 13.9, Case L, Epoch E4).

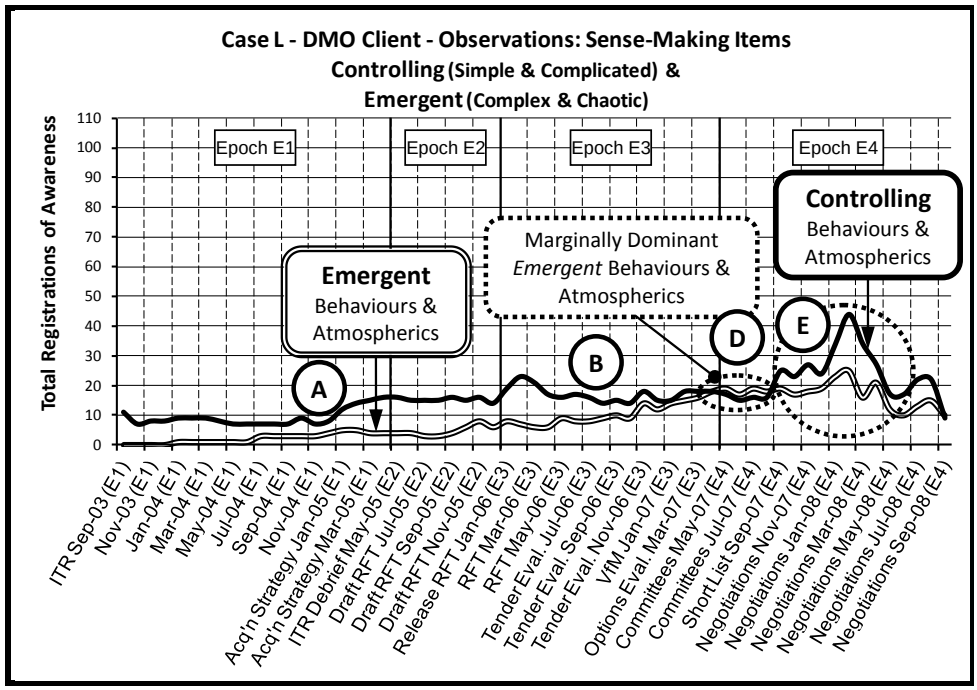


Figure 13.11: (preview example only) SMIs transposed into characteristics of Controlling (order) and Emergent (disorder) behaviours and atmospherics.

Redescription: Nodes 6 & 7

Node 6 is an extension of the example illustrated in Figure 13.11. It is guided by existing theory but still relies on aggregated SMI data.

While all the previous nodes represent aggregations of perceived behaviours identified from within organisations, Node 7 engages with external perceptions of organisations globally. The data capture and analysis are informed by signalling theory with a focus on organisational legitimacy.

Node 4 facilitates a confluence of Nodes 3, 6 and 7.

Nodes 2+8, Node 3, and Nodes 5+6 receive detailed treatment in the following data analysis chapters

Summary

This chapter presents a variety of deliberately selected methods and techniques used in a quest to model and analyse case-based problems. It explicates conceptual thematic idioms of communication behaviours (diegesis) from the data, together with a chronology of events. Redefined and redescribed data entertain different internal and external perspectives. The objective is to suggest putative explanations/interpretations for middle-range theory: not the truth.

If research validity is recognised, then how is it accounted?

Based on the explanation offered by Zachariadis, Scott, & Barrett (2013, p. 876), validity, within a retroductive approach, is achieved through closure and the recovery of robust demi-regularities with the use of intertwined (mixed) methods.

The following points identify methods, techniques and rationales that apply to this study:

- Data collection intertwines intensive qualitative interviews with extensive quantitative surveys.
- Recorded stream-of-consciousness interviews are open-ended.
- Through induction, the interview transcripts generate survey questions as conceptual metaphors of recalled observations of communication behaviours and atmospherics: the Sense-Making Items (diegesis).
- In the survey questionnaire, explanations complement each conceptual SMI.
- Against a survey SMI, respondents draw timelines of their recalled observations of communication behaviours and atmospherics.
- A polar (radar) chart displays aggregate data for each question.
- Sense-Making Items congregate into teleological Tendering Purpose (TP) constructs in gerund form.
- Collectively, the Tendering Purposes are analysed in a structure-learning Bayesian Belief Learning Network. The results describe the overall degree of discontinuity of persistence in the co-occurring TPs. High global levels of discontinuity of persistence might be indicative of a leader's problematic complexity capability.
- 'Redefinition' and 'redescription' are distinguished. *Redefinition* of a problem operates on the Sense-Making Item and its transformation into higher-level Tendering Purpose constructs or other regimes. *Redescription* is an external holistic

reflection on organisational legitimacy. Redescription of a problem considers the timing of broadband processes within or even across epochs, such as coordinating and negotiating process patterns as informed by theory.

- Such insights from redescription contribute to an understanding of what a world would need to be like for such observed (SMI) communication behaviours to occur: its structures, cultures, contexts, and contingent arrangements, none of which can, in general, be observed directly.

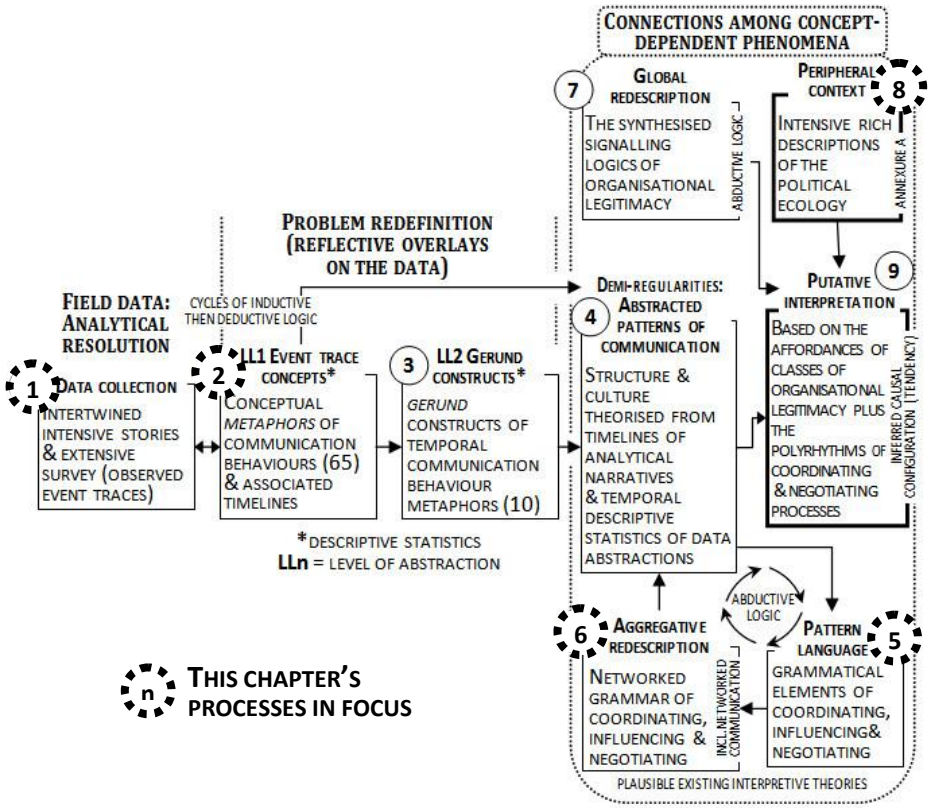
The next chapter

Making sense of communication behaviours is presented as a narrative in the following chapter. In detail, it gives voice to the dyad of the client and contractor. The games-at-play are exposed vividly as well as identifying 'that which cannot be said' (the trauma of experience). It concludes with a redescription of the problem in terms of polyrhythms of sense-making and sense-giving and further, it introduces a new regime of phase definitions for a tender process and its governance.

Chapter 14

Analysis:

Making Sense of Communication Behaviours



Using aggregative measures, the purpose of this chapter is fourfold:

- to display the data presentations of Sense-Making Items (SMIs) using a storyboard motif: a narrative
- to elucidate the key SMIs as artefacts for making sense of the prevailing political reality
- to demonstrate the power of dyadic data in exposing 'that which cannot be said'
- to demonstrate the methodology's validity by incorporating corroborating and contrasting commentary and complementing theory

The construction of this narrative means that mediation of reality occurs at least twice (Jacobs, 2006, p. 144; Patterson, 2008, p. 30). The first mediation comes from the

research participants' recollections of observations of communication behaviours. These metaphoric Sense-Making Items (SMIs) might not reflect the original proponent's gaming purpose. The second mediation of reality comes with the researcher's narrative construction based on: (a) the participants' perceived SMIs, (b) the contextual landscape, and (c) the political ecology recovered from the conversations and commentaries assembled in Annexure A.

The result is an experience-narrative of making sense of perceptions of communication behaviours (SMIs) and atmospherics that shape the realpolitik of power and influence.

The character begins with explaining conceptual Sense-Making Items (SMIs) followed by their collective assembly into a narrative. It concludes with a clearer delimiting of tender phases which is a contribution to practice theory (Molloy, 2008, pp. 163-165).

Sense-Making Items (SMIs)

The SMIs reflect Snowden's (November 2007, p. 72) 'safe-to-fail' information seeding and information seeking probes; safe-to-fail because they are short-term and generally innocuous for the parties involved. These SMI artefacts are a human product of the project-specific and socially complex political context. (See Wittgenstein (1978) and Schwandt (2007, p. 175) on Language Games[277])

In such complex contexts, the role of the leader is to promote the practice of probing, sensing, and responding, in order to make sense of perceived temporal reality. The idea and prospect of these probes is to promote conversations that might resonate with others: morphogenetic interaction. Successful probes gain momentum and eventually achieve a critical presence that enables their ideas to shape the political discourse (Snowden & Boone, November 2007, p. 75).

SMI artefacts are conceptual metaphors for the political games-at-play: political because they seek to influence people. The study data are temporal and the resulting experience-narrative presents a progressive statement of situational awareness, not in terms of the industrial engineering metrics of time, cost, and performance, but rather in terms of the progressive health of the tender project as it evolves towards political appropriateness (or otherwise).

Language games have a time and place, and misplaced games might indicate an inappropriate management response to contextual complexity. However, progressive

[277] "...words and sentences acquire their meanings because they are used in some rule-governed, self-contained practice like a game."

monitoring of the tender project's games-at-play, the 'what's going on when', is only half the story. The 'how' and 'why' is necessary to infer and explain the mechanisms that appear to distinguish tender project success from failure.

Such insights have a short shelf-life as the Case S contractor's bid manager recalls[278]:

> But politically, I could almost imagine that if you could spin the roulette wheel now then you might get a totally different answer than you did a year ago because the politics are different.

An experience-narrative of making sense of the prevailing reality

From the intensive stream-of-consciousness interviews, some sixty-five metaphoric conceptual Sense-Making Items are identified: categorically different but not necessarily responding to different purposes. The extensive timeline survey provides data concerning the timing of recalled observations of communication behaviours and atmospherics.

This chapter deals only with aggregate dyadic data: being Case S client (DMO) and contractor (see Figure 14.1 below). In addition, the DMO bid manager defines (official) phases or epochs within the tender project timeline. These are subjected to forensic investigation.

[278] Some participant quotations repeat throughout the dissertation, as they add gloss to a variety of frames of reasoning.

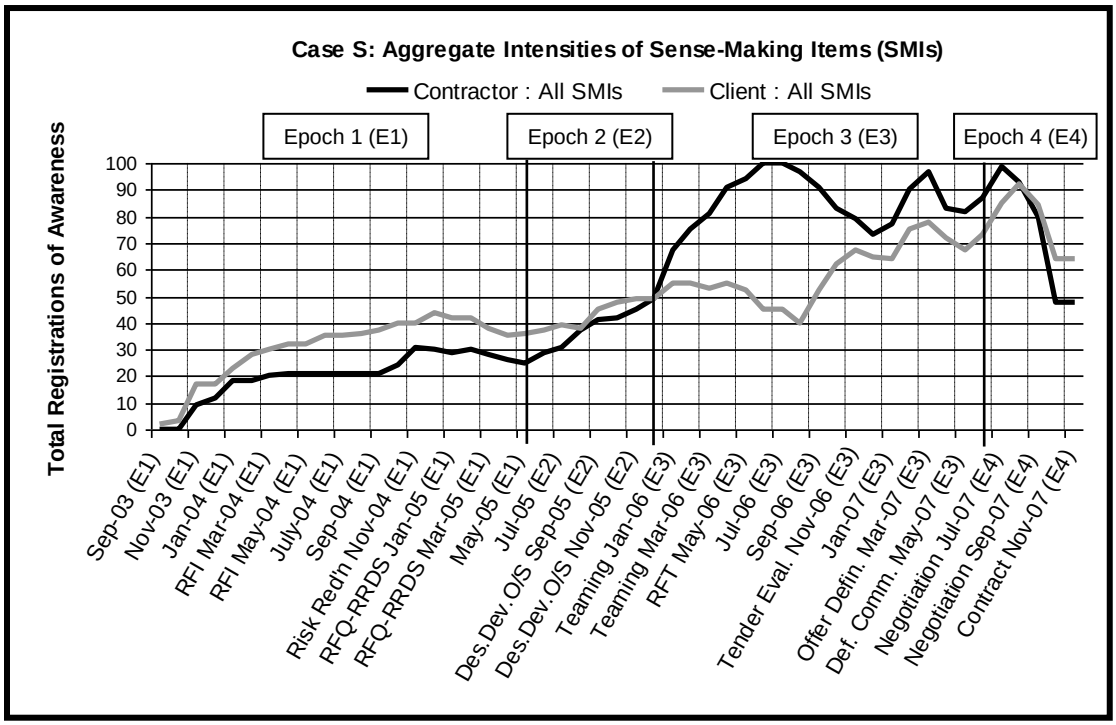


Figure 14.1: Aggregate observations of Sense-Making Items (behaviours and atmospherics) as recalled by respondents.

For every two-month period, Figure 14.1 displays the aggregate number of recalled observations of SMI behaviours of the Case S client and contractor respectively.

The remainder of this chapter is devoted to exposing the sense-making narrative behind the traces presented in Figure 14.1. In general, this enjoins variants of Figure 14.1 above and individual SMI polar (radar) charts described in the next section.

The Sense-Making Item (SMI) Artefact

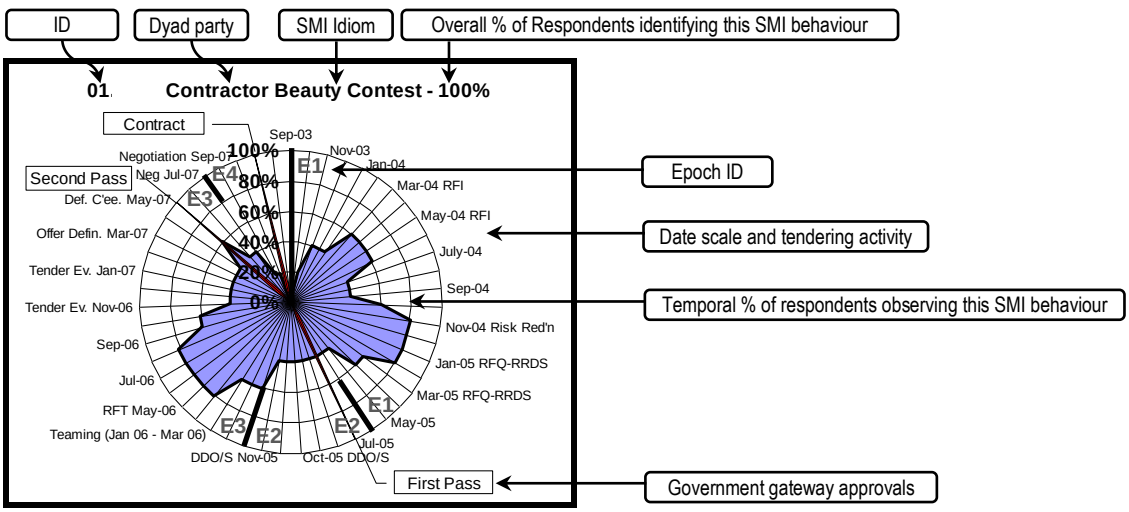


Figure 14.2: E*n* (01) Beauty Contest SMI [E*n* = Epoch ID]

The SMI is not reality but rather, a conceptual idiom with which to express an idea, impression, or perception.

Epoch (phase) definitions are illuminated in Figure 14.3 (below).

Delimiting epoch sectors: E1, E2, E3, & E4

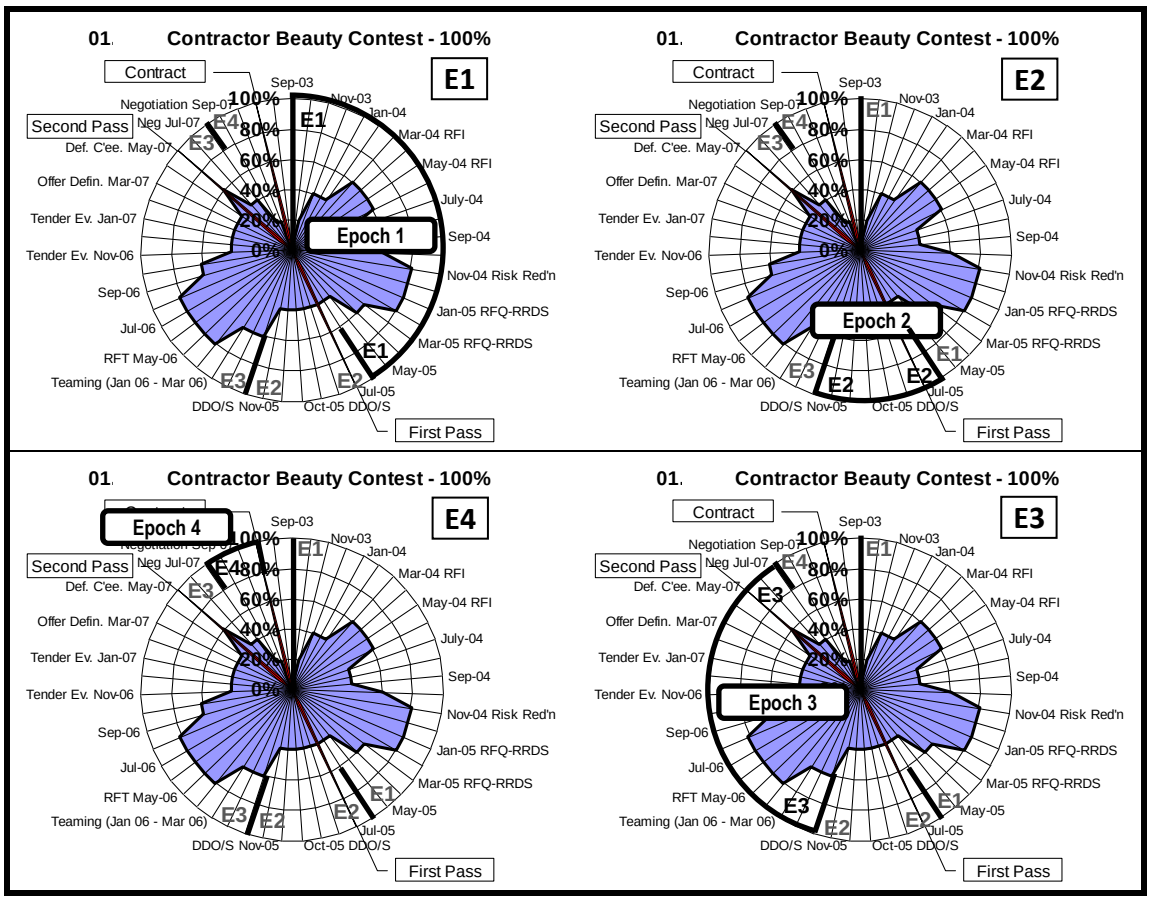


Figure 14.3: Exemplar SMI polar chart displaying epoch sectors.

A storyboard narrative of epoch E1 and epoch E2

Figure 14.4 below delimits epoch E1 and epoch E2 that are considered together for this section. With some 65 SMIs, only select exemplars present in this chapter. Annexure G lists the full set of SMIs. There might not be a way for predicting the importance of any one SMI and therefore the selection chosen for this narrative might have attributes of frequency of observations, quality of available commentary, or dyadic incisiveness.

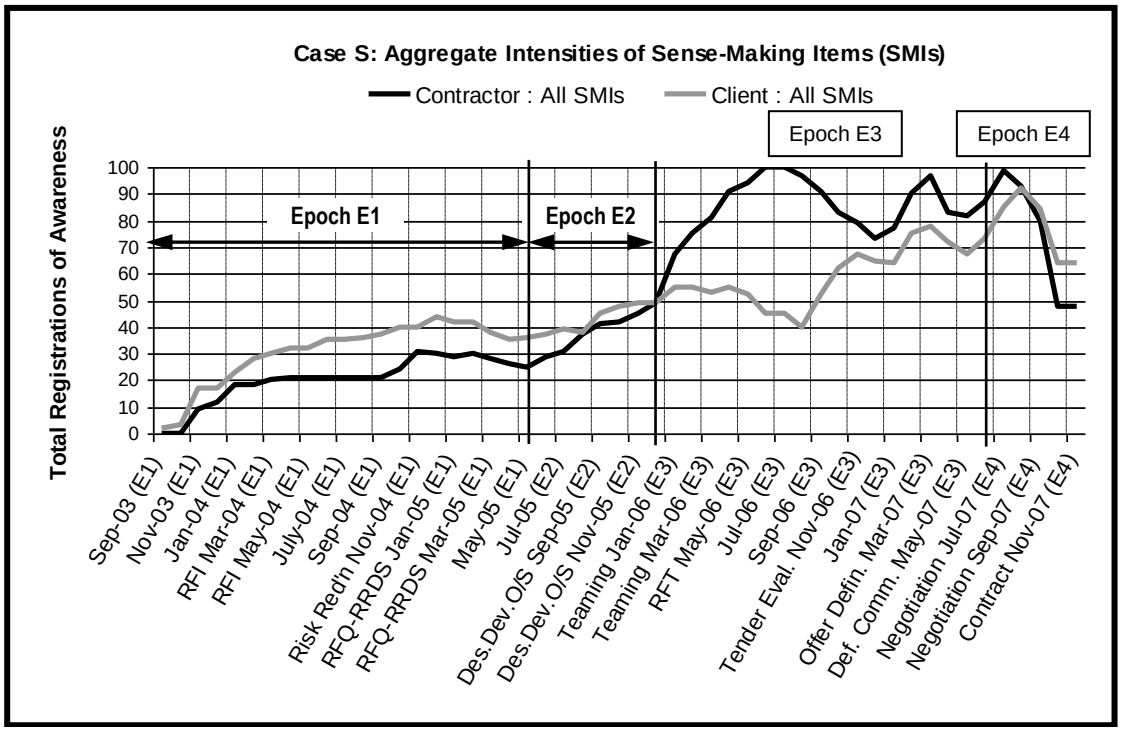


Figure 14.4: Epochs E1 & E2 - Aggregate observations of Sense-Making Items (behaviours and atmospherics) as recalled by respondents.

The ubiquitous 'Beauty Contest' or 'Beauty Parade', known worldwide, exposes the face and presence of an entity selling a service or product. Military equipment marketing personalities might include *inter alia*, kings and queens, past presidents and prime ministers, war heroes, and retired politicians. Their job is to facilitate communications with Australia's Prime Minister, the Australian Minister for Defence, bureaucrats, Australian ambassadors, high commissioners, and so forth.

BEAUTY CONTEST: A party's behaviour concentrates on its presentation values.

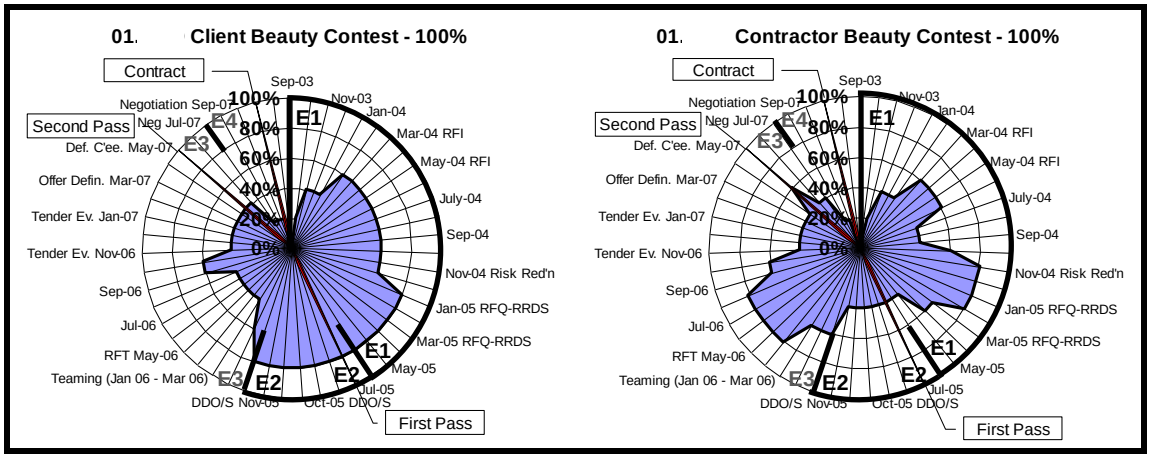


Figure 14.5: E1&E2 01 Beauty Contest SMI.

In general, the Beauty Contest is a trust-building exercise. The client data in the left frame of Figure 14.5 reflects their collective awareness of this activity and the contractor in the right frame recalls their collective awareness. There are differences which, *inter alia*, illustrate the contractor making overtures to State Government politicians interested in promoting the project for their State's economic benefit.

Figure 14.6 below is a replication of hand-drawn diagrams provided by the respective tender team leaders of the contractor and its major overseas subcontractor. The leaders recall their network of 'beauty contest' interactions leading to the Minister for Defence.

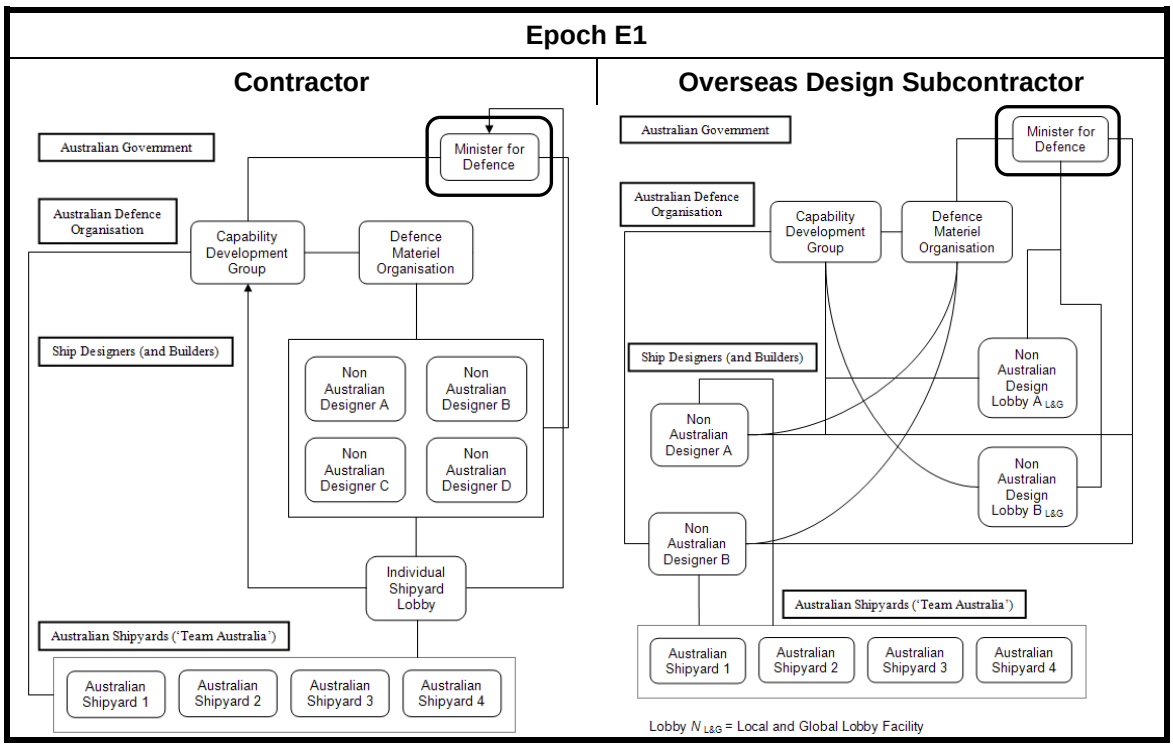


Figure 14.6: Epoch E1 - Presentations to the Minister for Defence.

The right-hand frame of Figure 14.6 provides corroborative evidence from the design subcontractor who managed their ‘beauty contest’ as a separately funded project.

Such industrial marketing exercises might have a normative role in the early epochs of a tender, but their presence in later epochs might suggest changes in the tender’s political strategy.

In the remaining epochs of Figure 14.5, the DMO client’s data plot approaches an expected regime of incoming marketing activity. The contractor’s data plot displays a second peak of activity during the early tender preparation period in epoch E3. The contractor needs to engage with one of the two available subcontractors.

JUNGLE JITTERS: A party is keen for the work but apprehensive about untested relationships.

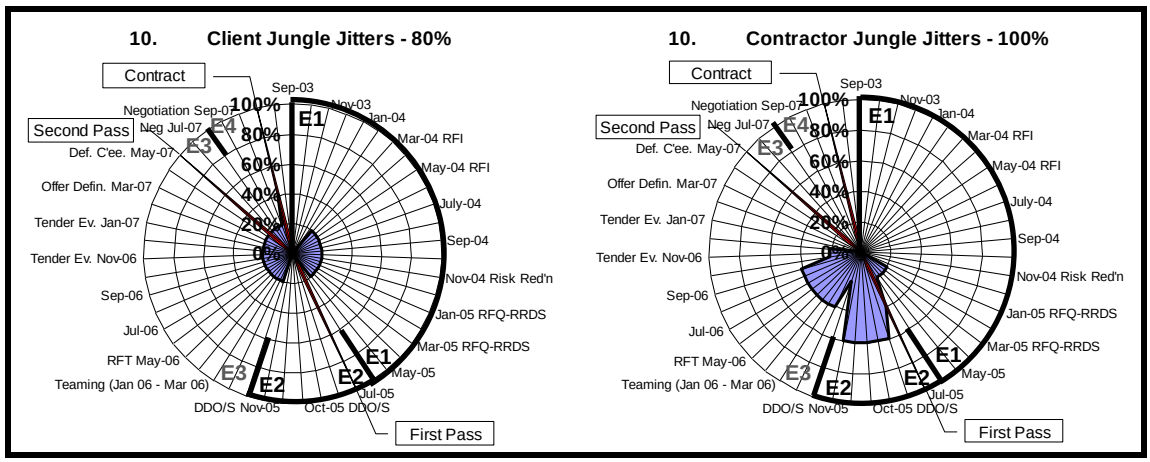


Figure 14.7: E1&E2 10 Jungle Jitters SMI

Figure 14.7 has resonance for a contractor. The government’s strategy is to select two potential Australian prime contractors and then allow them to ‘mate’ with two government-suggested overseas subcontractors. This takes matchmaking into uncharted waters and for a while, a *ménage à trois* is *de rigueur*.

Reflections on epochs E1 & E2

Although many SMIs are active during epochs E1 & E2, the contractor focuses on projecting capability and capacity to the DMO client, the Minister for Defence, and numerous other government ministers, State Government parliamentarians, and senior bureaucrats in government agencies.

Concurrently, the DMO client deals with an evolving politically-defined tender strategy.

Epoch: E3

In epoch E3, the data reflects the heightened tempo of activity as the parties prepare for tender production and submission, technical and financial evaluation, critical review, and then the government's approval (called 'Second Pass') that is a prerequisite for entering into final negotiations.

A storyboard narrative of epoch E3

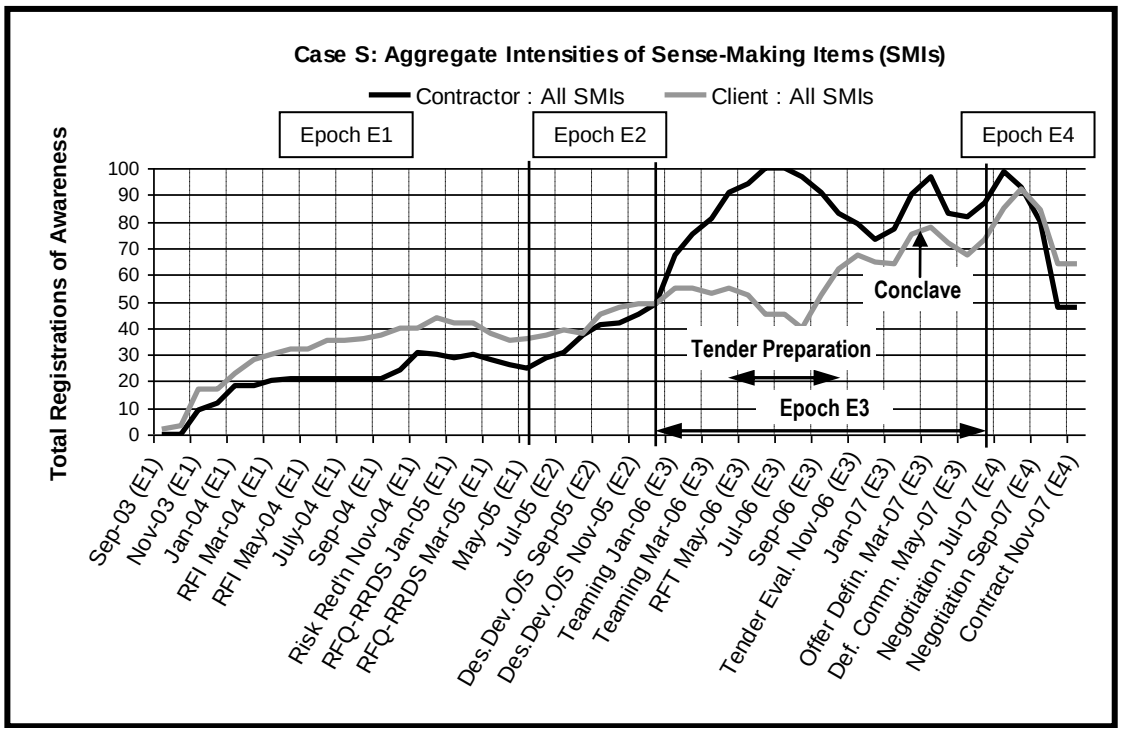


Figure 14.8: Epoch E3 - Aggregate observations of Sense-Making Items (behaviours and atmospherics) as recalled by respondents.

Epoch E3 (Figure 14.8 above) has several key activities:

1. the respective teaming of two government-selected Australian contractors with two overseas design companies
2. the contractors' preparation and submission of their tenders
3. the evaluation of the tenders
4. the critical deconstruction of the tenders (see 'Conclave' in Figure 14.8)

Even though there are two Australian prime contractors in this competition, only the successful contractor participated in the research surveys. However, the unsuccessful

contractor offered every opportunity for off-the-record interviews and their tender project manager agreed to discussions after his employment terminated.

SPEED DATING: Potential participants must 'mate' before entering the game.

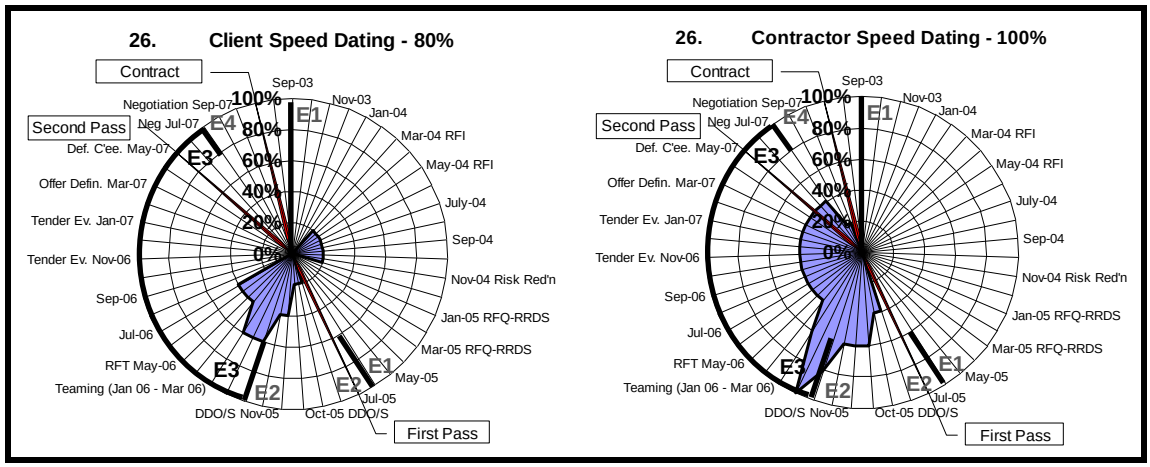


Figure 14.9: E3 26 Speed Dating SMI

The recalled observations in Figure 14.9 above, reflect not only the evidence of the courtship between Australian contractors and overseas design companies, but in the right-hand frame, the outcome remains uncertain for the contractor who seeks to become 'engaged' to both overseas designers. The DMO client in the left-frame might appear to be taking a 'voyeuristic' position on this courtship but all the while, the government and the DMO are *also* conversing with an overseas designer (a subcontractor and potential rival prime contractor); a game that the DMO might be less inclined to publicise at this time.

Meanwhile, the contractor is ambivalent about their chosen design partner, in spite of their perceived superior solution and effective working relationship. The contractor is apprehensive about the destabilising potential of the manipulating 'great aunt'; the Defence minister who might seek to sideline the Australian prime contractor in favour of the overseas designer who can also build the equipment. For an in-principle example, see McPhee (3 April 2012).

SMART THINKING: Attention focuses on a party's business-model.

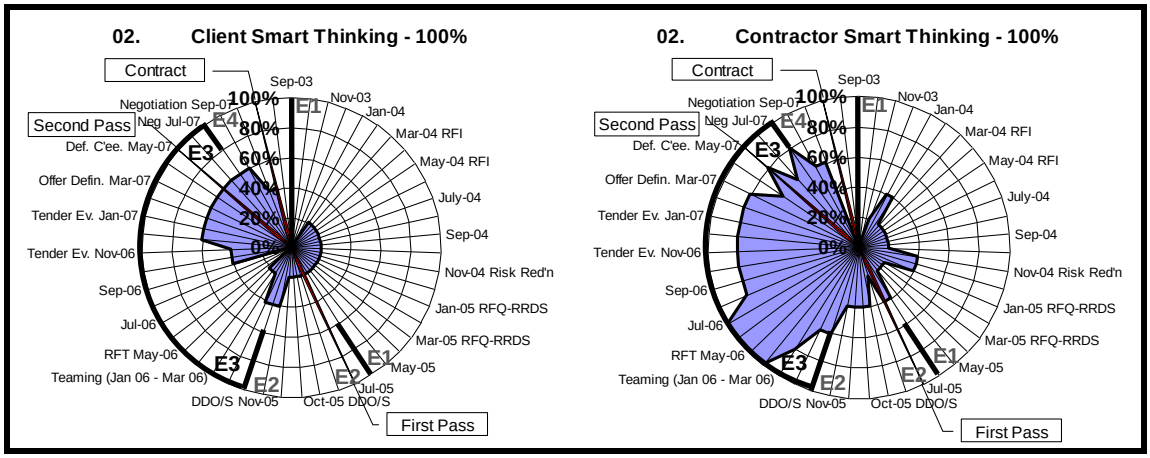


Figure 14.10: E3 02 Smart Thinking SMI

Which business model has the potential to be more closely aligned with the political 'hot button' issues? The right-hand frame of Figure 14.10 displays the contractor's ongoing engagement with this question. It's an enigma that continues through to final negotiations. John White[279], a Defence Industry advisor, provides a framework for this conversation:

> Coming to Defence industry, which can't get away from the fact that it's a monopsonistic industry, there's always a tension between:
>
> - Do we use local industry and have short lines of supply and build up skill and capability for strategic capacity outcomes as well as economic benefit/employment outcomes?
> - Do we believe that Australian local industry can be competitive; can be of suitable quality? or
> - Do we go overseas where nobody can blame us if something goes wrong because we have done an international tender and we've picked the best one; we haven't been parochial or biased or influenced by Australian strategic industry possibilities?
>
> So, there's that natural tension which plays out at a political level, depending on the philosophy of the [political] party in power. But interestingly, in the last 20 years, whether it has been Labor or Liberal, there has been a propensity to look for the strategic Australian industry outcomes. That shouldn't surprise, because there's jobs, there's investment in regions: it's votes. (see Annexure A, page 19, start at line 62)

[279] Dr John White is an Advisory Board Member of Defence SA and former Chief Executive of Transfield Defence Systems.

KASHMIR: A party behaves apprehensively as it perceives that others might appropriate its current &/or future contract share.

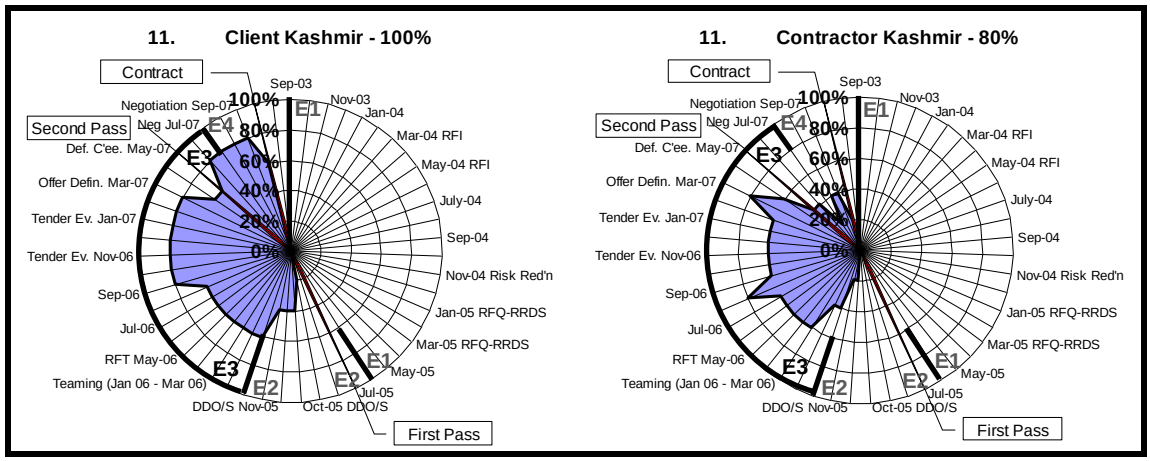


Figure 14.11: E3 11 Kashmir SMI

This SMI idiom 'Kashmir', in Figure 14.11 above, exists in the linguistics of the DMO (client) organisation. The client articulates it more than the contractor does, although in this instance, it is the contractor reacting to their apprehension that the overseas design partner will covet the contractor's Australian market. (Later, epoch E4 illustrates the reticence of both parties to articulate emotionally distressing events.)

There are meetings between Heads of State and the political desire for the overseas design company to establish facilities in Australia appears in the prevailing political discourse[280].

For the contractor, there are at least two sources of potential profit. The first comes from the fabrication of the equipment. The second comes from the ongoing sustainment of the equipment. The value of the second contract is significantly greater than the first.

[280] (The Senate, 30 May 2011, p. 81)

SWEET SEDUCTION: Probing for potential intelligence sources.

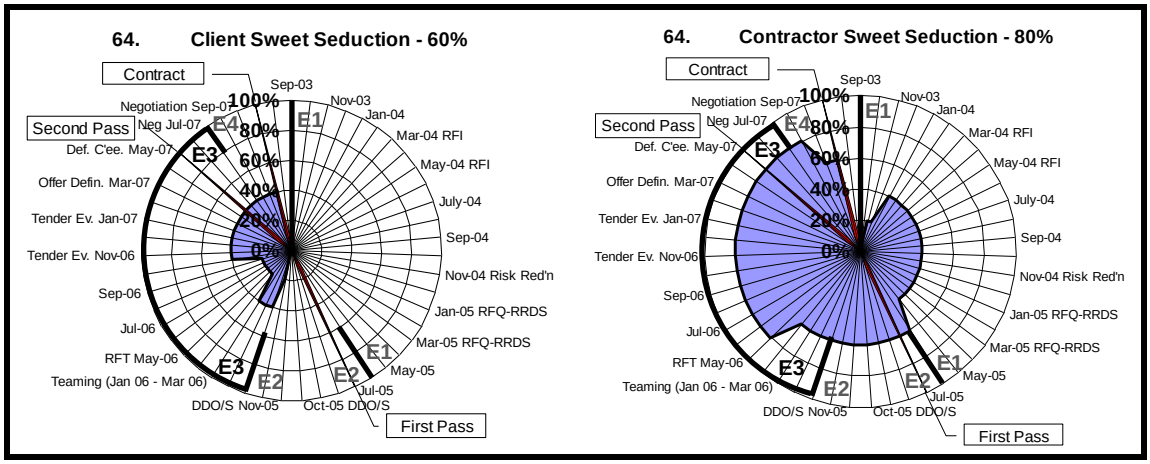


Figure 14.12: E3 64 Sweet Seduction SMI

Figure 14.12 is reflective of a socially complex context. If the tender context was simple, (Snowden & Boone, November 2007, p. 70) then the procurement process would follow a standard sequence of activities and there would be no need to probe the tendering domain for strategic political insights.

In Figure 14.12, the contractor devotes significant effort into locating individuals who might have connections and insights into the shaping of the project-specific political discourse and the manner in which the decision-making politicians might construct their meaning making. Figure 14.13 suggests that the payoff is potentially tangible.

The counterpoint is that the Australian Government, and therefore the Australian taxpayers, are paying for the contractor's intelligence probing costs that are recouped later in the overheads of future projects.

The question remains open as to whether there is a potential cost reduction if the tendering strategy did not include political 'hot button' issues. Brendan Nelson, former Defence minister in the Howard Coalition Government offers an opinion grounded on the balance of power between the military and the government:

> Obviously all of the costs that the companies have, whether it's their government relations thing, whether it's their accountants, their lawyers, whoever it is, all of those things are going to be embedded in their overall costs. I don't know whether the Australian taxpayer would be particularly reassured to know that there are people who think that all of the decisions are made in the Department [of Defence]. (Annexure. A, page 82, start at line 114)

The implication is that decision-making is political and needs to occur at a political level.

Defence Industry advisor John White also considers the cost of tendering and the impact on the losing contractor:

> It costs $10m-$30m to bid one of these two-year processes: perhaps $50m. That can create terrible tensions where it need not, because the scale of these projects is so great that it would be easy for Defence and DMO to spend another percentage point of the project to create an easier-to-accept circumstance in the tendering process for the losers. You pay for it in the end, and if you don't do it [in] this upfront way which is fairer and equitable and more friendly, I argue that you pay a higher price the way they are currently doing it. And that's just poor structuring, planning, and strategy. (see Annexure. A, page 24, start at line 241)

In their book on the Collins Class Submarine, Yule and Woolner (2008) concur with John White's estimate of a 1% budget supplementation.

John Favaloro, a senior executive in the tendering contractor's organisation adds further detail:

> There are above normal overheads arising from the necessary DMO-specific audit requirements. Contracts are 'lumpy'. That is, they are large and have long lead [pre-production] and delivery times. In excess of $12m can be spent on preparing a tender. This preparation cost does not include all the bidding costs of the subcontractors. We had some tenders where the tender preparation costs represented about 25% of the expected profits but it was necessary to win in order to maintain the specialist skills and teams required for business continuity. The tender costs are spent over say a two-year tender preparation period and the profits will be earned during the approximate seven years of production. (see Annexure. A, page 39, start at line 16)

AUNTIE MAME: Obtaining high-value insights from a non-contracting party.

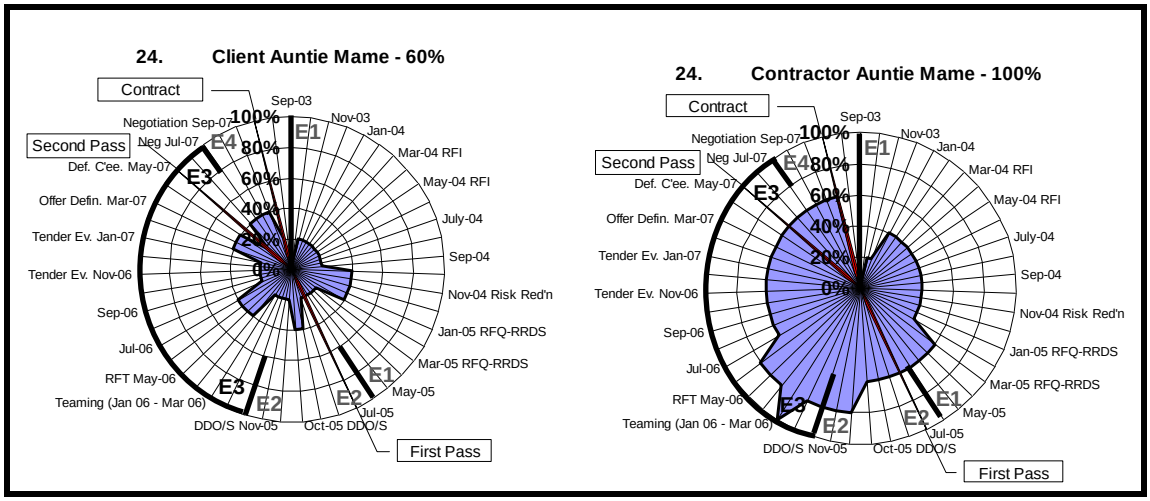


Figure 14.13: E3 24 Auntie Mame SMI

In Figure 14.13, obtaining strategic insights might well be an outcome of finding sources of potential intelligence, as in Figure 14.12. Overall, the contrast between the client and the contractor is stark. The DMO client observes occasional behaviours but the contractor believes in the need to receive quality intelligence throughout the tender project. Some of this intelligence comes from State Governments who seek economic stimuli in the context of, perhaps, the next election.

The perceived 'Sweet Seduction' (see Figure 14.12) behaviours and these 'Auntie Mame' behaviours in Figure 14.13 above, might suggest a possible causal relationship: the 'probing' and the 'obtaining'.

GUT ACHE: An aura of doubt pervades the process even though everything appears to be technically correct.

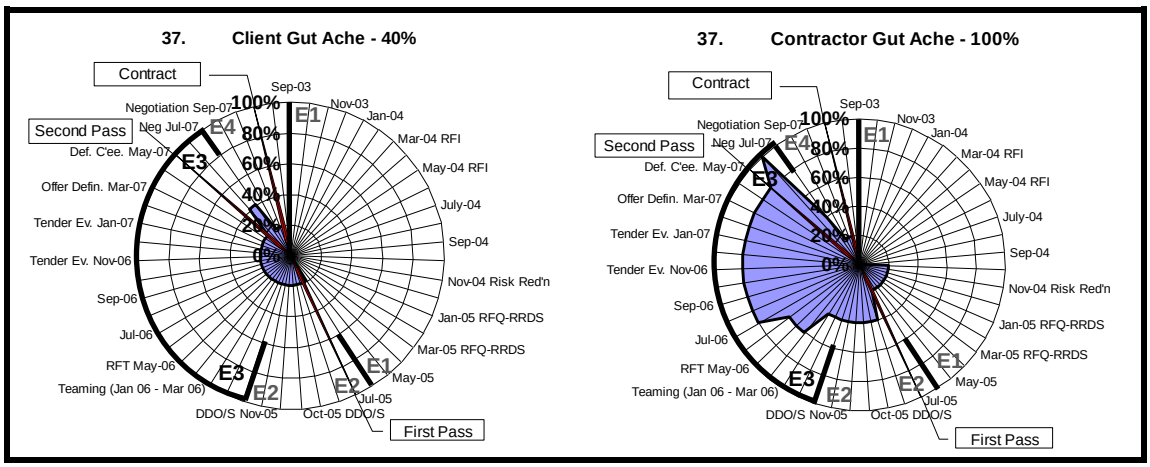


Figure 14.14: E3 37 Gut Ache SMI

In Figure 14.14 above, the tendering period's probity-induced constraints on communications between the DMO client and the contractor might shield the client from sensing the dilemmas facing the contractor. The contractor focuses on two missions: (1) produce a compliant tender, and (2) shape a dominant political discourse by the date for decision-making by the politicians.

WHO'S WHO IN THE ZOO: Putting structure to the political issues and players.

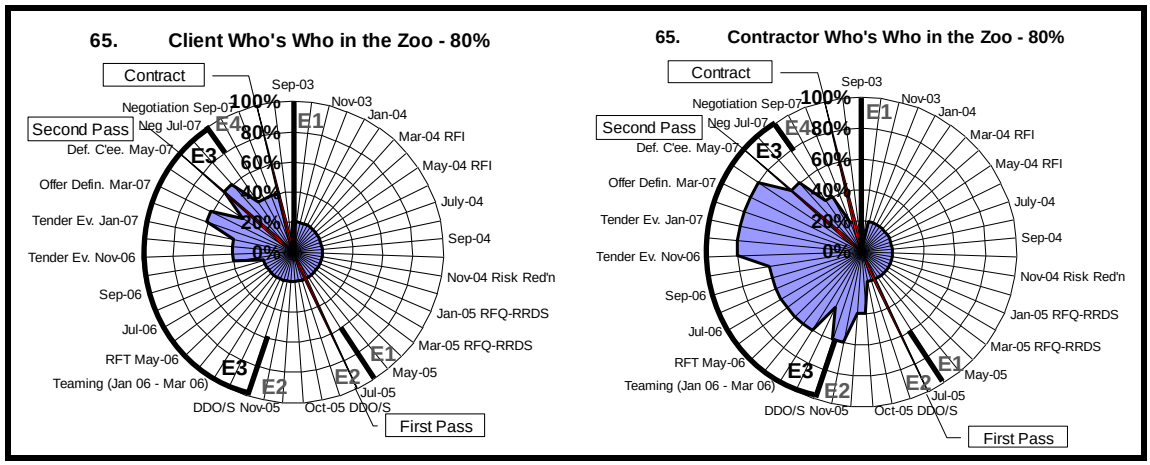


Figure 14.15: E3 65 Who's Who in the Zoo SMI

In Figure 14.15, the DMO client assumes generally, an instrumental approach to assessing equipment performance and related industry economics. The contractor takes a wider perspective that considers the influences emanating from a plethora of stakeholders. Who might be influencing whom, and in particular, who might be influencing the political decision-makers as to the conformation of the 'hot button' issues with respect to the prevailing political discourse? Different contractors offer their thoughts:

> Does that come from the military arm of Defence, does it come from the civilian arm of Defence, does it come from DMO, does it come from Department of Finance, or Treasury? Does it come from the Productivity Commission saying that you shouldn't spend a buck in Australia if you get better value overseas? I think that's a really interesting thing to explore. (see Annexure. A, page 21, start at line 132)
>
> In reality, the term that you are trying to really get some substance around is 'value'. What is it that they value and how are they valuing it? You have to be able to operate in a very fuzzy environment in which you have an instinct of what is the real value. The guys who wear a uniform have one set of values. The people, who are being measured by how well they procured the system, have a different set of values. Politicians have another set of set of values; there's an election soon.

> If you go up to them and say, 'what are your values', they will give you an answer but it might not be one that is well thought out. So you have to actually spend a lot of time, listen to them, read their body language and sometimes you have to interpret what their values are because they might not even know for sure. My success or failure is simply based on my ability to form a judgement and to form a view of things.
>
> [Additionally] I need to understand what the Ministers from the various States want as the outcome and which [political] camps they belong to. If I didn't, I'd leave myself at risk because if I know what drives them emotionally then I can arrange our bid accordingly. (see Annexure. A, page 10, start at line 76)

Phil Radford (July 2004) brings the issue into focus:

> Ultimately, all procurement preferences have to be translated into political choices at the highest level. Diplomatic influences may override all other issues. (see Annexure A., page 105, start at line 57)

The DMO client's program manager has a clear understanding:

> The Minister decided the acquisition strategy. So, the political context was set. At the end of the day, it's rightly the Minister and Government who make the major capital acquisition decisions. (see Annexure. A, page 15, start at line 99)

A Defence advisor in the Political Office of the Minister for Defence in the Howard Coalition Government:

> Robert Hill [the defence minister] and I, again in one of those late night sessions, wrote up on the whiteboard who was who in the zoo, what their interests were, and we did a big matrix. Our goal was to determine; (1) the best system, (2) the greatest level of local industry content at the (3) lowest price. We weren't going to sacrifice things like local industry content or price for a very marginal capability gain; that was our view. (Annexure. A, page 88, start at line 122)

SNAKE: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

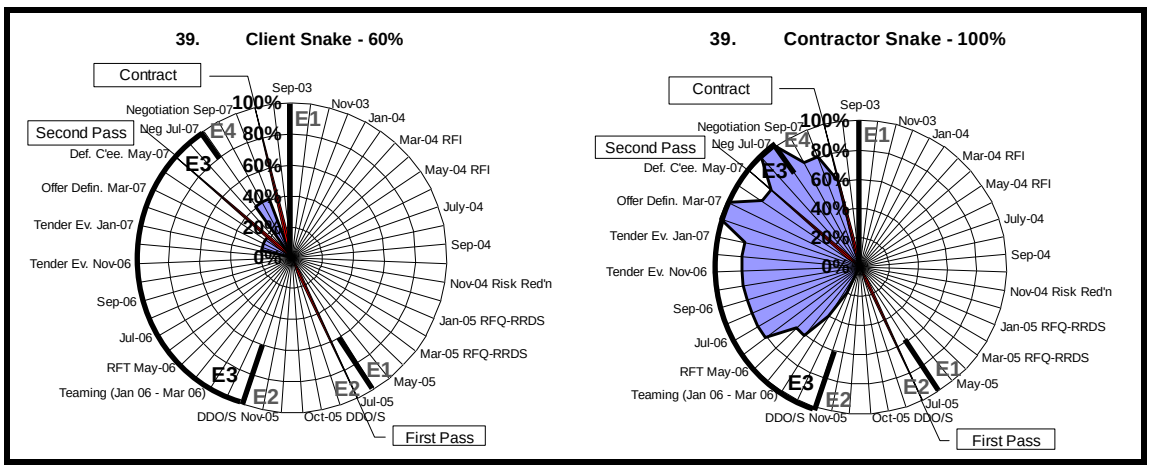


Figure 14.16: E3 39 Snake SMI

Figure 14.16 shows clearly, who is on the receiving end. The contractor resists these pressures from both the DMO client and the design subcontractor:

> What we really felt was that we understood the requirement and we had bid to match it but we were very concerned that the DMO historically, tends to later want more than it asked for. And [then] attorneys get involved and take some very liberal interpretations of the language. It happens. (see Annexure. A, page 8, start at line 21)

WITH FRIENDS LIKE THESE: A significant project risk is being generated within our own (macro) organisation.

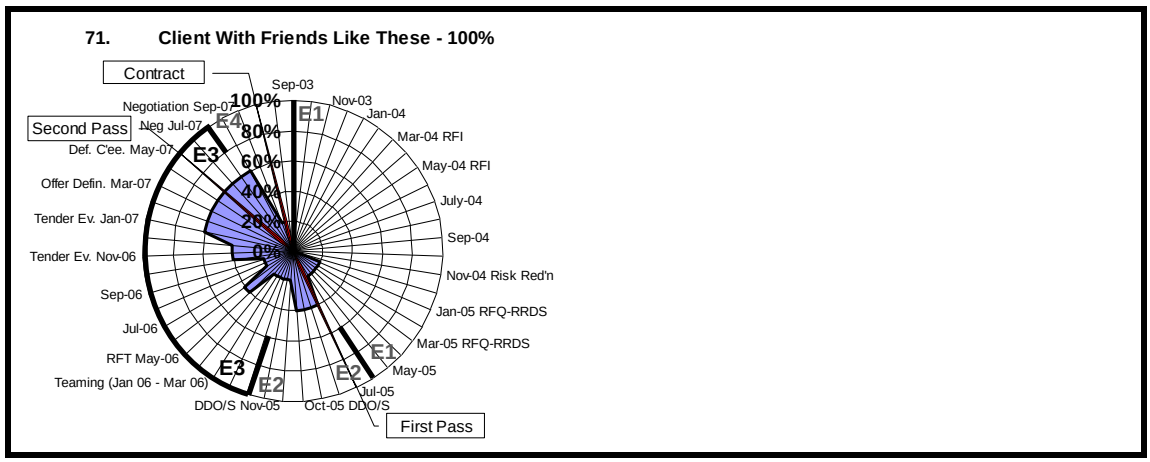


Figure 14.17: E3 71 With Friends Like These SMI

During the auditing of this inquiry's results by the DMO participants, this additional Sense-Making Item idiom was defined (see Figure 14.17). (By that time, the prime contractor had been acquired by an overseas defence contractor and data could only be collected from the DMO (client) research participants.)

The indication is that the DMO client is observing significant risks generated within its own organisation (Barber, 2005). Generally, this is the work of the 'Iron Colonels' making a stance to stop the project or to change it in some way.

The DMO (client) tender program manager recalls:

> At the same time, I had to deal with our culturally embedded Iron Colonel syndrome[281]. These people try to block or hinder whatever you are trying to

[281] There are several anecdotal definitions of this term but a more complete title is 'Star-Gazing Iron Colonel'. Colonels seek promotion to the rank of Brigadier, with star-shaped accoutrements on the epaulettes. Promotion arises from satisfactory performance reports delivered by the Colonel's superior officers. To cultivate unblemished opinions, 'problems' received from the Colonel's subordinates are blocked by the Colonel and problematic directions received from the Colonel's superiors are passed to a committee or similar diversion which should delay the matter until after the promotion reports have been

> achieve. I had to deal with that all the time; right through to now. Why do they do it? (see Annexure. A, page 14, start at line 86)

FINDING NEMO: A party knows that there is a game at play but has difficulty defining its structure and parameters.

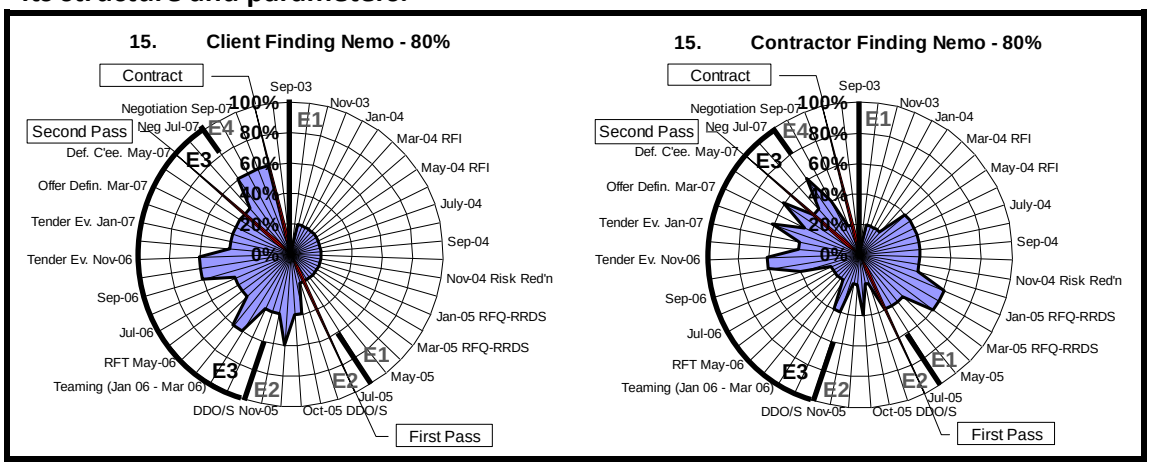


Figure 14.18: E3 15 Finding Nemo SMI

Figure 14.18 might indicate that superficially, this SMI is of secondary importance. However, this SMI appears to tax project leaders rather than their support managers. The contractor accepts the idea of a politically-manipulated tendering strategy, but in this case, the strategy appears to change frequently. The contractor's program manager recalls how he reacted, by integrating ideas into conversations, rather than challenging the tender strategy:

> As program manager, much of my time was spent considering how we responded to both verbal and non-verbal communications and what we thought was happening inside the government. We sat around and tried to ascertain what all the different signals meant.
>
> The tendering documents are so complex that you can get ten different experts in the room and they will tell you ten different solutions of 'here's what the government really wants'.
>
> All the way through, you are weaving in themes and presenting information in a manner that lets you create a framework for how you want the bids to be evaluated. (see Annexure. A, page 11, start at line 102)

The DMO client is also impacted:

> The detail of the [politically influenced] procurement strategy changed so many times that I needed a *plan du jour* plus a well-structured communications strategy. (see Annexure. A, page 12, start at line 12)

---

submitted. Another interpretation reflects the steadfastness of Colonels seeking to provide their war-fighters with the best equipment regardless of cost and bureaucratic process.

VANITY FAIR: A party feels pressure to participate because of the project size and/or its market stature.

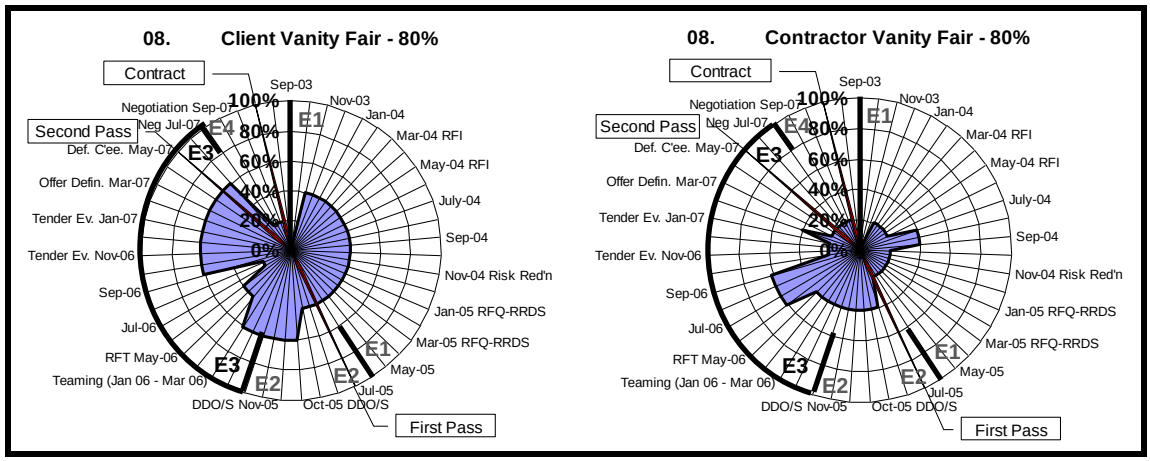


Figure 14.19: E3 08 Vanity Fair SMI

In the face of a monopsonist client, a potential contractor or subcontractor might believe that while the possibility of selection is remote, non-participation might be counter to business development. A contractor sums up this reality:

> Always when you lose [in Australia], you have been used [as a 'stalking horse'] to create [an artificial] competition. But, to the question of whether there is a 'round-robin' approach to the awarding of contracts, the answer is 'Yes', and sometimes your turn actually comes when you do put in a particularly good offer. (see Annexure. A, page 24, start at line 254)

Brendan Nelson, Defence minister in the Howard Coalition Government:

> I [had] accurately sensed that they [an overseas designer] felt that they were a 'stalking horse' and that they were not seriously nor going to be seriously considered as a rival bid in the particular project that they were involved with, and I made absolutely clear to them that that was the case. (see Annexure. A, page 81, start at line 78)

An advisor to the minister for Defence in the Howard Coalition Government comments:

> At first, Navantia were quite blunt and said, 'Well look, it's pretty obvious that you guys have a process here and we look like a bolt-on so that you can have something to compare against'. And although they never said the word 'stalking-horse', that's what they were trying to get at. (see Annexure. A, page 90, start at line 190)

SELECTIVE HEARING: A party chooses to be 'led' to a fundamentally different interpretation of the game-at-play.

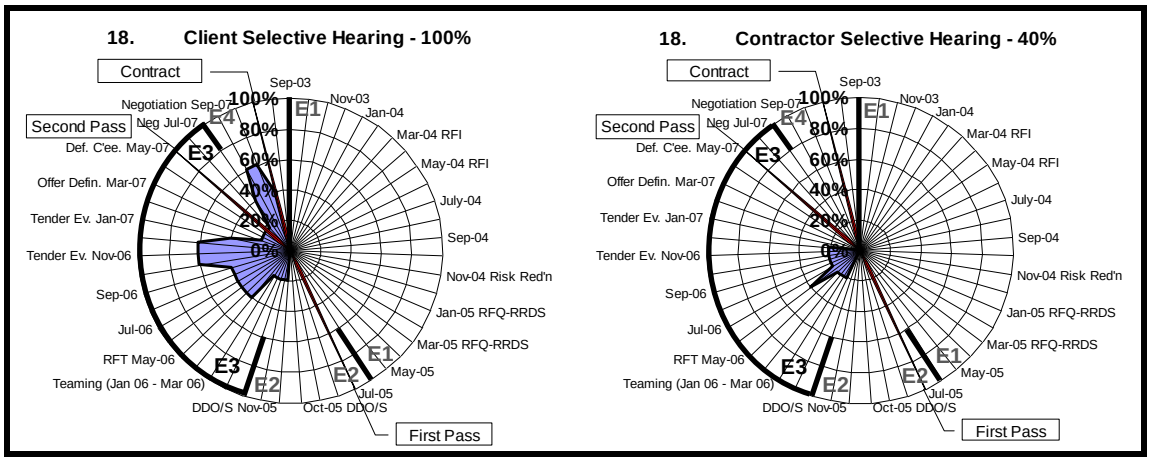


Figure 14.20: E3 18 Selective Hearing SMI

In Figure 14.20, the DMO client is observing instances of the contractor's selective hearing. However, the contractor might be ignorant of what they don't know, or how they are being gamed. The DMO client's program manager explains the influence of his potentially misleading guidance, language and culture:

> Even though I was working to a script to ensure that the information I provided was exactly the same to each competitor, they could perceive it differently and then assume a different game-at-play. What happens then is that their behaviours change as a consequence of their translation of their perceived game-at-play. I would give them lots of hints and guidance, but they must listen to every word and not just the ones that make immediate sense to them. (see Annexure. A, page 13, start at line 53)

An advisor in the Defence minister's Political Office in the Howard Coalition Government appears to obfuscate and then flicks a political decision back to the DMO client, who might then seek to avoid the question because it is outside the scope of their bureaucratic domain. This leaves the inquirer to contemplate which parts of the information might be useful, for example:

> 'Is it acceptable to the government to build a module in Malaysia?' We had to say that we don't know. We played a dangerous game because the more you start offering little nuggets of advice and influencing the process, where does it end? It's not the job for the political office to do that, that's the job of the DMO project management office. (see Annexure. A, page 86, start at line 27)

This political advisor is promoting potentially specious arguments. He reflects on a 'free market' whilst the buyer is a monopsonist dealing with oligopolists. Additionally,

he requires the instrumental DMO client to provide political answers in the context of the government's decision-making.

Ignorance dominates this discussion (Smithson, 2010). The political 'hot button' issues appear as an omnibus rubric in the tender documents. The Request for Tender (RFT) provides points of intent as seeds for the contractor to develop strategic options. This might include employment growth in high unemployment regions, minimum cost, enhanced industrial capacity and capability for Australia, and so forth.

A contractor's knowledge culture might influence the interpretation of this guidance. For example, a losing contractor was fixated with the idea of minimum cost. This translated into a bid that promoted the construction of the equipment in a low-cost Asian country. The accompanying (Asian) construction contract conditions did not allow for any design changes once construction started. The very nature of Defence procurement is one of continual adjustment to changing geopolitical and local political exigencies; hence a fundamental mismatch in ideology.

Another losing contractor focused on regional employment and divided the construction into numerous modules with each module allocated to a specific Australian regional centre. Integrating numerous small regional contractors with their varying levels of technology/quality, and re-integrating the completed modules, presented unmanageable risks from the perspective of the DMO client.

The winning contractor took a more holistic and perhaps phronetic approach (B. Flyvbjerg, Garbuio, & Lovallo, 2009). Detailed analysis demonstrated that the government's budget ceiling was unrealistic, and having breached a cognitive/emotional barrier, the contractor shifted focus from cost to a strategic bid design that sought alignment with key political 'hot button' ideas. In so doing, the focus shifted to understanding and shaping the dominant discourse, which is a project in its own right.

'Selective hearing' is a game engineered by the Defence minister's Political Office and the DMO. Its objective appears to game the contractors by providing potentially incorrect or misleading (budget) information and then to monitor how this misinformation is recognised, embraced or discounted as a game.

The Case S DMO program manager recalls:

> The government had given me a budget and I insisted that the tenderers keep within that budget. I knew it was unrealistically low but I was interested in how they would cope. National culture also impacts what is offered. Some cultures prize quality in their value propositions, which

> means that the client has to pay a premium but if you get superior product life then this might represent good value-for-money. (see Annexure. A, page 14, start at line 84)

MACHIAVELLI'S MINISTRATIONS: A powerful stakeholder changes the game.

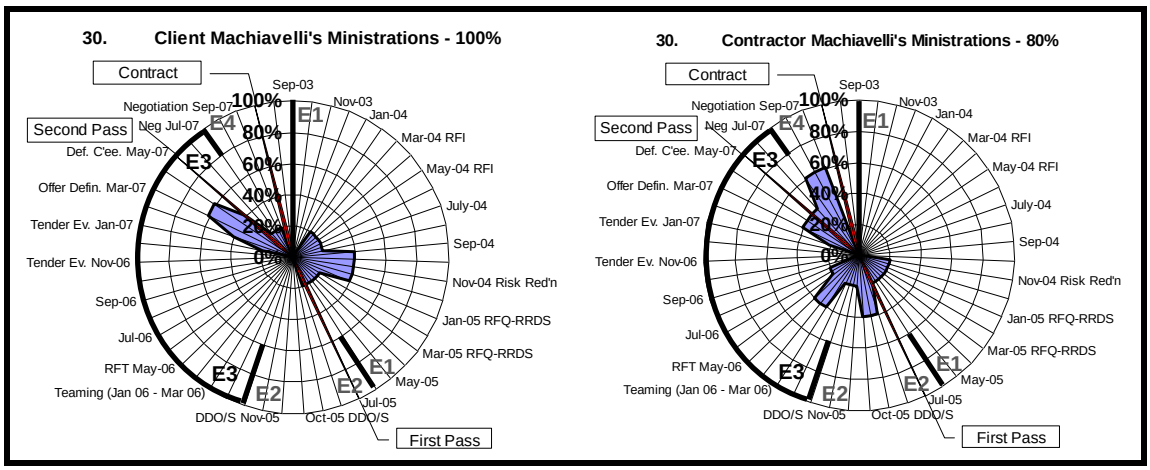


Figure 14.21: E3 30 Machiavelli's Ministrations SMI

The DMO client's program manager explains this common game with reference to Figure 14.21:

> Just after tender evaluation [Offer Definition], the preferred contractor stopped giving us information because they were playing a game, which goes something like this, "I've got a deal, I've won and the client wants more information. It's not in my financial interest to provide more information until *after* contract signature. Any scope changes after contract signature means more money to me." (see Annexure. A, page 13, start at line 34)

The client registers the contractor's intransigence in epoch E3. Later in epoch **E4** (see Figure 14.28 E4 30 Machiavelli's Ministration) and Figure 14.21 (E3), the DMO client 'takes revenge' by winding back all negotiations to the *beginning* of the Offer Definition process (the critical review of the contractor's submitted tender in epoch E3) and starting negotiations *ab initio*. In the right-hand side of Figure 14.21 above (epoch E4), the contractor registers this client-initiated retaliatory game changer, but the DMO client appears not to discuss publicly the contractor's vigorous reaction; as what had just been negotiated was set aside and negotiations started afresh.

CALL IN THE BIG GUNS: A party seeks Ministerial dialogue.

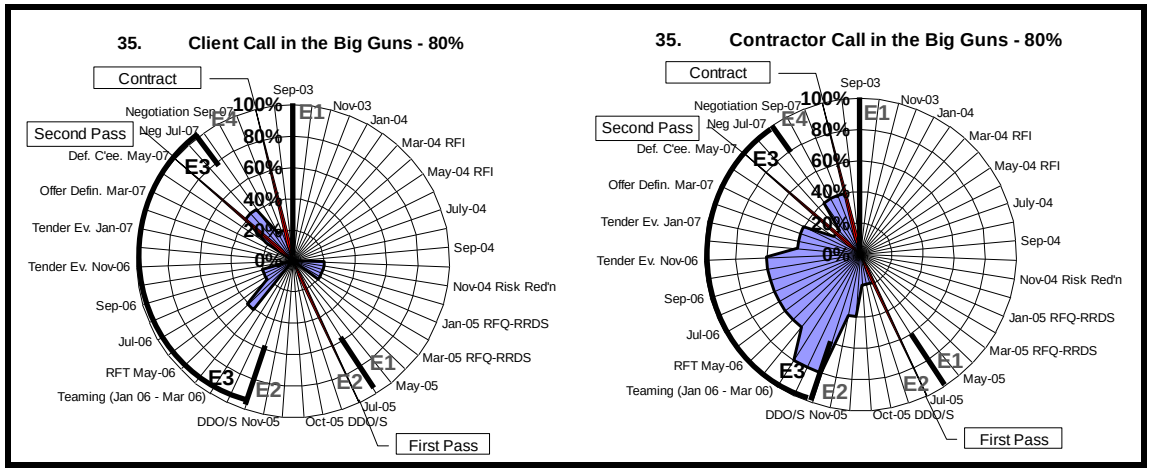


Figure 14.22: E3 35 Call in the Big Guns SMI

The DMO client tends to restrict requests for ministerial involvement until there is a negotiation impasse with a supplier. The DMO client's General Counsel offers a compliance perspective, rather than an opinion:

> In terms of contractor disputes over source selection decisions, we are required by the Commonwealth Procurement Guidelines to have in place a tenderer complaints handling process. This is for compliance with the Australia-USA Free Trade Agreement. Occasionally they will involve ministerial input and intervention. (see Annexure. A, page 42, start at line 1)

REFILLING THE HONEY POT: Enticed participants need constant maintenance.

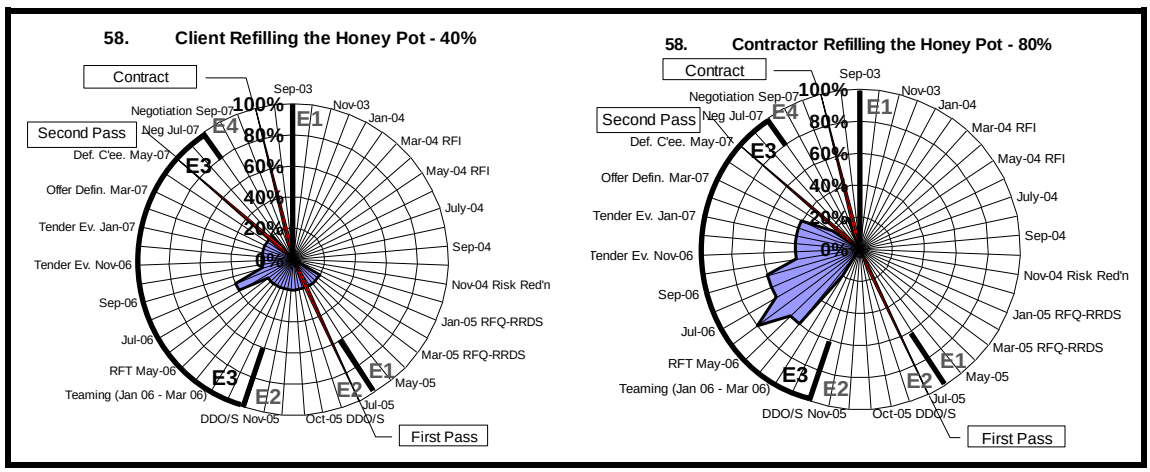


Figure 14.23: E3 58 Refilling the Honey Pot SMI

Figure 14.23 illustrates the DMO client being only marginally aware of the energy that the prime contractor is devoting to the government's 'enticed' overseas design subcontractor. If this relationship fails, then the contractor will face financial loss,

particularly as the government has the potential to request the overseas design company to assume the dual role of designer and prime contractor.

Reflections on epoch E3

Whereas the tendering activities within epochs E1and E2 are orchestrated by the client, epoch E3 sees the contractor orchestrating information probing and the projection of ideas in a quest to control the project-specific discourse.

The DMO client's administration of the government's probity requirements limits communication with the contractor to formal technical questions of relevance to the tender documents. Epoch E3 is where optimism (B. Flyvbjerg, 2008) gives way to reality. Behind the scenes, the DMO client and the overseas design subcontractor are negotiating. The contractor's program manager offers a personal perspective on the emotions at play (Barry, Fulmer, & Van Kleef, 2004):

> I think what happens in this process is, if you are an industry participant competing for a major government contract, it's a very high stakes game where your career, your livelihood, the future of your family's at stake. I've felt the heart-break of loss probably a lot more than the thrill of victory. The impact of not winning would have just totally changed every aspect of our business. (see Annexure. A, page 11, start at line 97)

A casual overview of the metaphoric games-at-play (SMIs) in Figure 14.8 indicates that the prime contractor is expending more energy in observing communication behaviours than the DMO client.

Epoch E3 is remarkable, not just for its long duration of about 1½ years, but the strength and persistence of the contractor's observations. This tendering context is socially and politically complex with emergent properties. This *is* the meta-game at play; not so much about getting all your ideas accepted by the decision-making politicians, but realising that the process of probing the numerous stakeholders comprising the complex context, of itself, enhances communications, aligns values and promotes the 'reserve currency' of trust. The meta-game or meta-inference is one of *generating awareness through connectivity*; of *action emanating from trans-action* (Antonacopoulou, 2008, p. 166).

Allan Behm, Chief of Staff to Defence minister Combet reasons:

> For a contractor, you have to be known in Canberra [Australia's capital city and seat of the Commonwealth Government (capitol)]. It's not all about price; it has much more to do with trust when it works properly, but it's also

about the confidence that I know that the person *is* going to do it. (see Annexure. A, page 44, start at line 40)

Epoch: E4

The next section considers the short duration epoch E4 that is restricted to negotiations with the government's preferred contractor. In many instances, issues negotiated between the client and the prime contractor require translation to contracts between the prime contractor and subcontractor(s). In part, this is why the design subcontractor appeared during negotiations between the prime contractor and the DMO client. This presence is unsettling for the prime contractor, particularly as the prime contract agreement is between them and the DMO. With diplomatic aplomb, the DMO stopped such appearances.

A storyboard narrative of epoch E4

During epoch E4, the DMO client is not subject to the government's probity requirements, which constrain communications with the (prime) contractor.

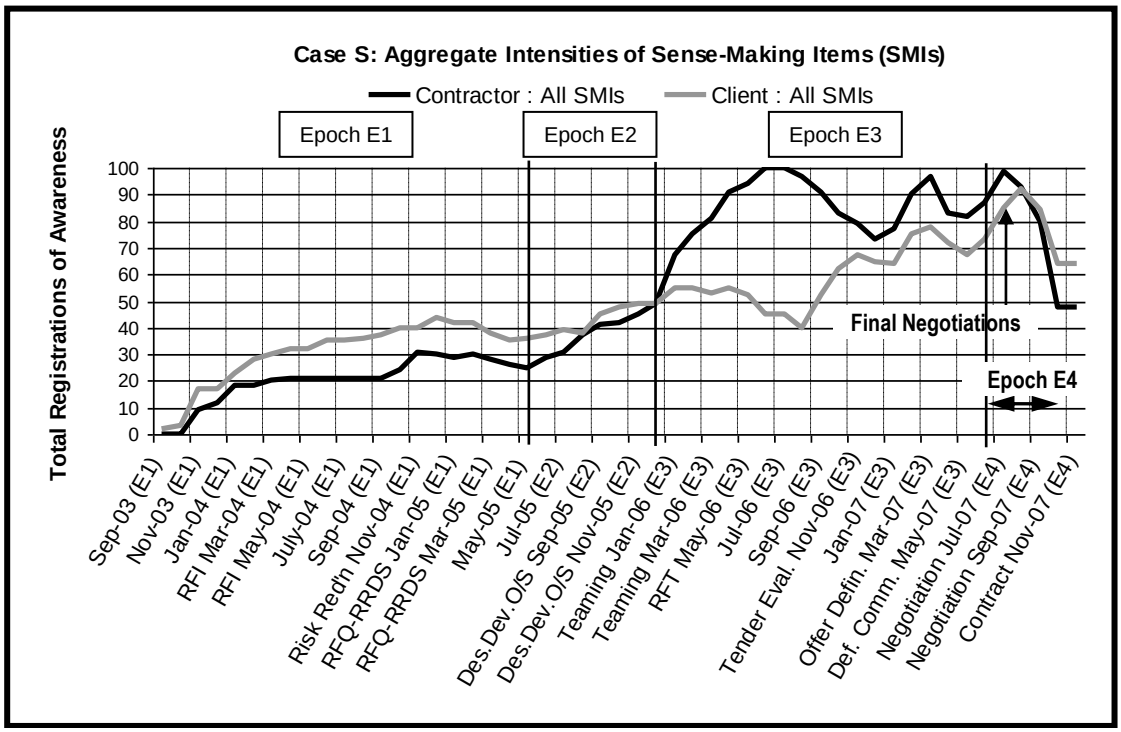


Figure 14.24: Epoch E4 - Aggregate observations of Sense-Making Items (behaviours and atmospherics) as recalled by respondents.

Epoch E3 lasted about 1½ years (see Figure 14.24 above). Tender (bid) preparation, submission, technical evaluation, the critical review, dominate epoch E3. In contrast,

epoch E4 has the shortest epoch duration of 3-4 months, during which time, the DMO client achieves a peak of aggregate recalled observations. Epoch E4 might be characterised as 'clinical' in that the negotiating parties are in very close physical proximity for extended periods of time.

As the DMO client's program manager recalls, 'And I don't believe that you can absolutely understand all of the value propositions on offer until you actually see the "whites of their eyes". Who can you really trust?' (see Annexure. A, page 15, start at line 123)

Because of this quasi-controlled clinical environment, the analysis of the epoch E4 data is delimited to internally complementing SMIs that are either observed and reported by both parties of the dyad, or reported by one party (generally the protagonist) and not reported by the other party (generally the antagonist). At work might be Smithson's (2010) 'institutional ignorance' or Squire's (2008, p. 16) 'that which cannot be said'; issues of personal anguish or torment.

For brevity, the SMIs that are jointly articulated, are annotated with limited commentary, while asymmetric articulations receive analysis that is more detailed.

Even during the final negotiations with the government's preferred contractor, the contractor is still probing for intelligence sources during epoch E4, while the DMO client is only slightly aware of these behaviours; an indication potentially that the contractor's intelligence is obtained generally from outside of the DMO, and it is posited, closer to government.

Epoch E4: Mutual recognition of communication behaviours (similar patterns) – commentary only where required

SWEET SEDUCTION: Probing for potential intelligence sources
AUNTIE MAME: Obtaining high-value insights from a non-contracting party

GONE TO GRANDMA: A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor

The DMO client is receiving petitions from the design subcontractor to cajole the contractor to perform some action(s) of relevance to the subcontractor.

MÉNAGE À TROIS: A client and subcontractor are negotiating.

Feedback from the government *to* the overseas subcontractor and to the Australian contractor comes in various indirect ways. For example, an opposition Senator makes a very public statement in a Senate Committee hearing:

> I have just been over the [Spanish] Navantia site and they are certainly very experienced. I would be interested in your [DMO's] financial arrangements [accepted price and agreement with a current Australian contractor], actually, because I am conscious that Navantia are very, very anxious about where their next job is coming from (The Senate, 30 May 2011, p. 81). (see Annexure. A, page 129, start at line 396)

The gravitas of the Senate Chamber might resonate with both the current Australian (preferred) prime contractor and the overseas 'pretender'. This behaviour goes to the essence of the Australian prime contractor's commercial survival and the Senator's public comments might seed a degree of uncertainty. These questions are carefully formulated and often presented in with a casual demeanour.

WEDGING: A small negotiation win on one issue can be used to leverage positions on related issues

COCK FIGHT: Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money

WINNER'S CURSE[282]: A party realises that it will suffer because it offered a fixed-price to deliver an ill-defined or ill-understood requirement

The Case S contractor reflects on this dread:

> When you're finally selected, that doesn't mean that you have truly won; all you are really selected for is as preferred bidder. It just means that then you have earned the right to go into negotiations with the Commonwealth. There's that 24 hour period of joy, and then when that subsides then you go, wait a minute, are we confident in 20-20 hindsight that we haven't somehow agreed to some things here that we shouldn't have? (see Annexure. A, page 8, start at line 7)

Winner's curse is of equal importance for both the DMO client and the contractor (Dick, 2005; Samuelson & Bazerman, 1985). If the contractor's business fails then the DMO client has to secure another contractor at a higher price, plus the political

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[282] Winner's Curse: This can occur when bidding on an ill-defined or poorly understood specification. All bids are likely to be unsatisfactory and the selected bid enjoys 'winner's curse'. That is, a near guarantee of financial loss because the scope of work is unknown or underestimated.

and security consequences of delayed equipment supply to the military (Ergas & Menezes, 2004).

THE SCORPION: The project is impacted with a 'toxic' human agent whose presence unites opposing parties or drives them apart.

This SMI behaviour exists in the linguistics of the DMO (client) organisation. The tactic might bring negotiating parties to a speedy resolution. It is interesting to observe that the DMO client uses 'The Scorpion' to expedite the machinations of some of its Tender Evaluation Working Groups (TEWGs).

The chosen personality might come from another government agency with superior status such as the Department of Finance or the Department of Prime Minister and Cabinet. Neither the contractor nor the client can readily challenge this appointment as both departments have a duty to be involved with major Defence capital procurements. The personality might have thespian talents. Antics include yelling, screaming, hitting your head on the table, unbridled verbal abuse, and so forth (Barry et al., 2004). The negotiations become disrupted and for a time, dysfunctional. The negotiating parties or evaluation team might seek refuge in private caucus and conclude the matter: the scorpion has earned its fee.

Epoch E4: Asymmetrical articulation of communication behaviours

The remaining SMIs illustrate incisive differences in the potential incapacity of respondents to articulate unpleasant experiences.

SELECTIVE HEARING: A party chooses to be 'led' to a fundamentally different interpretation of the game-at-play.

E4 BEHAVIOUR NOT ARTICUALTED BY THE CONTRACTOR

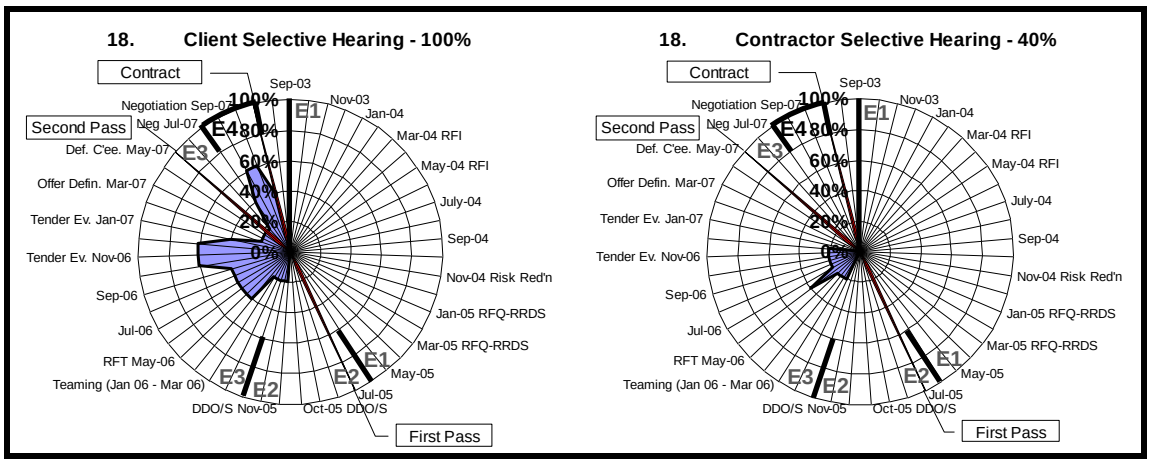

Figure 14.25: E4 18 Selective Hearing SMI

Figure 14.25, epoch E4, illustrates an asymmetry of information with potentially debilitating consequences. The DMO client 'knows' the game, and it is incumbent on contractor to find and interpret the game; noting that culture shapes the probing and interpreting processes (Brett & Kopelman, 2004, p. 402). The question remains as to the sources of misinformation. (see Annexure. A, page 85, start at line 4 and page 14, start at line 84)

KASHMIR: A party behaves apprehensively as it perceives that others may appropriate its current &/or future market share.

E4 BEHAVIOUR NOT ARTICULATED BY THE CONTRACTOR

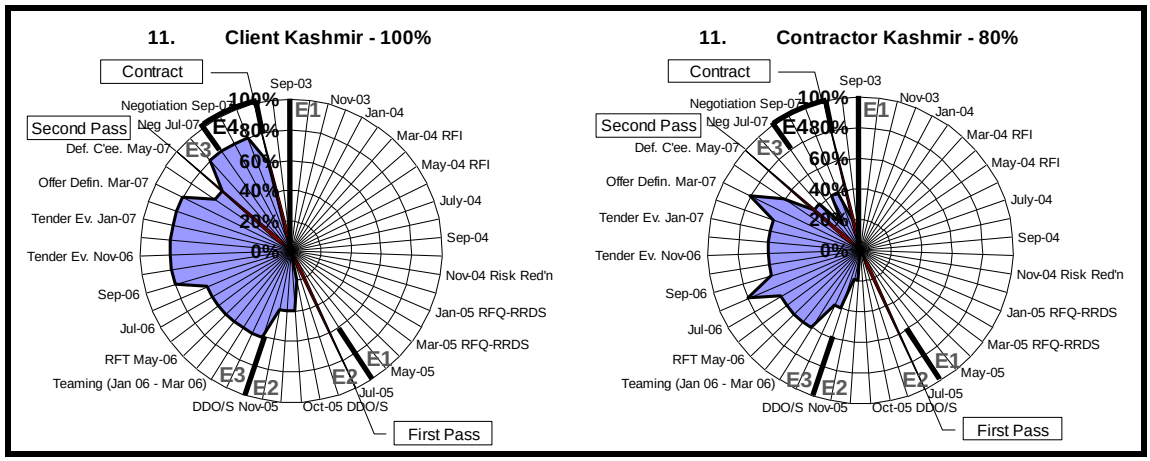

Figure 14.26: E4 11 Kashmir SMI

In Figure 14.26 epoch E4 above, the DMO client perceives that the (prime) contractor is apprehensive about the overseas design subcontractor's intentions to establish Australian facilities (perhaps with government encouragement), which are potentially capable of undertaking long-term equipment sustainment contracts. Even though the parties are facing each other over many months, the contractor appears unwilling to articulate this potential approaching conflict. 'Kashmir' is present in the DMO linguistics.

FINDING NEMO: A party knows that there is a game-at-play but has difficulty defining its structure and parameters.

E4 BEHAVIOUR NOT ARTICULATED BY THE CONTRACTOR

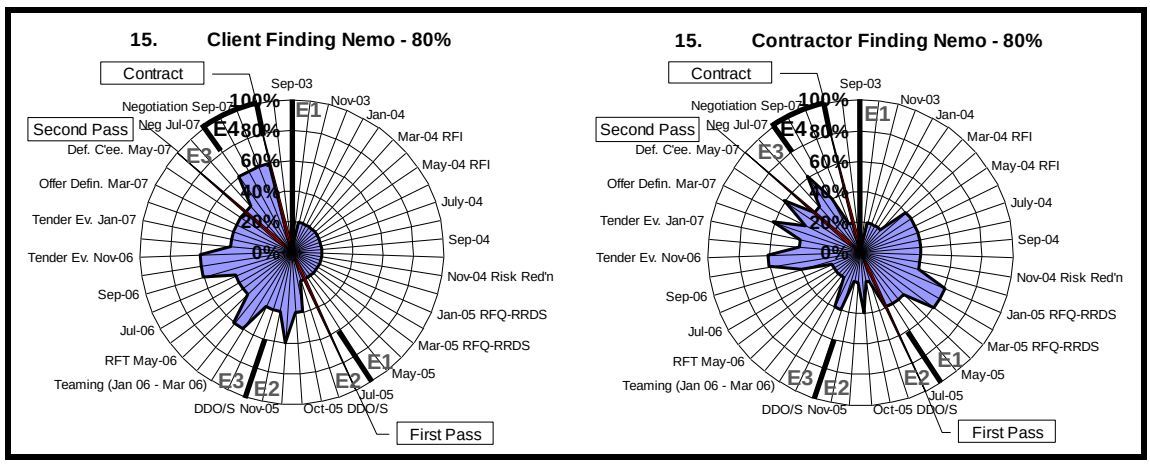

Figure 14.27: E4 15 Finding Nemo SMI

In Figure 14.27, the DMO client appears to be observing the contractor's projection of incredulity at the manner in which epoch E4 is being managed (negotiations returning to a starting position). Some insight is gained from a comparison of the right-hand frame of Figure 14.28 below with the left-hand frame of Figure 14.27 above.

MACHIAVELLI'S MINISTRATIONS: A powerful stakeholder changes the game.
E4 BEHAVIOUR ARTICULATED BY THE CONTRACTOR

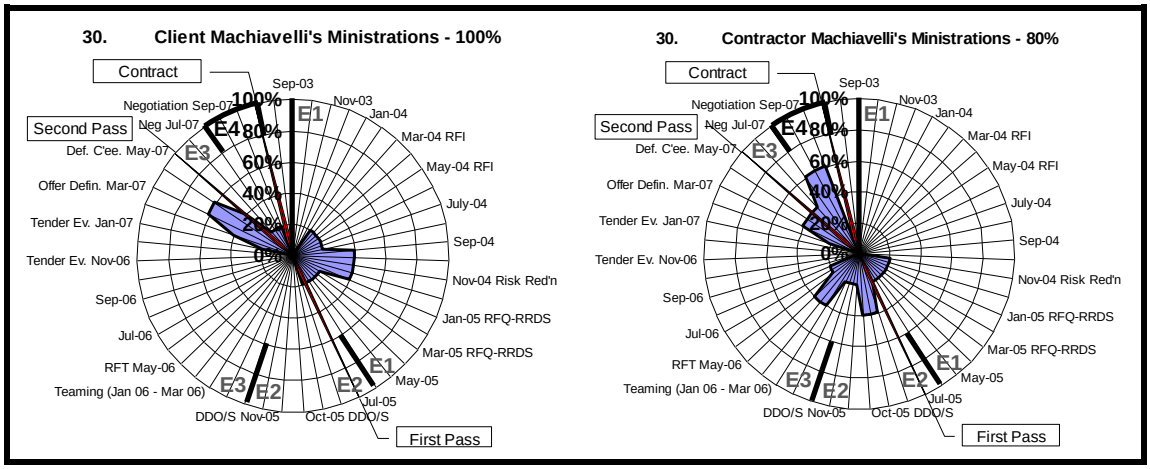

Figure 14.28: E4 30 Machiavelli's Ministrations SMI

(See Figure 14.21, Epoch E3, SMI 30 for commentary.)

SNAKE: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).
E4 BEHAVIOUR NOT SERIOUSLY ARTICULATED BY THE CLIENT

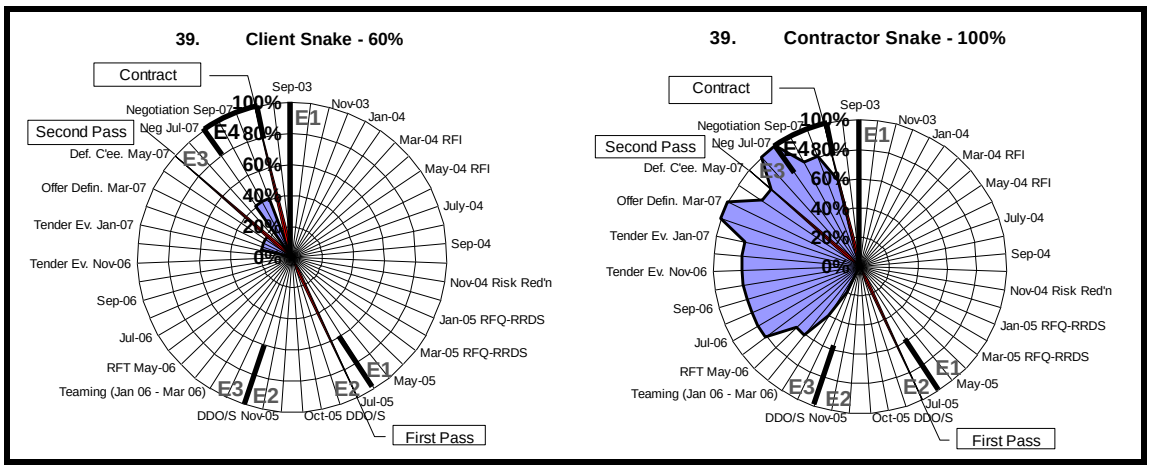

Figure 14.29: E4 39 Snake SMI

In Figure 14.29 epoch E4, the contractor continues to resist pressures to increase its scope of work beyond that described in their submitted tender. The pressure is coming from the DMO client who chooses to deflect the issue during research interviews.

Figure 14.30, epoch E4, might or might not be accurate but it reflects the contractor's opinion. Indeed, the Defence Minister's Political Office is conscious of this potential problem. (see Annexure. A, page 92, start at line 7)

POPCORN MACHINE: A negotiator has an unstable authority base.
E4 BEHAVIOUR NOT SERIOUSLY ARTICULATED BY THE CLIENT

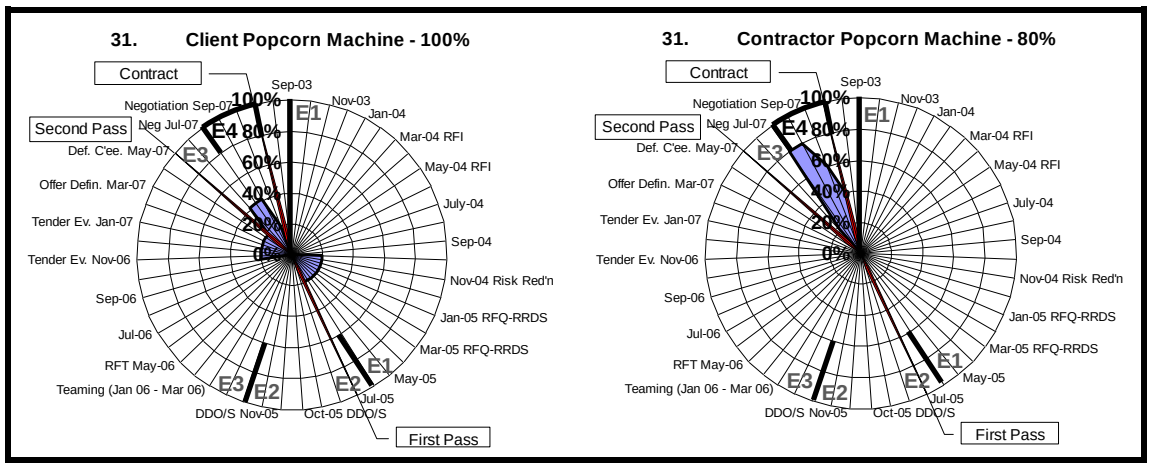

Figure 14.30: E4 31 Popcorn Machine SMI

LEMONS FOR SALE: A contractor closely monitors the client for any potential contract breach, which could sustain a transfer of risk.
E4 BEHAVIOUR NOT ARTICULATED BY THE CLIENT

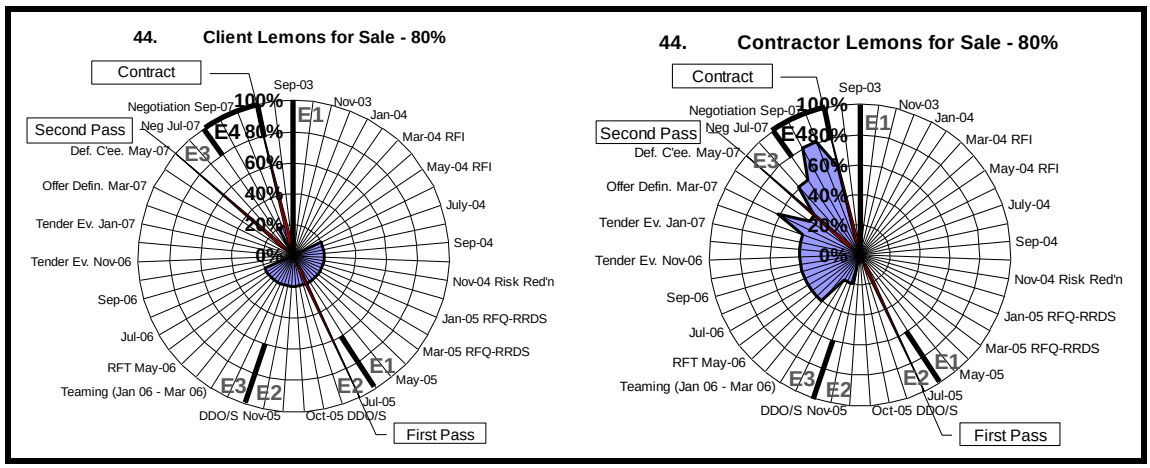

Figure 14.31: E4 44 Lemons for Sale SMI

Figure 14.30 and Figure 14.31 might reflect a co-relation. The contractor is tuned to be sensitive to any action by the client that might result in a transfer of risk to the client. Such inept negotiating practices might indicate inadequate contract formation skills (Bennett, 1990). Inexperience can lead to omissions in the contract documents or confounding terms, particularly if DMO staff participate infrequently in tender projects.

SHOTGUN MARRIAGE: Political pressure to consummate a contract or agree to terms.
E4 BEHAVIOUR ARTICULATED MUTUALLY

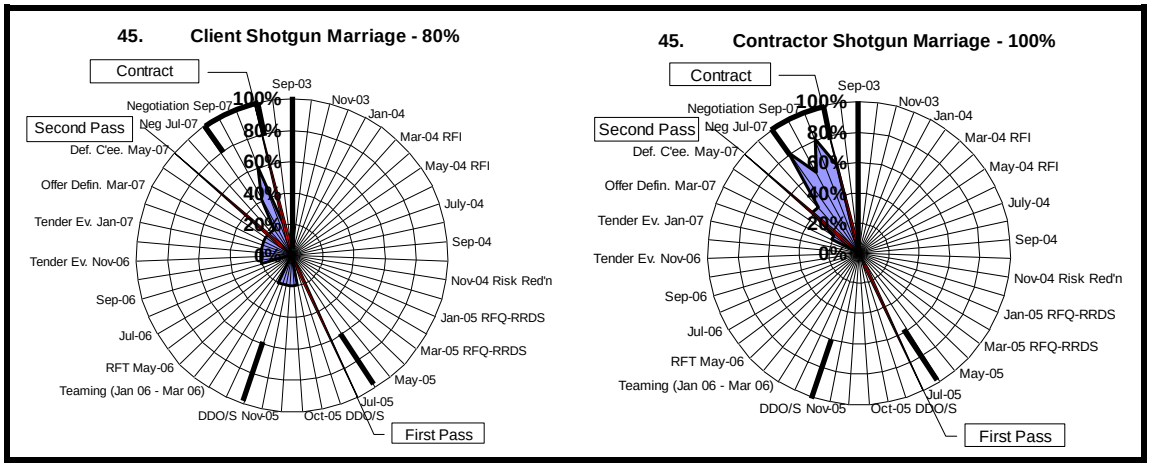

Figure 14.32: E4 45 Shotgun Marriage SMI

With a Federal election looming, Figure 14.32 illustrates the relative intensities of observed behaviours within the pre-election atmospherics. Time pressure might appear to be to the contractor's advantage as a number of renegotiated issues remain active.

The client postures that in spite of the looming election, there is 'no political pressure' to consummate the contract. The contractor has a different opinion. The political imperative for a handshake prior to the election prevails.

The contractor is advantaged while contractual issues remain unresolved (Ergas & Menezes, 2004). After contract signature, each issue will require a change to the contract scope and potentially more profit for the contractor.

Reflection on epoch E4

Epoch E4 is delimited to negotiations between the 'preferred supplier' (contractor) and the DMO client. The combative nature of these intense negotiations, together with the long hours of interaction and the lack of respite, results in degrees of mental and physical fatigue. The Case S project manager recalls:

> In the last weeks of contract negotiations, the overall relationship became seriously strained. And people got hurt. So, the new project manager will have to rebuild the trust.

Indeed, in the months following contract signature, the DMO bid manager, and both bid managers from the winning and losing contractor bid teams, lost their positions in their respective organisations.

Across the epochs, there appears to be a transition from the generally strategic SMI behaviours and atmospherics of epochs E1, E2, and E3, to the tactical SMI behaviours of epoch E4 with win/loss outcomes. The DMO client is negotiating with their 'preferred' contractor, but should negotiations fail, there is a reserve contractor in the wings.

The use of dyadic data reflecting on the same behaviour or atmospheric by two teams in close proximity over extended periods of time, suggests that the research method might give voice to 'that which cannot be said'; two constructions of reality but only one can be articulated (Squire et al., 2008, p. 16), while the other is inferred (intransitive).

The negative outcome to negotiations might reflect in incompetence, a tactical assault, revenge, or any combination of stasis and genesis (Franzosi, 2010, p. 18). However, in the respondents' recollections of these near-term events, there appears to be a decided disinclination by antagonists to register negative outcomes in the course of this study. In contrast, protagonists appear to articulate willingly their exploits. 'Revenge attacks' tend not to follow this heuristic. The 'tricked' party might seek to share their anguish or express their right to the moral high ground.

Epoch (phase) definitions revisited

Initially, bid managers provide the temporal delimiters of the epochs as defined in the DMO procurement manual. However, Gioia & Chittipeddi (1991) consider such phases in terms of *sequential and reciprocal* cycles of *sense-making* and *sense-giving* communication behaviours, where sense-making relates to understanding and cognition, and sense-giving relates to influencing and action.

As a point of distinction, the conceptual Sense-Making Item (SMI) metaphor is a respondent's characterisation of a recalled observation (or perception) of a communication behaviour or atmospheric. In contrast, sense-making and sense-giving are purposive.[283]

Figure 14.33 presents these conceptual analogues and delineates the tender campaign phases with the Gioia & Chittipeddi abductive logic (redescription) of sense-making or sense-giving; being an organisation's overarching purpose during a phase within a tender project.

[283] A teacher projects sense-giving and a student processes sense-making.

In Figure 14.33, short thin parallel vertical lines delimit the Gioia & Chittipeddi phases. Importantly, these delimited phases represent generally, *reversals* in the dominance of either sense-making or sense-giving communication behaviours. Contractor information presents as dark line shade and font, while the DMO client data is lighter in shade.

For this study, the DMO (epoch) phase delimiters of E1, E2, E3 and E4, are redescribed as a *directed process mechanism* for epochs E1 and E2, and as a *coordinating process mechanism* for epochs E3 and E4 (see Figure 14.33 below).

During epoch E1, the DMO bid manager provides information (sense-giving) and the contractors respond with their interpretations.

During epoch E2, the contractors provide options (sense-giving) and the DMO client reflects on the possibilities.

Both these activities are DMO directed process mechanisms that deliver value positions and ongoing adjustments to political risk.

During the first half of epoch E3, the DMO client withdraws from any form of contractor direction, but provides sense-giving through the tender documents. During the third quarter of epoch E3, the contractor provides sense-giving within their delivered tender offer.

The fourth quarter of epoch E3 sees both client and contract engaged in deconstructing the tender offer. Each one is projecting to the other how to interpret the bid against the specification.

The final negotiations during epoch E4 involve rapid exchanges of sense-giving and sense-making. There is a joint mission to deliver a politically acceptable bid to the decision-making politicians.

Overall, epochs E3 and E4 are a joint enterprise of coordination: a coordinating process mechanism (see Figure 14.33 below).

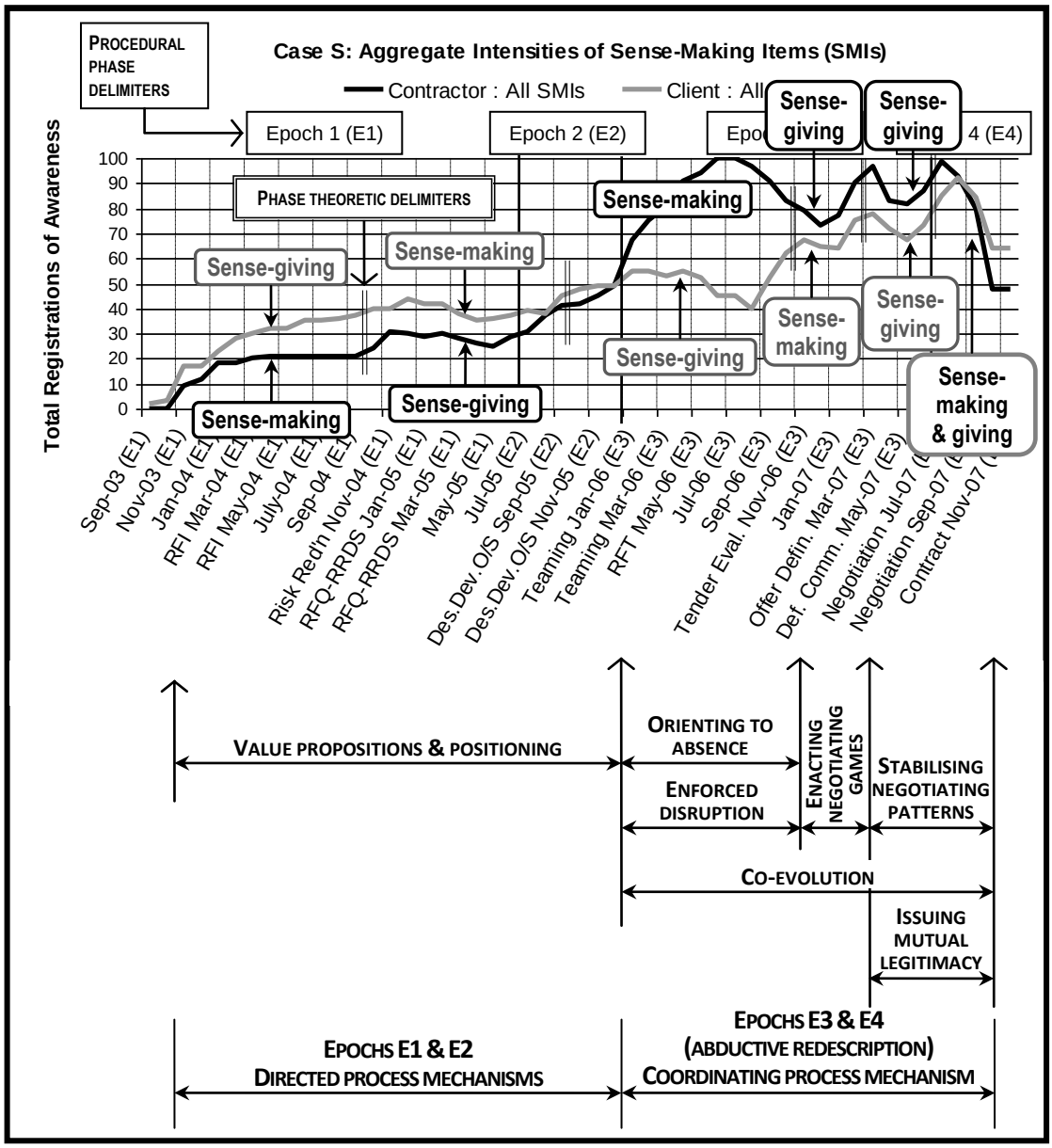

Figure 14.33: Tendering campaign phases: comparison of DMO procedural phase delimiters (epochs), phase delimiters based on reversals of sense-making and sense-giving communication behaviours, and the logical elements of coordinating process mechanisms

During epochs E3 and E4, the Gioia & Chittipeddi (1991) phase modality of reversals in sense-making and sense-giving, corresponds generally with the coordinating process mechanism described by Jarzabkowski, Lê, & Feldman (2012).

While Jarzabkowski, et al. identify the elements of a coordinating process mechanism, it appears that the only elemental logic proffered is linear, comprising the grammatical elements of: enacting disruption; orienting to absence; creating elements; forming new pattern; stabilising new patterns (Jarzabkowski et al., 2012, p. 908).

In Figure 14.33, I propose an enlargement of the Jarzabkowski, et al. grammar to include idiographic elements of ‘value propositions and positioning’, ‘co-evolution’ and ‘issuing mutual legitimacy’.

In addition, Figure 14.33 offers the logic architecture for the grammatical elements found in epochs 1 to 4.

Figure 14.33 illustrates that both the DMO client and the contractor ‘co-evolve’ as an outcome of the coordinating process mechanism.

Together, Gioia & Chittipeddi (1991) and Jarzabkowski, et al.(2012) provide different approaches to the validation of the primary methodology developed for this study. In particular, the work of Gioia & Chittipeddi theorise the modalities of sense-making and sense-giving; and Jarzabkowski, et al. decribe the grammatical elements of a coordinating process mechanism as illustrated in Figure 14.33. As both offer complementing paths of reasoning, they are important for middle-range explanatory/interpretive theory: theory for tendering.

Summary

The fundamental purpose of this chapter is to validate the foundations of the research methodology. Importantly, the idea of participants recalling observed communication behaviours and atmospherics appears robust when the individuals remain in the ongoing project.

An informant’s recalled observation/perception of temporal communication behaviour or atmospheric is characterised conceptually as a Sense-Making Item (SMI). In general, the SMI represents the recollection of a ‘safe-to-fail’ information seeding or information seeking probe; otherwise described as a game-at-play.

The chapter reflects a tension between the DMO client and the contractor, where the client purports to know the political strategy in play and the contractor seeks this information: ‘who’s who in the zoo’.

The DMO client experiences internally generated risks that might suggest bureaucratic power plays.

For foreign contractors, playing the game within an incredulous artificial market becomes quizzical when political operatives talk authoritatively of a ‘free market’.

At times, the tensions heighten when bureaucrats, hiding behind the shield of probity regulations, withdraw the communications lifeline to the contractor.

During tender compilation, communication is not entertained on matters outside of the details in the tender.

The phasing of the tender project receives close attention. Existing theory is introduced (the abductive logic of redescription) to explain the phasing in terms of sequential and reciprocating cycles of sense-making and sense-giving.

In parallel, the abductive application of a recent theory of coordinating process mechanisms exposes elements of grammatical logic comprising: enforced disruption; orienting to absence; co-evolution; enacting negotiating games; stabilising negotiating patterns, and issuing mutual legitimacy. Preceding the coordinating process mechanism is a directed process mechanism of 'value propositions and positioning'.

Methodological validity is provided through the abductive logic of reciprocating cycles of sense-making and sense-giving, and the grammatical elements of directed and coordinating process mechanisms. Empirical patterns of communication behaviours provide corroboration, as do the explanations provided by respondents.

The next chapter

In the next chapter, the question is posed as to why one DMO tender bid manager can lead a team to a conclusive tender outcome and another is less successful and the Defence Minister intervenes to either take the tender off the market or to re-tender.

Related to this question are the purposes of the behaviours identified with SMI idioms. Existing theory enables the overall problem data set to be redescribed in terms of 'purposes'. Further, the relationships between purposes are modelled.

The outcome sought is not correlation *per se*; rather, interest lies in the patterning of behaviours and temporal changes in the pattern. For example, what can be said about a leader if the team's observations of behaviours are inconsistent and sparse? In contrast, another team has strong temporal consistency in observations of behaviours, and pattern changes are clearly evident.

The next chapter considers a higher-level reflective overlay on the data where redefinition involves the transposition of conceptual SMIs into purposive (gerund) constructs. In terms of a contribution to middle-range theory, the contrasting Case S and Case L expose a leader's capability to understand and operate effectively within a complex socio-political context.

Chapter 15
Analysis:
Behavioural Purposes and Leadership

The previous chapter established the capacity and prospects of aggregative methods for analysing the research data on recalled perceptions of communication behaviours; and the next chapter deals with the analysis of global perceptions of organisational legitimacy.

Using aggregative methods, the purpose of this chapter is to distinguish the patterns of performance of the respective client and contractor tender project-teams. Based on the known delivery of a successful (conclusive) tender project and a problematic (withdrawn) tender project, how do the respective team leaders differ in their capability to deal with socio-political complexity? Clearly there is a difference sufficient for the Defence minister to intervene; albeit on the recommendation of the contractors and with the tacit support of the DMO[284].

This chapter begins with a consultant's report (The Helmsman Institute, 2009) on the two case studies used in this inquiry. From the consultant's perspective, both Case S and Case L appear to be above average in complexity and their report highlights that while technical complexity is a critical driver, *it is often not the most critical driver of the project's complexity*. The consultant's report to the CEO DMO is a watershed because, almost as 'a matter of faith', the DMO appears to resists the idea of non-technical complexity.[285]

The scene is now set to address the case-specific socio-political complexity in terms of a leader's complexity-capability needed to recognise and react to the phased realpolitik.

Redefinition and redescription of the data will provide different thematic perspectives and the instrumental model of Bayesian Belief Learning Networks (BBLN) is applied to explicate temporal patterns in the data (not reality).

Any discussion making reference to the actual cases and their contextual realpolitik are matters of insightful interpretation only: mid-range theory.

---

[284] Arguable, this is a rational approach as the pathology of socio-political complexity is political rather than engineering and the DMO might not want to accept a political legacy.
[285] 'It's our [DMO] job to present government with the data (Barker, August 2006).'

Figure 15.1 (below) provides an overview of the process relationships in focus for this chapter.

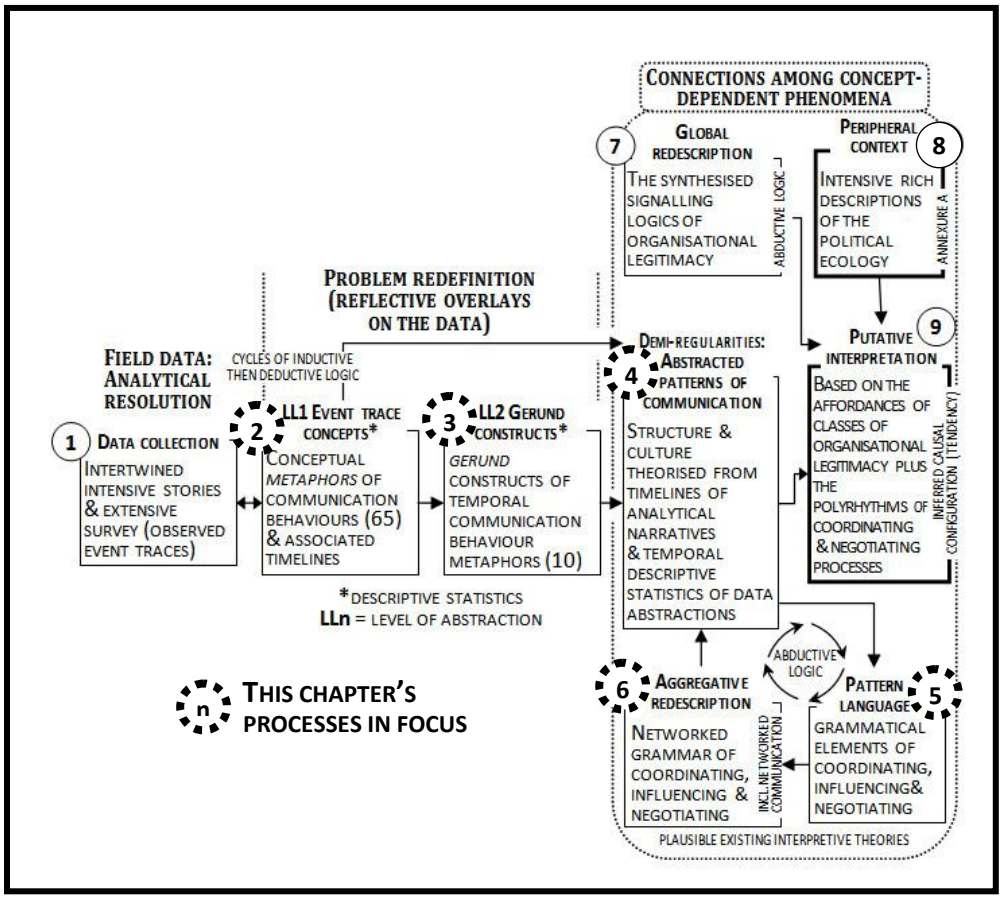

Figure 15.1: The foci of the relational process schema

THEME 1: NODE 3: REDEFINITION: In comparing the two cases (S & L), this first theme considers the dyadic behavioural *purposes* (TPs) of both the DMO client and the contractor. Tendering purposes are presented in their graphical temporal co-relational dispositions.

THEME 2, NODE 3, REDEFINITION AND REDESCRIPTION: The second theme redefines the SMI data in terms of dyadic awareness of *emergent* and *controlling* behaviours; that is, different perspectives on the same data.

THEME 3, NODES 2,3,4, 5 & 6, REDEFINITION AND REDESCRIPTION: Given the socio-political contextual complexity identified in Annexure A and Chapter 1, the third theme considers the social 'complexity-capability' of leaders. It uses existing theory for guiding the analysis; how a plausible world would need to behave for its collective

influence to be the cause of the observed outcome: a conclusive or problematic tender project.

The ideas of organising within the social complexity of open systems are discussed in terms of patterns of human behaviours and endeavours.

To explicate these patterns, this research project conceives a constructed metric of the 'persistence of awareness of communication behaviours'. For example, during the lead-in period to a tender project, industrial marketing campaigns are likely to dominate a client's scarce time resources. The 'Beauty Contest' might reasonably be expected to appear consistently in the recalled perception about that period in history. In contrast, another tender project team might deliver a small number of random SMI recollections.

The reason proffered is that a tender project team might be sensitised to the awareness of communication behaviours and equally, another team might be sensitised to orchestrated ignorance of such behaviours. In both cases, leaders might be deemed effective in managing their respective situational awareness. The issue rests on leadership agendas that are better suited to open systems with their inherent social complexities, or closed systems of replicable policies and procedures.

Neither is good nor bad; it is a matter of appropriateness and both types of leaders, particularly military commanders, might perform well in both domains if directed accordingly: a matter for the 'rules-of-engagement'. A problem arises when the leader misreads the context or has always worked in one context and is unaware (ignorant) of other possibilities, other than textbook references.

Where the tender project team is conscious of the need to interact and exchange ideas, there is a reasonable chance that recalled perceptions will identify similar observations of behaviours at about the same time in the project. There might well be a temporal persistence of observations.

General ignorance about the need for interaction and communication is likely to receive fewer (recalled perceptions) data points and data type (SMI) is likely to be inconsistent.

THEME 4, NODE 3, REDEFINITION AND REDESCRIPTION: Theme 4 examines whether the overall statistical patterns identified in Theme 3 have a consistent co-relation to any of the Tender Purpose patterns. Both are constructs of the data, not reality; relational but not causal.

Theme 1: Case S and Case L - Comparison and Contrast

The Helmsman Institute's (2009) suite of 'project complexity metrics' relate to only the overall project; they are not temporal in nature and do not distinguish the tender process from the assembly and delivery process.

In Figure 15.2, Helmsman considers Case S and Case L amongst a portfolio of other major Defence projects (shaded).

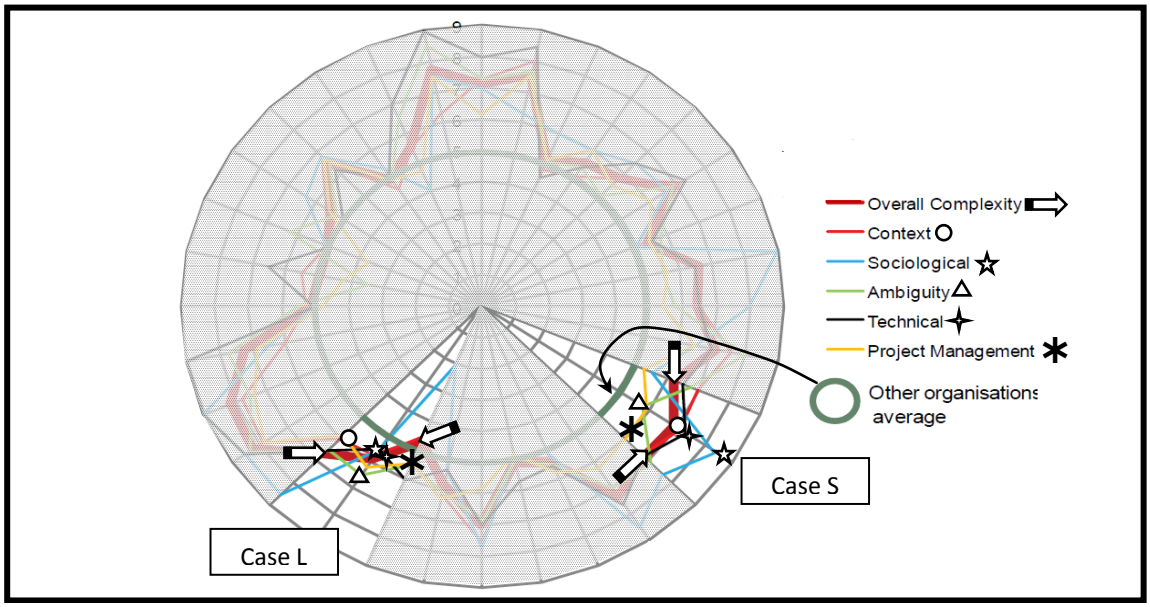

Figure 15.2: Adapted from (The Helmsman Institute, 2009, p. 3). Assessment of the drivers of complexity for a portfolio of major Defence projects.

They also consider non-Defence projects of equivalent scale and cost. The average 'complexity' measure[286] for the non-Defence projects displays in Figure 15.2 (above) at the approximate 60% mark[287] on the primary axis of the polar chart, and displays as a thick circle identified by the legend item 'Other organisations' average'.

	HEADS OF COMPLEXITY	CASE S (ABOVE AVERAGE COMPLEXITY)	CASE L (ABOVE AVERAGE COMPLEXITY)
⇨	OVERALL COMPLEXITY	Significant	Moderate
○	CONTEXT	Significant	Moderate
☆	SOCIOLOGICAL	Serious - Very Serious	Moderate
△	AMBIGUITY	Moderate	Moderate-Significant
✦	TECHNICAL	Significant - Serious	Moderate
✱	PROJECT MANAGEMENT	Moderate	Moderate-Significant

Table 15.1: Explication of complexity illustrated in Figure 15.2

[286] A proprietary sociologically-based method that guides their opinion; not a presentation of fact.
[287] The Helmsman axis has only 9 divisions.
☆The Case S project manager engaged new professional staff.

Case S and Case L

Both Case S and Case L projects are approximately equal in terms of multi-billion dollar budgets. The Case L tender project becomes problematic, particularly during the protracted negotiating period in epoch E4. The tender project joins the Defence minister's 'projects of concern list' and the tender is withdrawn from the market: colloquially expressed as 'taken off the street'. Coalition stakeholders receive advice regarding the re-tendering of the project in the near future (beyond this study's data collection period).

Therefore, the Case L contractors' data are no longer available for presentation, as they have potential value for other contractors in the subsequent competition. However, significant insights accrue from a comparison of the Case S client/contractor dyadic data and the Case L DMO client (monadic) data. The Case L contractors' stream-of-consciousness interviews remain available.

Figure 15.3 and Figure 15.4 (following) illustrate the two tender projects having subtly different epoch definitions. Both have four epochs and the projects are generally similar, differing only in the politicly-defined tender strategy and associated tasks.

In recognition of the 'coordinating process mechanisms' identified in the previous chapter, epoch E3 is refined by distinguishing E3a in Figure 15.3, and E3a and E3b in Figure 15.4.

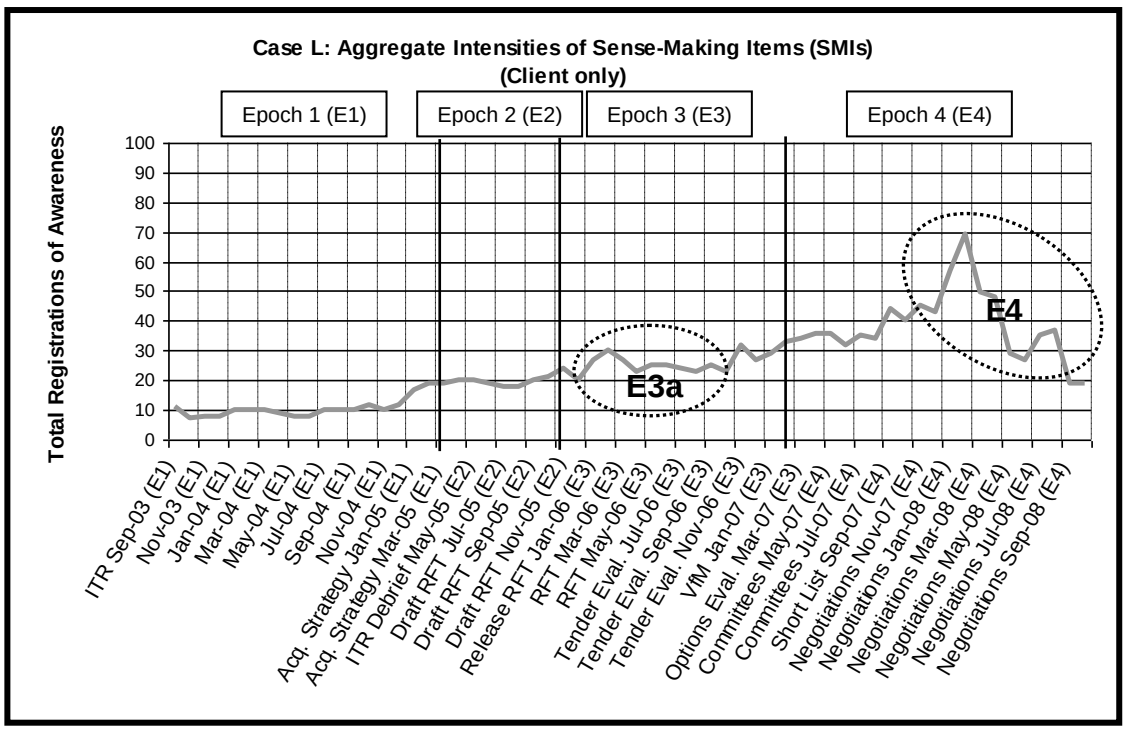

Figure 15.3: Case L - Aggregate observations of Sense-Making Items (behaviours and atmospherics) as recalled by respondents.

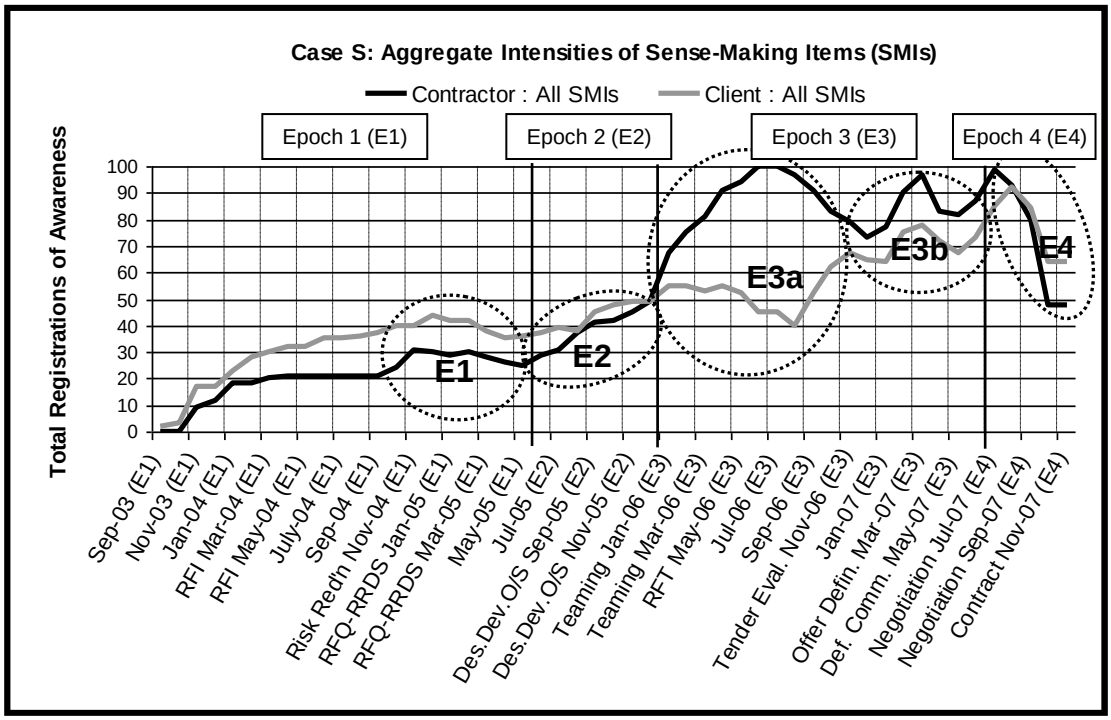

Figure 15.4: Case S - Aggregate observations of Sense-Making Items (behaviours and atmospherics) as recalled by respondents.

Case L: an overview from the DMO project manager

The DMO client's project (bid) manager provides his contextual insight into Case L:

> I became aware of the significance of political influence and political intervention very early in the project's life. I was attending a senior management meeting [in Melbourne] when I received a phone call at 9.00am instructing me to be in Canberra at 12 noon to meet with the Minister. Apparently, the Minister had received three or four minsubs [Ministerial Submissions from the Department of Defence] that were conflicting. My job was to untangle and explain the situation. But, once I was in his office, I soon realised that the Minister was driven by other political agendas.
>
> Some two years earlier, he had told his Cabinet colleagues exactly how this project and its tender were going to be run. Regardless of current field [combat] realities, these past undertakings could not be changed. Some issues of ministerial credibility might have been at stake; he didn't say. Despite the fact that I was recently appointed as the project manager, the Minister imposed the tendering strategy. So that was quite telling and an interesting insight because he was dictating the final date for tender submissions and the recommendation to Cabinet of the preferred contractor.
>
> Industry representatives had direct access to the Minister's office and the senior executives of the DMO; but they would rarely speak to me in the political sense of trying to shape the outcome.

> Half way through the tendering process, the field [combat] operational environment changed significantly. The military and the government required a substantial enhancement to the specification, but there was no change to budget or the delivery schedule.
>
> Now, we had the unusual situation of an initial government approval for an American solution being replaced with an Australian solution for both manufacture and through-life support. Industry was confused.
>
> While there are opportunities for foreign embassies to be involved, I personally didn't see this.
>
> The industry producing the general product technology that my project had to procure is well established in Australia, but because of the bespoke specialisations that the military require in this instance, the companies that are likely to win the work are primarily based overseas, and not all of them have a large presence here. (see Annexure. A, page 35, start at line 1)

Modalities of leadership in the face of technical, social and political complexity

The Case L tender project has some similarities with the Case S tender project. Political direction guides both strategies. However, Case L reflects in part, a state of confusion amongst the coalition of stakeholders, accompanied with an apparent diminution of communications with the DMO client's tender project team. Many possible reasons might contribute to this situation, but, inter alia, they are sufficient for the Defence minister to withdraw the tender project during the protracted final negotiations: the implication being that the industry is able to promote to the Defence minister, the idea and prospect of a new strategic direction.

In contrast to the socio-political complexity influencing the Case S management modality, Case L appears to take a process approach to tender management. The project manager is a senior military officer[288] and the DMO has, as guidance, the (then) prevailing Defence Procurement Policy Manual (DMO, 2006). The Australian Institute of Project Management[289] (AIPM) conducts fee-for-service audits on the tender project's formal project management processes and a high score accrues. Everything appears in order; however, the tender project becomes problematic. Process management is in place while political management is problematic.

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[288] In personal discussions with DMO's senior management, it was accepted that the rank of Brigadier is insufficient to manage (rather than just administer) the politics engulfing a project of this size.
[289] The Australian Institute of Project Management (www.aipm.com.au/)

With this background, the idea of organisational order and unorder (disorder)[290] are juxtaposed (Snowden & Boone, November 2007) to illustrate (later) how leader-imposed order might lead to unorder (disorder), regardless of the formalities of project management reports. At play is the contrast between a 'being' ontology (stasis) and a 'becoming' ontology (genesis) (Robert Chia, 2003) with associated management thought.

While the Case L DMO client follows a process, the contractors are struggling with the complexities of politicly inspired uncertainties relating to changes in technology and changes in perceived political objectives. In this dynamic complex context, the need to establish and maintain awareness and trusting relationships through networked conversations, as in Case S, appears not to be receiving sufficient priority or indeed recognition by the Case L DMO client; a view expressed by a subordinate manager within Case L (see Annexure A, page 151, start at line 190).

Case comparisons

CASE S

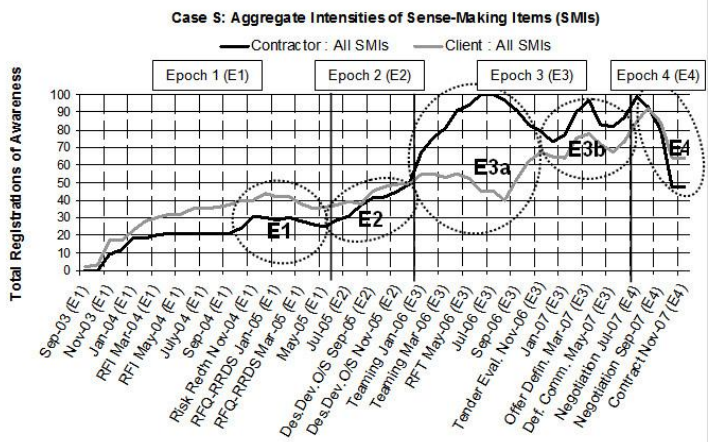

Figure 15.5: Case S – DMO Client and Contractor polyrhythms of awareness

[290] Snowden & Boone (November 2007) argue the contrast of order/unorder, but many other authors prefer 'disorder' (Hulme, 2009b).

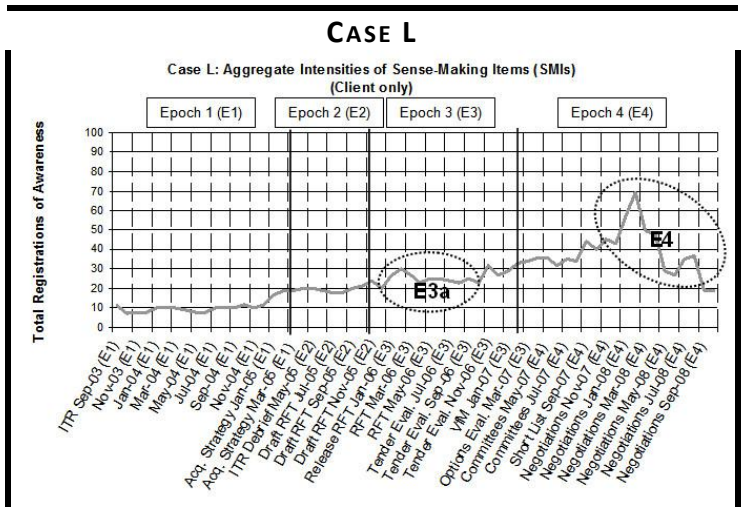

Figure 15.6: Case L – DMO Client polyrhythm of awareness

While reflecting on Case L, the DMO respondents recall comparatively fewer observations of communication behaviours and atmospherics (see the grey DMO client polyline line in Figure 15.6 (above) than the respondents in Case S (see the grey DMO client polyline line in Figure 15.5 above). While personal agency might be at play, both cases display peak DMO client observations in their respective E4 epochs.

In Case L Figure 15.6, sub epoch E3a has a relatively constant level of recalled behaviours and atmospherics during the tender preparation period with its probity-constrained communications between client and contractor. This imposed reduction in communications appears co-related with a reduction in observations and situational-awareness of both DMO client tender project teams (see Figure 15.5, E3a and Figure 15.6, E3a).

For Case L (Figure 15.6 above), small peaks of observational activity occur on either side of the E3a probity period, but they remain unexplained. There is a general upward trend in temporal observations, but the effort expended during unconstrained communications on either side of E3a, is about the same as that expended during constrained communications limited to formal questions and answers.

One explanation is that the effort devoted to the observation of communication behaviours and atmospherics during the probity period, with its constrained communications, is no different to other times. This result might suggest that Case L is characterised by its formal and procedural communications. Further this bias towards interaction through formal communications as a means of corralling socio-political complexity might develop into an indicator of a problematic complex tender project.

Figure 15.5 (epoch 3a) in the comparative Case S, displays a reduction in the DMO client's observational effort expended during the bid preparation period; being the probity-related constraints on communications with a contractor. This indicates that outside of zone E3a in Figure 15.4, the Case S DMO client entertains levels of communications well beyond the formal levels of the tender preparation period (E3a).

Culture, trust, agency and leadership

Snowden & Boone (November 2007) provide a framework for thinking about the differences in observed communication behaviours. Their leadership prescription for complex organisational contexts, suggests an ongoing trilogy of activities that *probe*, *sense*, and *respond*. The probing communication behaviour comes generally from the contractor, and the DMO client might sense such behaviour. If the DMO client team responds in some way, then the contractor might sense this response, and in turn, the contractor might counter with a moderated or refined probe. Overall, this tit-for-tat communication behaviour involves probing with information seeding and information seeking communications of sense-giving, sense-making, and meaning-making. Such behaviours reflect a dynamic 'entwinement' of the parties and the potential maturation of their *joint* knowledge culture (co-evolution).

If a joint knowledge culture evolves, then it might carry with it the lineaments of trust. In contrast, the Case L DMO leader appears to project a cultural frame of power, authority, and due process (Dervin, 2003c), but awareness through connectivity and engagement appears problematic.

Figure 15.6 (Case L) displays a sharp peak of observations in epoch E4. The DMO client's project manager appears to recognise belatedly that the tender project lacks viability, but this realisation, or the agency to voice this realisation, materialises in epoch 4. The sharp decline in observations late in epoch E4 reflects the terminal intervention of the defence minister.

While the 'Final Negotiations' period for Case S takes 3-4 months (Figure 15.5), for Case L, 10 months elapse (Figure 15.6).[291]

[291] Note that the 'Short List' task in the Figure 15.3 timeline is the same as the 'Def. Comm' task in the Figure 15.4 timeline.

Leadership styles and socially complex contexts

Both Case S and Case L evolve from politicly inspired and politicly mediated tender strategies. A crucial understanding of connectivity and awareness during complex and politicly sensitive tendering, appears to be ignored institutionally by Case L (Proctor & Schiebinger, 2008). Remediation efforts might be belated. The DMO leadership style prevailing during the Case L tender project appears to be process oriented, which Snowden and Boone (November 2007) categorise as 'Simple'[292] or 'Complicated'[293]; both being 'ordered' (bureaucratic) contexts. The Helmsman Institute (2009) suggests that both Case S and Case L operate in an above average socio-politicly complex[294] context (Severin & Tankard, 2001; Snowden & Boone, November 2007).

The Case S program manager reflects an understanding of the modality of complex projects presenting as a wicked mess (Hancock, 2010). In contrast, the Case L project manager appears to choose the guidance of the DMO's procurement procedures manual, and treats social and political complexity accordingly.

Withdrawing an active tender process implies that the contractors have lost money in a failed bid process.[295] Behm (2009, June 5) suggests that the responsible politician, be it a minister, junior minister or a parliamentary secretary, might consider his or her future.

Having established the leadership styles, the discussion now turns to various *redefinitions* of the data[296]; theory-guided analyses that *inter alia*, enable deeper insights into the cognitive limits of leaders dealing with socio-political complexity. This process commences with the transformation of SMIs into congregations of Tendering Purposes (TPs). Table 15.2 below links each TP with its unique constituency (congregation) of SMIs.

---

[292] The leader needs to sense, categorise, and respond.
[293] The leader needs to sense, analyse, and respond.
[294] The leader needs to probe, sense, and respond; all of which might generate Sense-Making Items.
[295] generally in the order of millions of dollars
[296] rearranging or regrouping the data to enable different perspectives

The Tendering Purpose (TP) construct patterns

Table 15.2: The transformation of Sense-Making Items (SMIs) into Tendering Purpose (TP) congregations

COMPREHENDING

04. Cargo Cult: A party's behaviours result from a history of receiving guaranteed non-competitive work.
09. Winner's Curse: A party realises that it will suffer because it offered a fixed-price to deliver an ill-defined or ill-understood requirement.
15. Finding Nemo: A party knows that there is a game at play but has difficulty defining its parameters and structure.
18. Selective Hearing: A party chooses to be 'led' to a fundamentally different interpretation of the game at play.
22. Unrequited Love: Past superior performance appears to be of academic value only.
23. Pin the Tail on the Donkey: Both parties have a fundamentally different perception of the game at play.
32. Surprise!: A significant unanticipated event occurred.
43. Feed Forward: Political decisions which framed an earlier project are having foreseeable impacts on the current project.
55. Keeping up Appearances: The tendering process progresses conscientiously while a latent political decision has already been made.
63. To Play the King: The risks are so high that the decisions can only be carried by politicians.

CONFRONTING

07. Masquerade: A party displays a 'crafted' pretence for a period of time (particularly in the presence of competitors).
40. Disneyland: The entered environment appears to be carefully orchestrated resulting in a perceived power imbalance.
52. Who Rules the Waves?: Regardless of the client's specification, it must be done our way.
62. Real Power: The political office is called upon to reduce artificial complexity generated by the bureaucracy.

CREATING VALUE

02. Smart Thinking: Attention is focused on a party's business-model (and potential risks).
03. Gold Miner: A party uses this project to advance another project's objectives.
05. Cock Fight: Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.
11. Kashmir: A party behaves apprehensively as it perceives that other involved contractors may try to appropriate its current &/or future contract share.
44. Lemons for Sale: A contractor closely monitors the client for any potential contract breach, which could sustain a transfer of risk.
48. Wedging: A small negotiation win on one issue can be used to leverage positions on related issues.
61. Stalking Horse: Tenderers believe they are being used as a political 'stalking horse'.

Finding Connections

26. Speed Dating (in a shrinking sample): Potential participants must mate before entering the game.
65. Who's Who in the Zoo: Putting structure to the political issues and players.

Finding Direction

24. Auntie Mame: Obtaining high-value insights from a non-contracting party.
30. Machiavelli's Ministrations: A powerful stakeholder changes the game.
35. Call in the Big Guns: A party seeks Ministerial dialogue.
41. Pennies from Heaven: Unsolicited quality information is received from or about the other side or competitor.
47. I Had a Dream: Receiving impeccable non-attributable political direction.
59. Seeds of Doubt: A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.
60. A Moment of Truth: Impeccable official information of strategic importance.
64. Sweet Seduction: Probing for potential intelligence sources.

Table 15.2 (cont.)

IMPACTING TRUST

01. Beauty Contest: A party's behaviour concentrates on its presentation values.
10. Jungle Jitters: A party is keen for the work but apprehensive about untested relationships.
12. Decree Discordare: A party believes that another party plays the dual (ambiguous) roles of a team-player while retaining final decision-rights.
14. Transponders: Individuals seeking attention by hovering around the project or communicating their importance.
19. Eats Roots and Leaves: A transient bureaucrat institutes change and avoids on-going accountability by leaving.
21. Once Bitten, Twice Shy: Previous experiences have led to ambivalent or negative feelings.
25. Ring-a-Ring-a-Rusey: A party resents being gamed.
28. Ménage à Trois: A client and subcontractor are negotiating.
31. Popcorn Machine: A negotiator has an unstable authority base.
37. Gut Ache: An aura of doubt pervades the process even though everything appears to be technically correct.
50. Pissing in the Wind: One party's negotiator does not have his principal's approved baseline positions.
51. P Platers: A negotiation team is comprised of rookies.
53. Spinning Bow Tie: I don't trust the middle-man.
57. Included Out: Some potential suppliers receive disproportionate welcoming attention.
58. Refilling the Honey Pot: Enticed participants need constant maintenance.

INFLUENCING

06. Fool's Gold: A party is willing to offer anything that is requested, regardless of the commercial implications.
08. Vanity Fair: A party feels pressure to participate because of the project size and/or its market stature.
17. The Scorpion: The project is implanted with a toxic human agent (common foe) whose presence unites opposing parties or drives them apart.
29. Turf Wars: Bureaucrats compete for involvement.
34. Yes Minister: A superficial game is used to draw attention away from the main game.
42. Emperor's Clothes: A misperception is institutionalised.
45. Shotgun Marriage: Political pressure to consummate a contract or agree to terms.
46. Dirty Tricks: Misinformation is supplied to the highest political level.
49. White Ants: Team members independently seek change from the political office.
54. Mother's Choice: Client suggests the contractor abandons a proposed subcontractor.
56. Free Lunch: A buyer uses incentives to urge a seller to participate.

MEDIATING

13. Gone to Grandma: A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.

NEGOTIATING

27. Haughty Opportunist: A temporal situation fortuitously affords one party enhanced power.
33. Agent 86: A surreal personality is active in the project.
39. Snake: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

OBSTRUCTING

16. Star-Gazing 'Iron Colonel': A non-aligned bureaucrat focuses on procedural detail to avoid contentious issues which might degrade promotion prospects.
20. Squawking Crow: A transient bureaucrat seeks to discredit the process.
36. Spoil Sport: A losing party or contractor seeks to de-stabilise the nascent marriage.
38. Dr Salk: A game is initiated to thwart the emergence of another game.

Field data collection occurs at the Sense-Making Item (SMI) level and not at the purposive TP level. That is, respondents do not indicate their recollection of, for

example, trust-building communication behaviours, as a number of SMIs contribute to the trust-building purpose. Additionally, the constituency of a TP might be context dependent.

Table 15.2 lists all TPs but only the high-intensity TPs contribute to the following analyses starting with Figure 15.7.

High intensity Tendering Purpose constructs

Case S

Figure 15.7 (below) presents the lineaments of the four high-intensity Tendering Purpose constructs for Case S - DMO client.

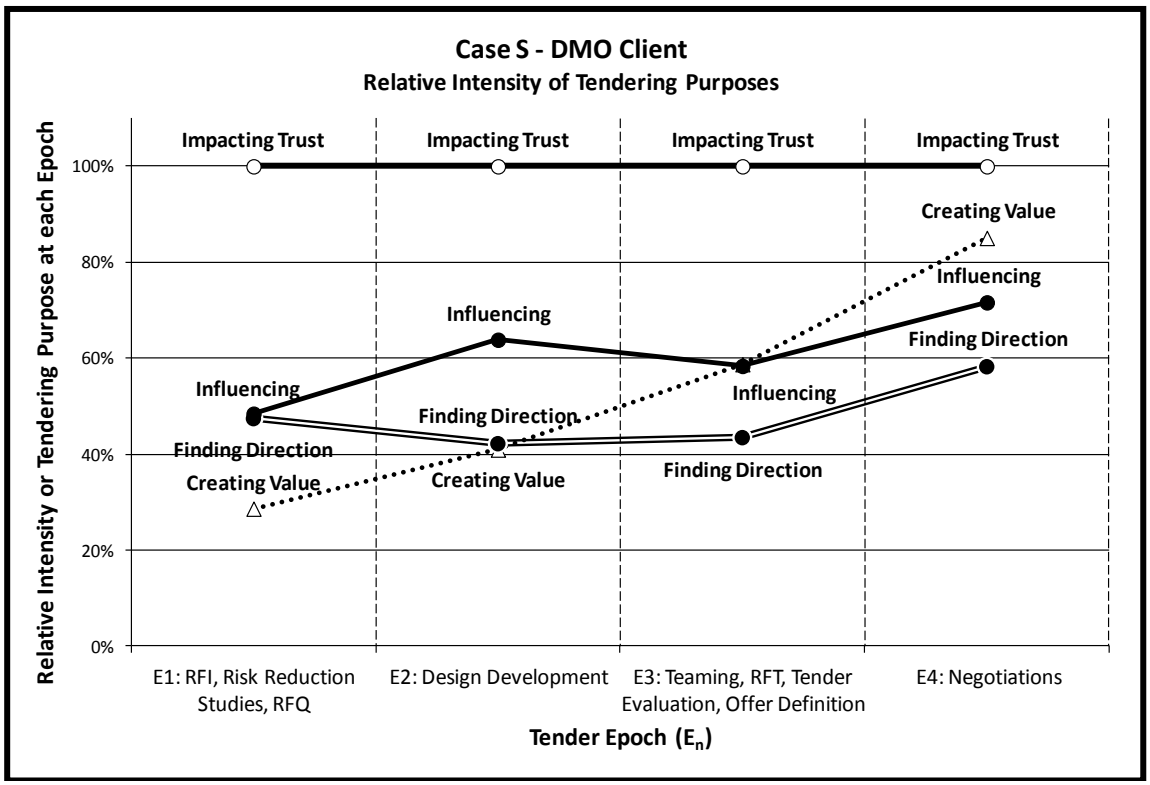

Figure 15.7: Case S DMO Client: High Intensity Tendering Purpose constructs

For each standardised epoch, the Tendering Purpose construct with the highest number of SMI observations, receives a score of *100%*. For example, in Figure 15.7, epoch E1 displays *Impacting Trust* as the Tendering Purpose with the highest number of SMI observations. In epoch E1, the Tendering Purpose construct of *Influencing* produces the second highest aggregate intensity of SMI observations; its score, relative to *Impacting Trust*, is around *48%*. The correct presentation of the data is a bar graph (histogram)

form, but polylines are used for visual clarity (Mark Easterby-Smith et al., 2008, pp. 240-241).

The dominance of *Impacting Trust* in Figure 15.7 (above) complements the opinions of both the Case S DMO client's project manager and political advisors. (For example, see Annexure. A, page 41, start at line 38.)

Also in Figure 15.7, the Case S DMO client team is observing heightened communications in the final epoch E4. During the audit of the research results by the original research participants (Lincoln & Guba, 1985, pp. 221-249), the Case S DMO project manager offers the following opinion on *Influencing*:

> We knew what their [the contractors] major subcontractor teaming arrangements were, and then we actively engaged with other subcontractors.

That is, the DMO client actively influenced the contractor's selection of subcontractors. Indeed, they vetoed some existing subcontract arrangements. Typically, this relates to which subcontractors might operate in and around US supplied components and other issues of national security.

In contrast, Figure 15.8, epoch E4 (below), has a number of high intensity SMIs that translate into TPs of *Influencing*, *Creating Value*, and *Finding Direction*; all occurring *after* tender submission during epoch E3. The actual tender (bid) lodged on a prescribed date and latest time, appears to be an offer subject to counter offers: an invitation to treat.

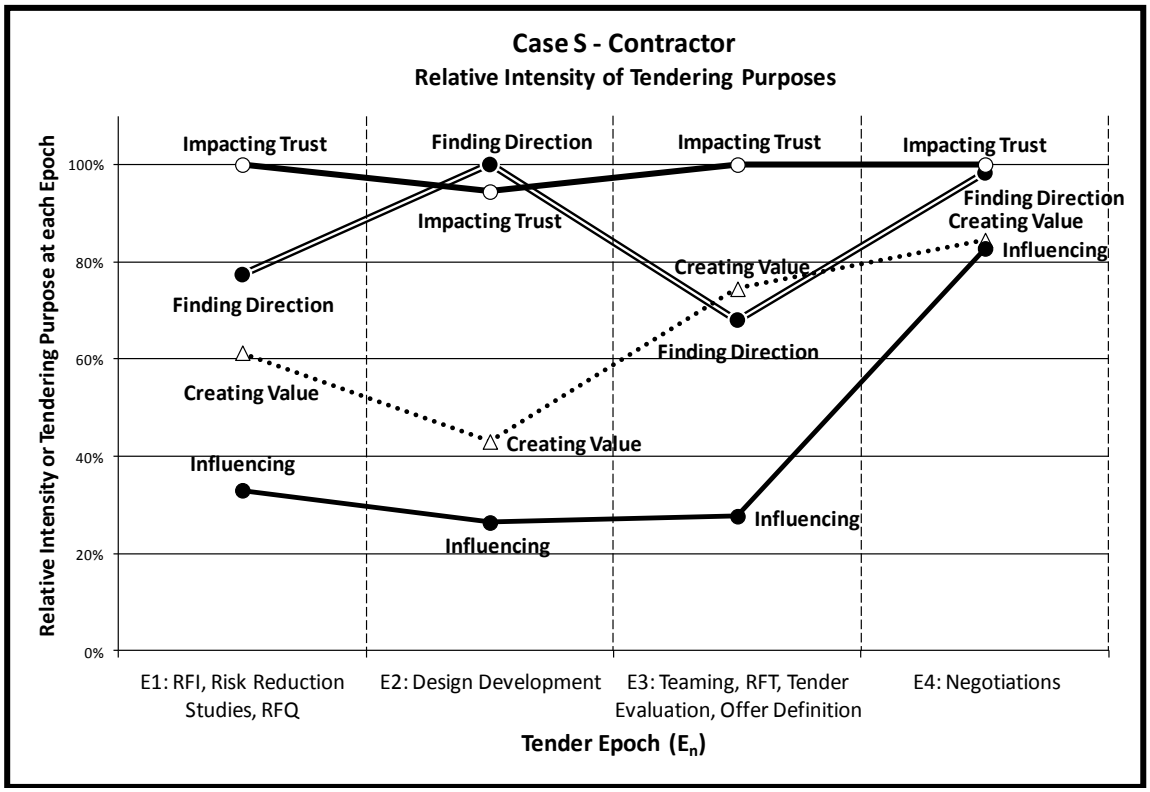

Figure 15.8: Case S Contractor: High Intensity Tendering Purpose constructs

With the contractor's tender (bid) submission occurring in epoch E3, *Finding Direction* during epoch E4 might appear quizzical.

While auditing the research results, the DMO client program manager reflects on this question:

> The reason why the contractor was still finding direction right to the end [epoch E4] is because they were still changing schedule and cost all the way up until the contract signature. They were slipping by nearly a year [their timeframe was too long] just before signature [and] we had many issues to clarify. When you get to that stage, every word, every gesture is analysed. All this behavioural stuff is coming to a crescendo [epoch E4]. This is illustrated in your graph [epoch E4 in Figure 15.7 & Figure 15.8].

In contrast to the conclusive Case S, in Figure 15.7 and Figure 15.8, the problematic Case L displays a different modality, as illustrated in Figure 15.9 (below).

Case L

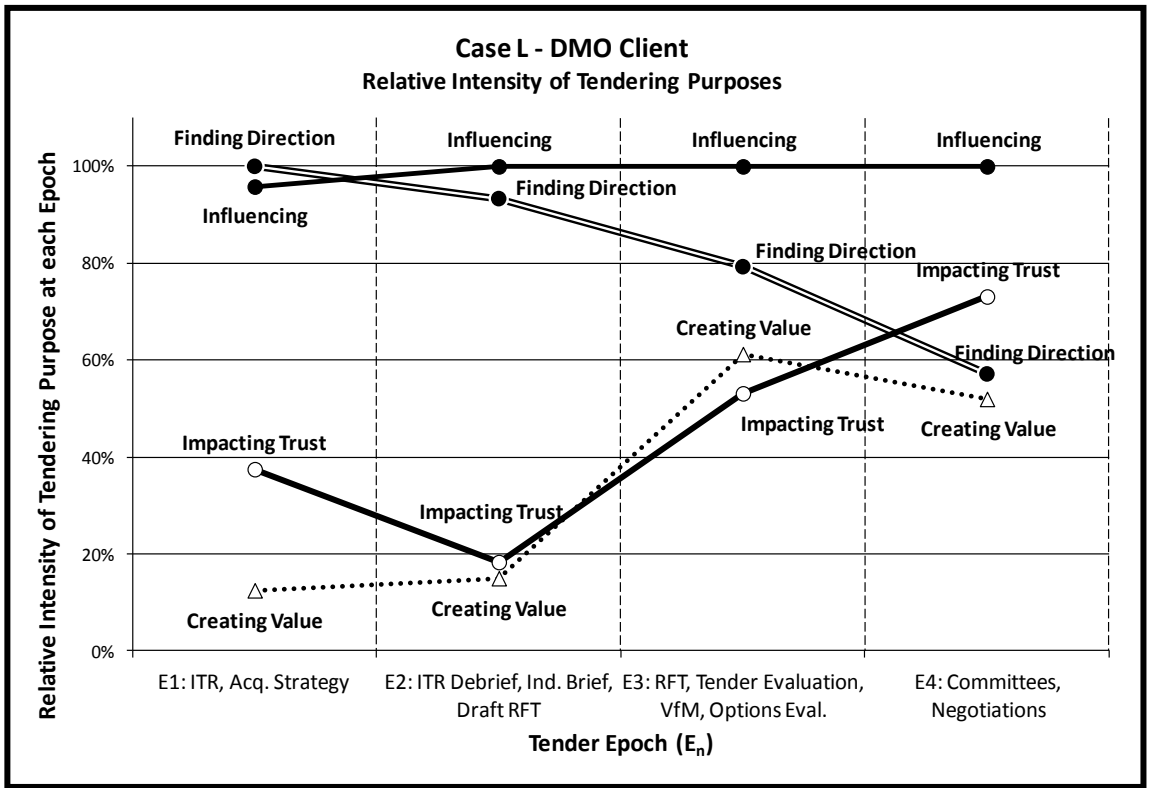

Figure 15.9: Case L DMO Client: High Intensity Tendering Purpose constructs

The idea and prospect of achieving a beneficial trusting relationship appears to be of little significance during epochs E1 and E2 in Figure 15.9. The realisation that mutual trust is, to some degree, an important characteristic of a complex socio-political tender context, comes in epoch E3 and increases in epoch E4, but it is never a dominant Tendering Purpose construct for the Case L DMO client.

Instead, *Influencing* is generally dominant. Importantly though, at the beginning (epoch E1) of Figure 15.9, the Case L DMO project manager *has to be told* the government's prescribed tender design strategy (see Annexure. A, page 32, start at line 7).[297] Dynamic socio-political complexity might well have an internally-generated component, which extends to at least government minister level and perhaps higher (Barber, 2005).

During the audit of the research results with the Case L DMO research participants, *inter alia*, Figure 15.9 receives the following comment from the commercial manager:

[297] Experienced Defence procurement managers might expect that the tender strategy is defined politicly.

> That's reflective of the negotiation model we adopted from the advice that we received in regards that it will be all about influencing. If anything, this is a confirmation of the way the money that we had spent on the negotiations model was obviously having some bite [impact].

The Case L tender project retained an external consultant to advise them on the likely demeanour of forthcoming relationships.

The term 'negotiation model' is a reference to the entire tender project strategy (not just the negotiation phase). The DMO clients and contractors appear to share this terminology (Weingart & Olekalns, 2004, p. 154).[298] In general, when an oligopolistic contractor faces a monopsonistic government client (Ergas & Menezes, 2004), the enduring tendering campaign might be characterised as one of ongoing mutual *meaning shaping* (Tversky & Kahneman, 1981) within an overriding euphemistic relationship of *grace and favour*.

This consultant's advice might have several potential consequences. The first relates to the psychological concept of 'confirmation bias', which Hulme (2009b) discusses in the context of reference frames. For Hulme, personal reference frames help to:

> [O]rganize central ideas so that a controversy can resonate with core [cultural] values and assumptions. They allow the reader to rapidly identify why an issue matters [to them], who might be responsible, and what should be done. This enables framing for the different stakeholder perspectives. (Hulme, 2009b, p. 226)

The DMO client might frame contextual political and economic issues according to DMO's own ideologies, norms, or political preferences, and certain issues might be emphasised over others (Kahneman, 2003). In Case L, the consultant frames a reasoned perspective about *influencing* and in turn, the project manager deploys a cultural perspective that biases interpretations towards *influencing*; an example of leader power (Dervin, 2003c), or as Humphreys & Brown (2008, p. 413) suggest, 'an exercise in power designed to legitimate new sets of understanding'.

Flyvbjerg (2001, p. 120) and Dalrymple et al. (2006) make reference to Foucault's (1991) consideration of the exertion of power and its control on interpreting social reality in a project context. By suggesting that *influencing* will dominant the tender project discourse, the social reality of Case L has been pre-interpreted (Sproule, 2006,

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[298] The construction industry has a parallel project perception; being one focused on, *ab initio*, recovery from loss-making and litigation. The objective is to focus on these two problem areas with a dominant discourse related to extracting profit at every opportunity and to ensure that daily evidence is of such high quality that a potential litigant is seized by the potential challenge ahead.

p. 126), which of itself might lead to another psychological concept of *Inattentional Blindness* (Mack & Rock, 1998, 1999). That is, the internal psychological structure (Midgley, 2000, p. 55), or 'group think' (Janis & Mann, 1977) of the tender project leaves it potentially blind to other possible conversations and discourses.

A potential outcome is that a complex socio-political tendering context translates to a structurally *simple* context and thus amenable to a command and control leadership style (Snowden & Boone, November 2007, p. 70); and bridging any knowledge gaps employs enduring and anthropogenic myths and symbols (Hulme, 2009a).

Integrative and distributive strategies

More generally though, Weingart & Olekalns (2004, p. 144) observe that any negotiation process – the tendering campaign – has *integrative* and *distributive* strategies. Integrative strategies seek to maximise joint gains, while distributive strategies seek to maximise individual gain: a power play.

Both Case S bid managers, reflect on the need for mutual trust, and the Case S DMO bid manager hints at joint gains:

> Because if you don't use the game for the purpose of actual enjoyment and the betterment of both CEOs, you will lose at the end of the day.[299]

Case S Figure 15.7 and Figure 15.8, with their dominant purpose of *Impacting Trust*, and Case L Figure 15.9 dominated by *Influencing* reflect clearly, a contrast between the integrative (Case S) and the distributive (Case L) cultural knowledge structures and strategy. This is not a black and white distinction as both cases demonstrate both purposes. However, it is a matter of bias and management intent.

Gelfand & Brett (2004, p. 422) caution that cultural knowledge structures and scripts (such as Influencing) are not always activated (the actual domain) and do not always shape communication behaviours in negotiation (the empirical domain). The following reasoning is proffered:

Given that Case L is managed by a senior military Officer who must always perform as a soldier first and a procurement officer second, the bias towards power distribution might be considered axiomatic. The reason being that as a procurement officer, the project manager is working within the DMO with its own CEO. But as a soldier, the project manager must respond to the military chain-of-command, its orders and codified

[299] The tender project was successful and both bid managers lost their jobs.

legal system. For a soldier, this dual loyalty is generally untenable. (see Annexure. A, page 58, start at line 28; page 62, start at line 1)

Consolidation

- Both Case S and Case L reflect above average complexity.
- Both cases have significant technical complexity but that might not be the most critical driver of project complexity
- Politicians define the tender strategy.
- The constituent Sense-Making Items (SMIs) of a Tendering Purpose (TP) might be context dependent.
- The highest intensities of SMIs occur *after* tender submission.
- For the conclusive Case S, the dominant TP is *Impacting Trust*; whereas *Influencing* is the dominant TP for the problematic Case L.

The next section

A fundamental theme emerging from this study is that regardless of the political machinations and the games-at-play, a capable DMO project leader with tendering campaign experience, is able to cut through provided the effort is coordinated with the contractor's bid manager and the coalition of stakeholders. For the dyadic bid managers, balancing or outweighing the impact of emergence is vital, and the dimensions of this task might vary according to their different perceptions of risks.

Theme 2: Control, Emergence and Leadership

This discussion *redefines*[300] the observed communication behaviours and atmospherics (SMIs) – the games-at-play – by their *control* or *emergence* texture. The results, such as Figure 15.10, illustrate how controlling communication behaviours offset emergent communication behaviours, but this balance might be fine or coarse, depending on the risk profile perceived by an organisation.

Additionally, the observations of communication behaviours and atmospherics, and the orchestration of controlling communication behaviours, are largely leader directed.

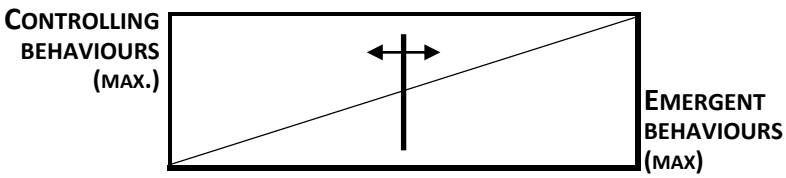
[300] different perspectives on the same data

When the temporal intensity of observed emergent communication behaviours exceeds the intensity of controlling communication behaviours, the successful (conclusive) tender project appears to redress this perceived imbalance with progressive and measured *controlling* communication behaviours (see Figure 15.10, Zone B). In contrast, the problematic tender project appears to over-react with discontinuous bursts of controlling communication behaviours, such that the staccato manner of directing (see Table 15.5, Epoch E4), of itself, reflects the unpredictability of emergent behaviours (see Figure 15.11, Zone E).

Control and emergence

Bar-Yam (1997) suggests a continuum of leadership capabilities (innate or expressed) with respect to a complex socio-political context. The terminal points of his continuum are 'complex *coordinated* behaviours' and '*emergent* collective behaviours'. He suggests that, complex coordinated behaviours might be found in a logistics problem of coordinating many suppliers to meet unpredictable demands, while emergent collective behaviours might describe the herd mentality of a stock market reacting to current events. While his contexts are different to this research, Bar-Yam has introduced the idea of a continuum of human communication behaviours from coordinated through to emergent, the latter being unpredictable and unsustainable generally.

Green & Li (2011) moderate this idea of a continuum of communication behaviours. Their proposition is analogous to two triangles, each with a long and short side, with one triangle sitting atop the other to form a long thin rectangle: the continuum.



The short vertical sides of each triangle illustrate maximum 'controlling behaviours' and 'emergent behaviours' respectively. The sharp point of each triangle is a notionally zero. A progression from the left to the right of the rectangle sees a changing ratio of control and emergence.

Using Snowden & Boone's (November 2007) typology, controlled communication behaviours align with (ordered) *Simple* and *Complicated* communication behaviours, and emergent communication behaviours align with (unordered) *Complex* and *Chaotic*

behaviours. Bentley (2000) found that the construction industry also displays control-emergence communication behaviours. Snowden and Boone are clear that their four organisational behaviour types are archetypes, and that certain leader initiatives can *transition* the organisation from disorder to order.

Of importance for this study, Bentley foregrounds a reality in which order and disorder coexist.[301]

Disorder is a natural disintegrating state (entropy) of human organisation, and the leader's function is to balance prevailing disorder with *negative entropy*; being an injection of human controlled effort (Aaltonen, 2007a; Abrahamson, 2002; Robinson, 2008). The following graphs illustrate how this plays out in the two case studies.

Case-based control and emergence

Figure 15.10 (below) illustrates the Case S DMO team's recalled observations of emergent and controlling communication behaviours as transposed (redefined) from the Sense-Making Items (SMI) data.

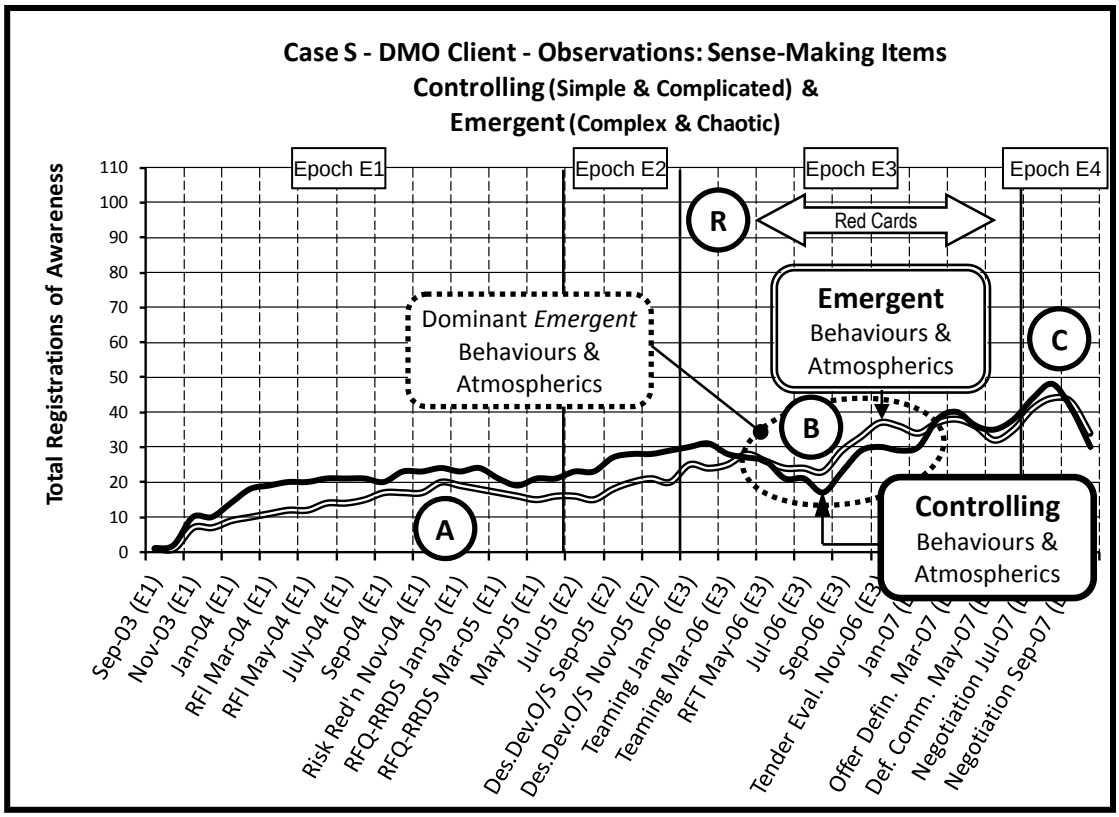


Figure 15.10: Case S DMO Client: Emergent and Controlling communication behaviours

[301] Even a 'perfect' bureaucracy will naturally disintegrate without inputs of energy to maintain the structure.

Annexure H describes the expert system used for this translation.[302]

For the Case S DMO client, Figure 15.10 Zone B, illustrates a period where emergent communication behaviours dominate (just) over controlling communication behaviours.

Figure 15.10 Zone B defines generally, the probity period during tender preparation and submission: a period when the DMO client broadcasts responses related to matters of technical clarification. Otherwise, in theory, there is no communication between a contractor and the DMO.

Figure 15.11 (below) illustrates the Case L DMO client's recalled observations of emergent and controlling communication behaviours. In this problematic tender project, Zone D highlights a minor dominance of emergent communication behaviours and a significant leader-orchestrated reaction in Zone E.

Figure 15.11, Zone B is a period when the DMO client is absorbed with tender evaluation that might comprise one or more cubic metres of paper. Contextual awareness is likely to receive a lower priority.

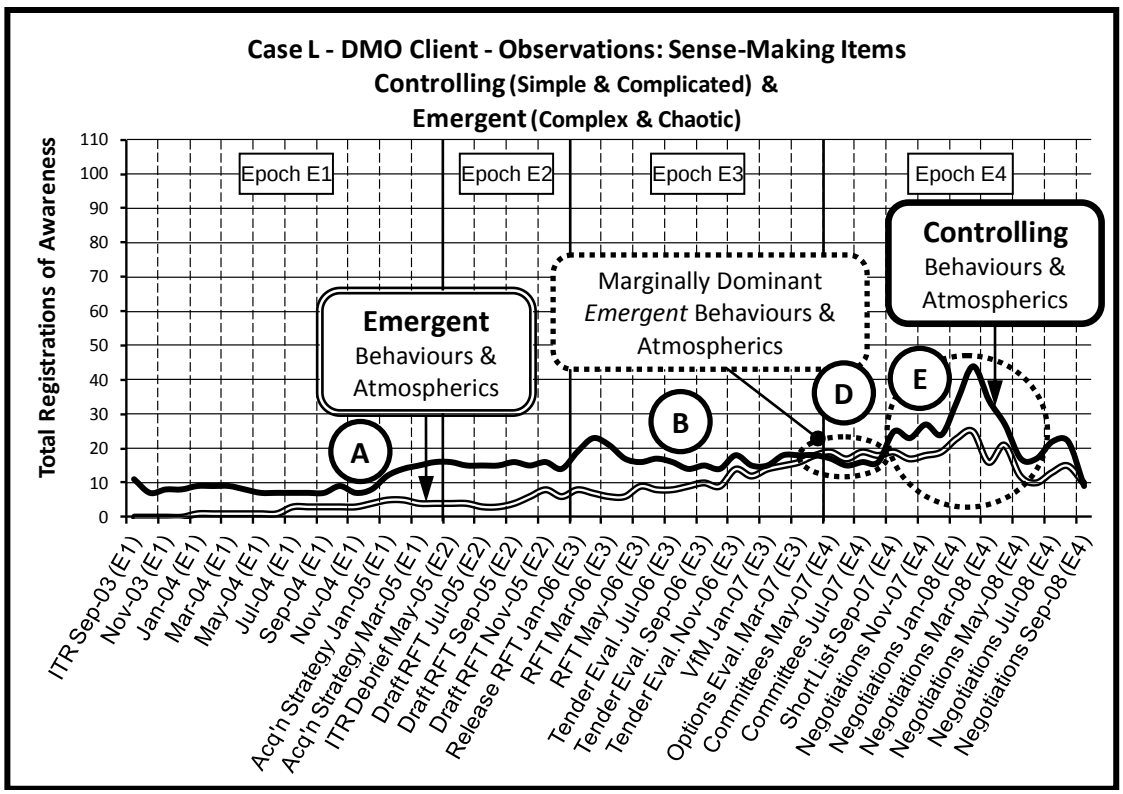


Figure 15.11: Case L DMO Client: Emergent and Controlling communication behaviours

[302] For this study, the transformation rules were audited by Snowden (2007).

Figure 15.12 (below) illustrates the situation for the Case S contractor. Zone B (probity period) displays the dominance of controlling communication behaviours over the emergent communication behaviours; an essential feature of risk management.

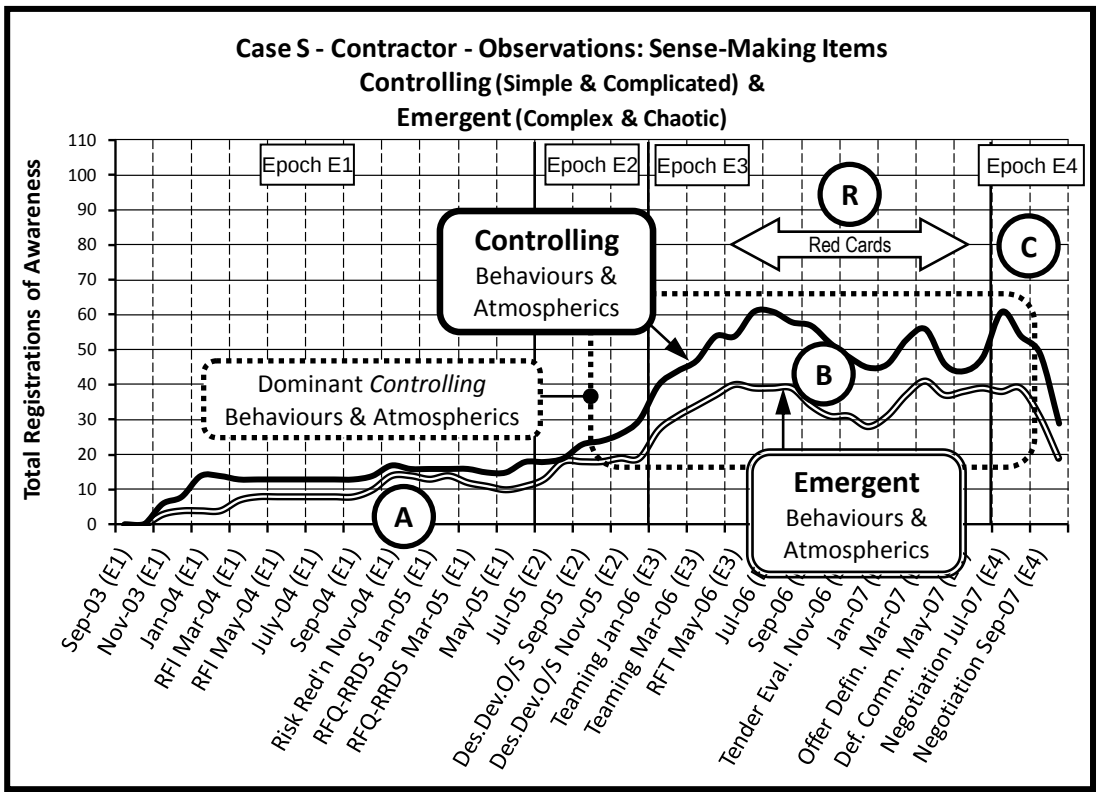


Figure 15.12: Case S Contractor: Emergent and Controlling communication behaviours

Summary points of emergence, control and leadership

- Emergent communication behaviours and controlling communication behaviours co-exist. The temporal quantum differences and rank reversals are important markers in the life of a tendering project.
- In the conclusive tender project, a DMO *client* orchestrates *controlling* communication behaviours sufficient to balance the observed energy devoted to *emergent* communication behaviours.
- In the conclusive tender project, a *contractor* also orchestrates *controlling* communication behaviours that are required to balance the observed energy devoted to *emergent* communication behaviours. However, additional *controlling* communication behaviours are required to evince necessary legitimacy from the coalition of organisations comprising the tender project.

- In the problematic tender project, a short minor dominance of emergent communication behaviours over controlling communication – in an otherwise 'controlling' regime – triggers marked controlling communication behaviours by the DMO client.
- For both cases, the DMO client experiences about a four-month delay between the appearance of dominant emergent communication behaviours and the deployment of counter-balancing controlling communication behaviours. In some instances, this might reflect the constraints on communications imposed by the probity requirements. Risk management process and institutional policy appear conflicted and this explication is a contribution by this research to policy review.
- During the Case S conclusive tender project, there are periods when the DMO client team leader and the contractor's team leader caucus in order to synchronise their controlling communication initiatives ('red cards'). That is, the respective leaders are demonstrating their capability to manage jointly a socio-political complex context.

The next section

Based on the two cases and the three data sets, the data analyses thus far, do little more than describe potentially, 'what' is happening, 'when' and by 'whom', in terms of observed emergent communication behaviours and controlling communication behaviours (see Figure 15.10, Figure 15.11 and Figure 15.12).

At issue is the complexity capability of the respective tender project team leader. The team leader appears to be able to manipulate the general sensitivity and awareness of communication behaviours and can orchestrate the deployment of controlling communication behaviours.

However, what is the innate and/or conferred capability that acculturates a leader and project team towards a successful disposition or otherwise? This is not an exercise of inferring a causal mechanism from within the intransitive dimension; rather, this will be a data-mining investigation into the SMI data in their Tendering Purpose constructs.

The works of Bar-Yam (1997) and Midgley (2000), combine with the philosophy of Wittgenstein (1978) to make operational Bentley's (2000) view that emergent and controlling communication behaviours *coexist*. The focus now shifts to the disposition of this coexisting data. At hand are the works of Deacon, Bryman, & Fenton (1998)

together with Szulanski (2003), who introduce the idea of 'discontinuity of persistence' of Wittgenstein's 'holistic coexisting purposes' (Monk, 2005).

At its simplest, if all the temporal TP constructs were random, then nothing in the data enables correlation with other variables, and the context is highly complex with emergent (unexpected) behaviours. If all the temporal TP constructs were constant, then they can be ranked relative to intensity. If on the other hand, the temporal TP constructs present as polylines of intensity, then they can be analysed for potentially useful correlations. In turn, the 'discontinuity of persistence' of the data can be assessed using Bayesian Belief Learning Networks as a measurement model to compute the temporal persistence in the data using correlation's 'cross-validation'.

Persistence in the recalled perceptions of SMIs that constitute a TP is suggestive of a leader-inspired culture of awareness. Alternatively, recalled random perception or 'no' perceptions are likely to be reflective of the prevailing culture of awareness. Either way leadership is at play.

This is the subject of the next section, which illustrates the practical value of descriptive statistics of central tendency[303].

Theme 3: Stability and instability: the leader complexity capability profile

Bar-Yam (1997) makes the point that to be in control, the complexity of the socio-political context cannot be greater than the complexity capability of the controlling person or team. A simple socio-technical example is a traffic controller at the intersection of two roads, being a problem within the capability of a single trained person. Complexity increases as the number of intersecting roads increases. With five intersecting roads, inherent limitations in the traffic controller's complexity capability might result in each road, in sequence, given access to the intersection. The presence of additional (coordinated) traffic controllers might improve the efficiency of the intersection. The demands on each controller are now lower than that experienced by the solo controller.

The road intersection example draws on socio-technical complexity.

In a socio-political context, such lowering of contextual complexity draws on the evocation of connectivity, awareness, and enduring and anthropogenic myths and symbols to overcome gaps in knowledge (Hulme, 2009a, 2009b).

[303] in contrast to probabilistic statistics

Importantly, a leader's socio-political complexity capability reflects the team's connectivity and awareness.

The analytical focus now turns to the co-existing (Bentley, 2000) Tendering Purpose constructs as a hierarchical network of co-existing TPs and their inter-correlations. The Methods chapter explains the application of Bayesian Belief Learning Networks (BBLN) as an instrumental model capable of measuring the discontinuity of persistence of the coexisting TPs. The objective is to locate holistically, communication behaviour persistence within the terminals of control and emergence and provide a proxy measure of 'leader complexity capability'.

Case S: DMO Client leader complexity capability

The temporal epoch data in Figure 15.13 are analysed in Figure 15.14 by Bayesian Belief Learning software that 'learns' the TP data's most efficacious hierarchical structure and then applies iterations of 'cross-validation' that generate the 'mean' and 'Standard Deviation' of the accuracy (robustness) of the correlation coefficients.

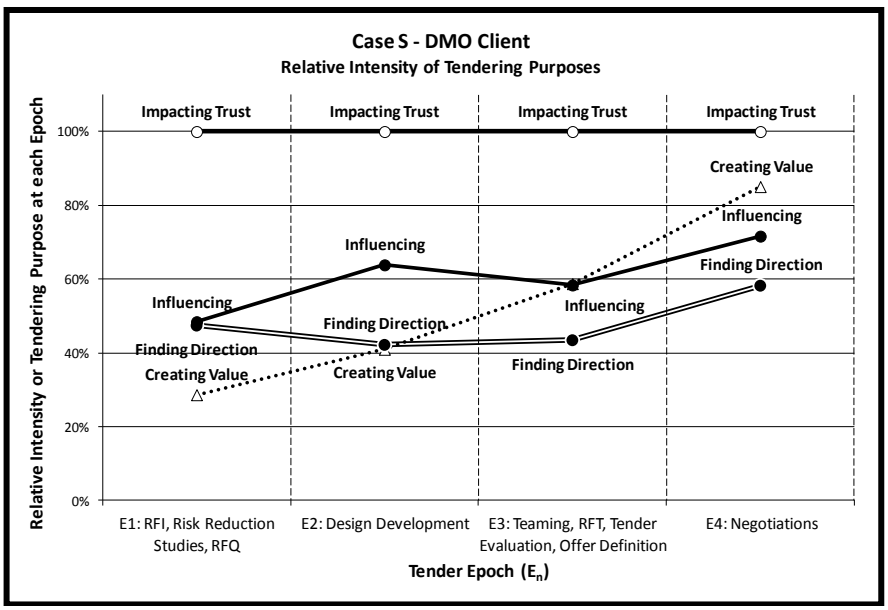


Figure 15.13 (copy of Figure 15.7): Case S – DMO Client – normalised relative awareness of SMIs that comprise Tendering Purpose constructs

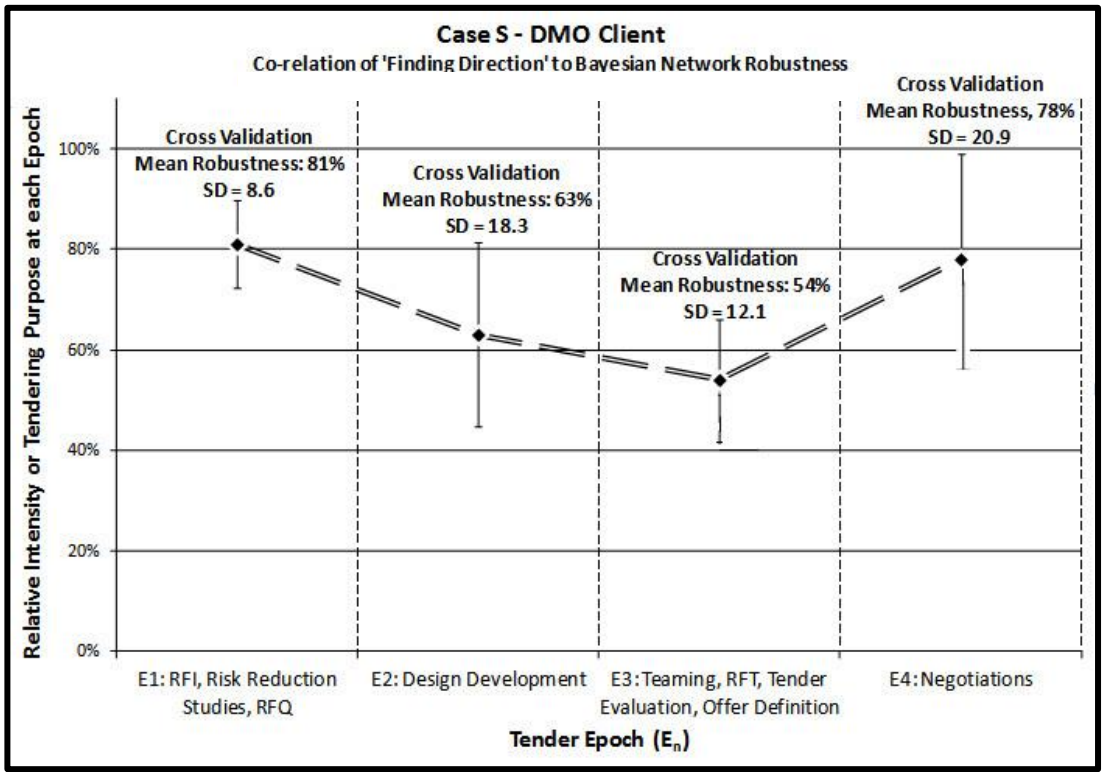


Figure 15.14: Trend in the cross-validation global mean robustness across standardised epochs

Figure 15.13(above) is a copy of the previously presented Figure 15.7. It displays the four dominating TPs for Case S DMO client: Impacting Trust; Creating Value; Influencing; Finding Direction.

As a hierarchical network, the simulated structure with the highest accuracy produces the results in Figure 15.14. The ± 1SD bands are marked. The data in epoch E1, with a mean of 81% and a SD of ±8.6 are the most robust and reliable; followed by epoch E3.

During epoch E1, the DMO client is *controlling* the situation generally: a ‘directed process mechanism’, noting that this changes to a ‘coordinating process mechanism’ in epochs E3 and E4 (see base of Figure 15.15 below).

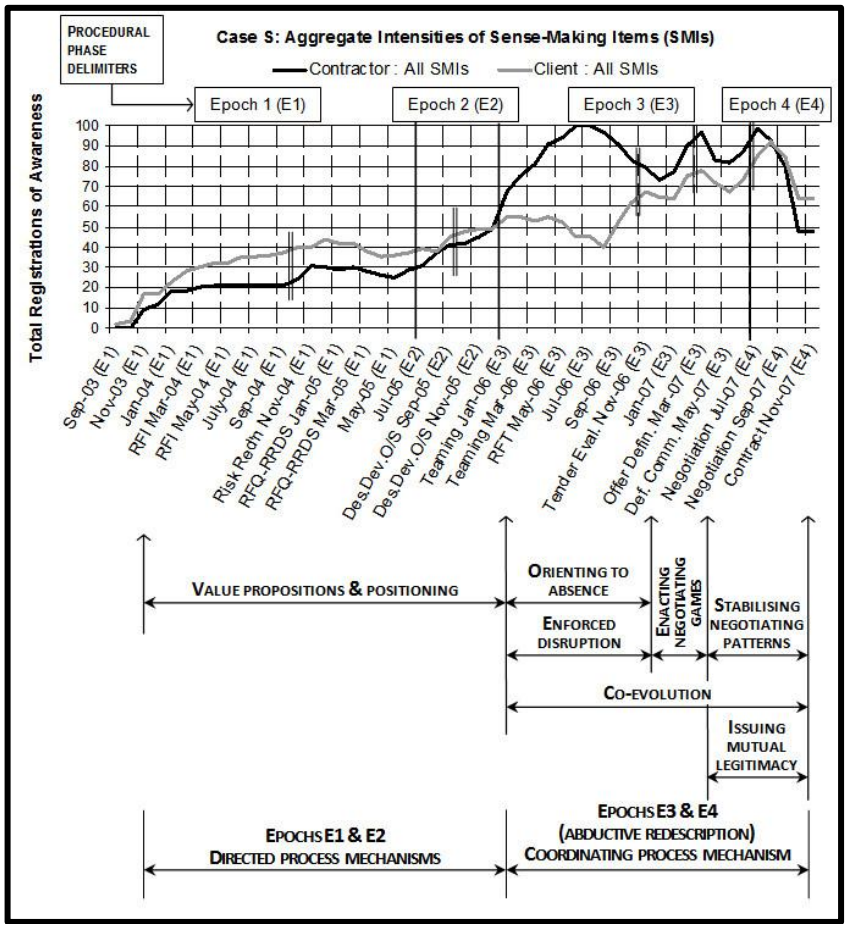


Figure 15.15: Phase identifiers and mechanisms copied from the previous chapter

Capability complexity

How then to interpret the results in Figure 15.14?

Consider Table 15.3, epoch E1(top row below). Within the bounds of *±1SD*, there are periods within epoch E1 when the cross-validation global robustness (quality) is as high as approximately *90%* (very low discontinuity of persistence). At other times in epoch E1, the global robustness reduces to approximately *70%*. The cross-validation *mean* global robustness is *81%* (a moderately low discontinuity of persistence).

The leader is eliciting strategic value propositions (design and assembly) from the contractor (s).

Case S DMO client Epoch	Cross-validation mean global robustness	Standard Deviation	HIGH CROSS-VALIDATION MEAN GLOBAL ROBUSTNESS. INFERRED HIGH LEADER COMPLEXITY CAPABILITY. ← → LOW CROSS-VALIDATION MEAN GLOBAL ROBUSTNESS. INFERRED LOW LEADER COMPLEXITY CAPABILITY.
E1: RFI, RFQ	81%	8.6	E1
E2: Design dev't	63%	18.3	E2
E3: RFT, Eval'n	54%	12.1	E3
E4: Negotiations	78%	20.9	E4
		Mean ±1SD	100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5

DIRECTED PROCESS MECHANISMS	**Epoch E1:** Value propositions **Epoch E2:** Value positioning
COORDINATING PROCESS MECHANISMS	**Epoch E3:** Enforced disruption, Orienting to absence, Enacting negotiating games, Co-evolution
COORDINATING PROCESS MECHANISMS	**Epoch E4:** Stabilising negotiating patterns, Issuing mutual legitimacy, Co-evolution

Table 15.3: Case S DMO client. Cross-validation robustness profile (Mean±1SD). Leader's inferred contextual complexity capability

Table 15.3, epoch E2 indicates that life might be getting more difficult for the DMO client leader. Both client and contractor are positioning (modelling) an array of positions in terms of their political viability. What is 'politicly viable' depends on the manipulations of the dominant political discourse. Much of this behaviour is emergent, and epoch 2 in Table 15.3 illustrates the increasing challenge faced by the leader.

During epoch E3, The DMO client enacts an 'enforced disruption' to communications with the contractor and then witnesses the contractor 'orienting to (this) absence'. Concurrently, both parties are 'enacting negotiating games', while being critically aware that they both have to evolve mutually in order to present a viable and coordinated (legitimate) entity to the decision-making politicians. Emergence and control are 'facing off' and, the DMO client, with the help of the contractor, recognises the forthcoming recovery task.

Although of relatively short duration, the recover task comprises epoch E4 in Table 15.3. The concurrent challenges require a stabilisation of negotiating patterns, the mutual issuing of holistic legitimacy, and the co-evolution of both parties into a unified project team of client and contractor that is acceptable politicly.

The standard deviation of epoch E4 is indicative of high variability in the data. The Helmsman Institute (2009) report suggests that: 'The most difficult projects that the

DMO undertakes are so complex that project management methods used on other traditional projects cannot apply'.

The process mechanisms at the base of Table 15.3 indicate a range of 'methods' to deal with the evolving project complexity; a complexity that increases as the decision date approaches.

Case S: Contractor leader complexity capability

Table 15.4 illustrates the contractor having a potentially more challenging task than does the client. Epoch E4 suggests that balancing emergence with control is difficult and this might be explained by the additional task of forming a politicly stable and unified team with the overseas subcontractor with whom the DMO client is in conversation: the *ménage à trios*.

Case S Contractor Epoch	Cross-validation mean global robustness	Standard Deviation	HIGH CROSS-VALIDATION MEAN GLOBAL ROBUSTNESS. INFERRED HIGH LEADER COMPLEXITY CAPABILITY. ← → LOW CROSS-VALIDATION MEAN GLOBAL ROBUSTNESS. INFERRED LOW LEADER COMPLEXITY CAPABILITY.
E1: RFI, RFQ	84%	8.1	E1
E2: Design dev't	66%	17.9	E2
E3: RFT, Eval'n	46%	11.7	E3
E4: Negotiations	60%	24.5	E4
		Mean ±1SD	100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5

DIRECTED PROCESS MECHANISMS	**Epoch E1:** Value propositions **Epoch E2:** Value positioning
COORDINATING PROCESS MECHANISMS	**Epoch E3:** Enforced disruption, Orienting to absence, Enacting negotiating games, Co-evolution
COORDINATING PROCESS MECHANISMS	**Epoch E4:** Stabilising negotiating patterns, Issuing mutual legitimacy, Co-evolution

Table 15.4: Case S Contractor. Cross-validation robustness profile (Mean±1SD). Leader's inferred contextual complexity capability

However overall, the similarities between Table 15.3 and Table 15.4 are striking and together they present the conformation of a successful (conclusive) tender in the midst of serious socio-political complexity; and in contrast with the problematic Case L that follows.

Case L: DMO Client leader complexity capability

Table 15.5 illustrates the situation for the Case L DMO bid manager. During epoch E1, the tender project is highly controlled with very low discontinuity of persistence.

Epoch E2 displays the same high level of control accompanied by a low level of discontinuity of persistence.

Case L DMO client Epoch	Bayesian network's Mean global robustness	Standard Deviation	HIGH CROSS-VALIDATION MEAN GLOBAL ROBUSTNESS. INFERRED HIGH LEADER COMPLEXITY CAPABILITY.																					LOW CROSS-VALIDATION MEAN GLOBAL ROBUSTNESS. INFERRED LOW LEADER COMPLEXITY CAPABILITY.
E1: ITR	84%	9								**E1**														
E2: Industry brief	80%	14										**E2**												
E3: RFT, Eval'n	62%	12													**E3**									
E4: Negotiations	47%	12																**E4**						
		Mean ±1SD	100	95	90	85	80	75	70	65	60	55	50	45	40	35	30	25	20	15	10	5		

Table 15.5: Case L DMO client. Cross-validation robustness profile (Mean±1SD). Leader's inferred contextual complexity capability. E1 through E4 host the same process mechanisms as in Table 15.4 (above).

During the tender preparation and probity period of epoch E3, the situation deteriorates, but is better than the Case S DMO client and contractor for their epoch 3.

However, in contrast to Case S, the Case L epoch E4 deteriorates to a lower level of control or containment. The inability to effectively stabilise negotiating patterns, issue mutual legitimacy and co-evolve, represents not so much a failure of an individual, but rather, an organisational and institutional systemic failure.

Figure 15.16 replicates the situation at Zone E during epoch E4.

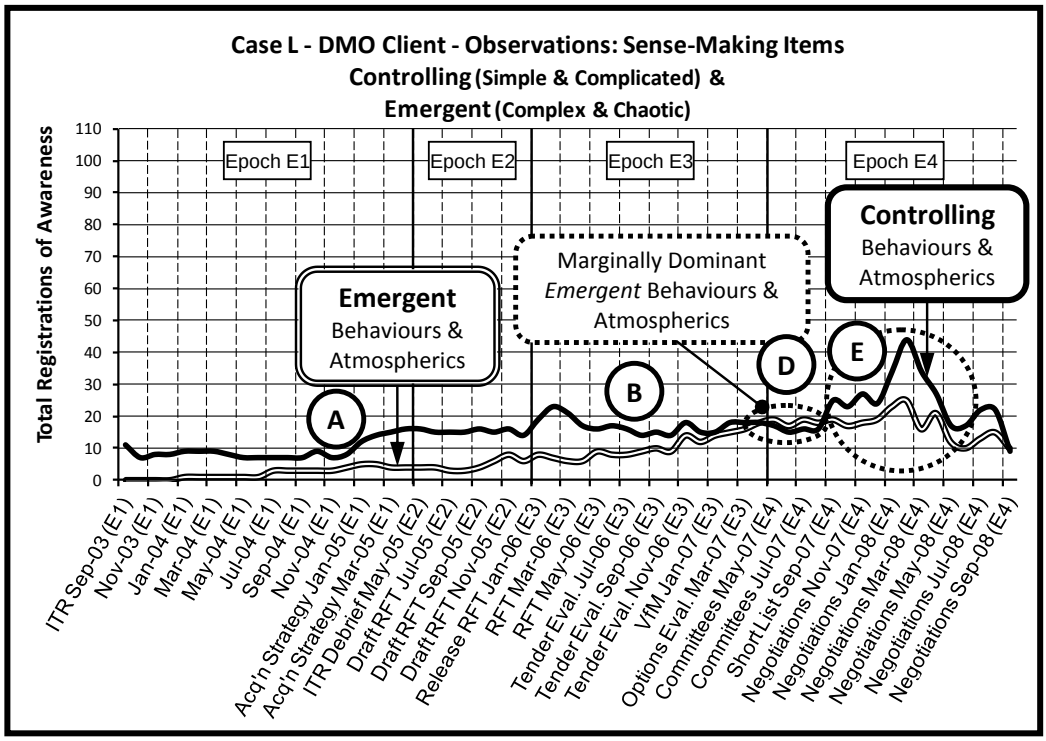


Figure 15.16: Case L DMO Client: Emergent and Controlling communication behaviours

While there is a burst of conceptual controlling communication behaviours and atmospherics during epoch E4 at 'E' (Figure 15.16), Table 15.5 indicates that much of it is discontinuous, ambiguous and therefore similar in effect to emergent behaviour. The belated attempts to 'take control' appear to be counterproductive.

Other than the Defence minister's termination of the tender project during epoch E4 and informant comments, nothing else is factual. All analysis infers from the descriptive statistics on the conceptual SMI data in temporal TP congregations. With this caveat, the leader complexity capability during Case L is significantly lower than that of both the Case S dyadic leaders.

Abrahamson (2002, p. 142) suggests that, 'A failure in an attempt to create order, creates disorder'. This study suggests that an 'attempt to create order' might fail if the attempt is fragmented and variable, which of itself creates more uncertainty.

Based on Table 15.3, Table 15.4, and Table 15.5, a leader complexity- capability problem does not materialise in the data until epoch E4. However, the necessary groundwork occurs generally in the preceding epochs. What on the surface appears to be tight control (Table 15.5, Epoch E4), with high performance project management audit report, materialises into failure.

Rather than waiting until mid epoch E4 before problem identification, the next section addresses the possibility of trend data.

Theme 4: Trends in cross-validation global mean robustness

Case S DMO client

In Figure 15.17 below, the broken double polyline illustrates the central-tendency statistical results of the cross-validation global mean robustness of the Tendering Purpose constructs. Figure 15.17 is a synoptic chart containing two different data types.

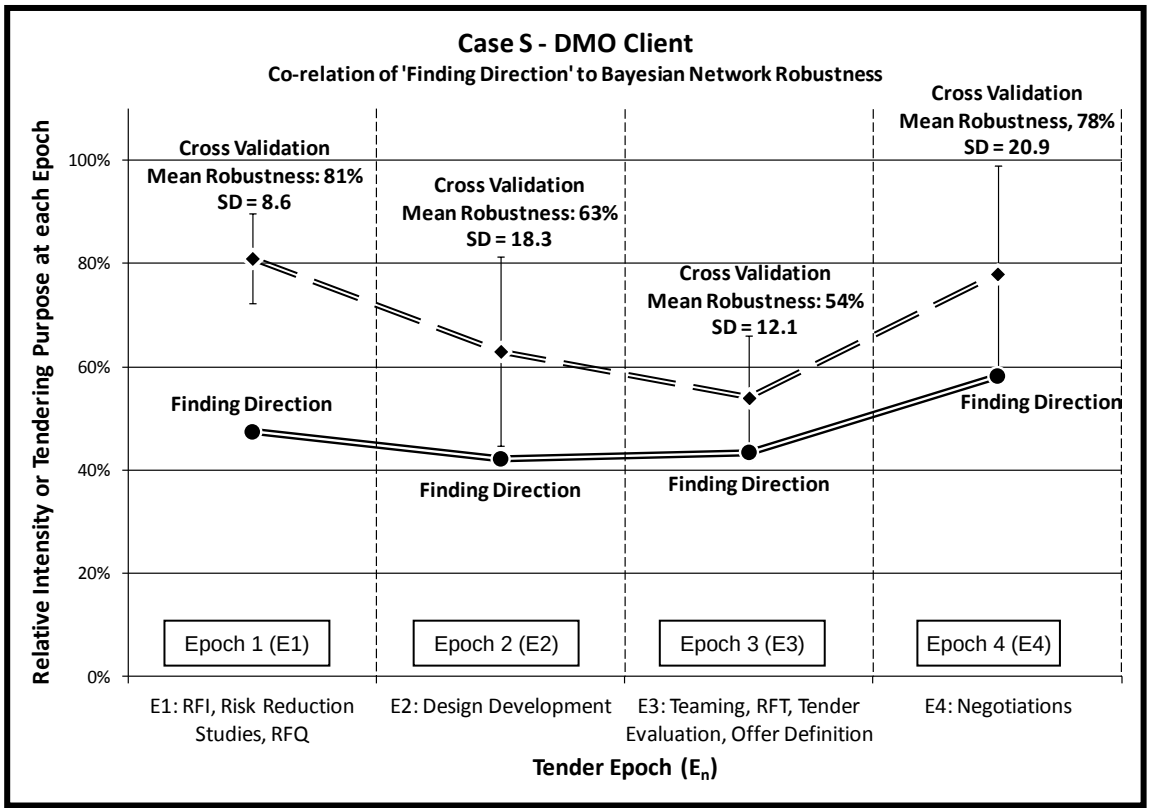


Figure 15.17 (synoptic): Case S DMO Client. Trends in the actual cross-validation global mean robustness juxtaposed with standardised trends of the Tendering Purpose construct *Finding Direction*

As in Table 15.3, Table 15.4, and Table 15.5 above, Figure 15.17 displays Mean and Standard Deviation statistics. There is no relationship between the cross validation data and the temporal plot of the TP *Finding Direction*. There is merely a visual co-relation and not an indication of convergent validity.

Case S contractor

The Case S contractor displays in Figure 15.18. Again, the Tendering Purpose construct *Finding Direction* shares some geometric similarity with the global mean robustness trend, particularly in the later epochs.

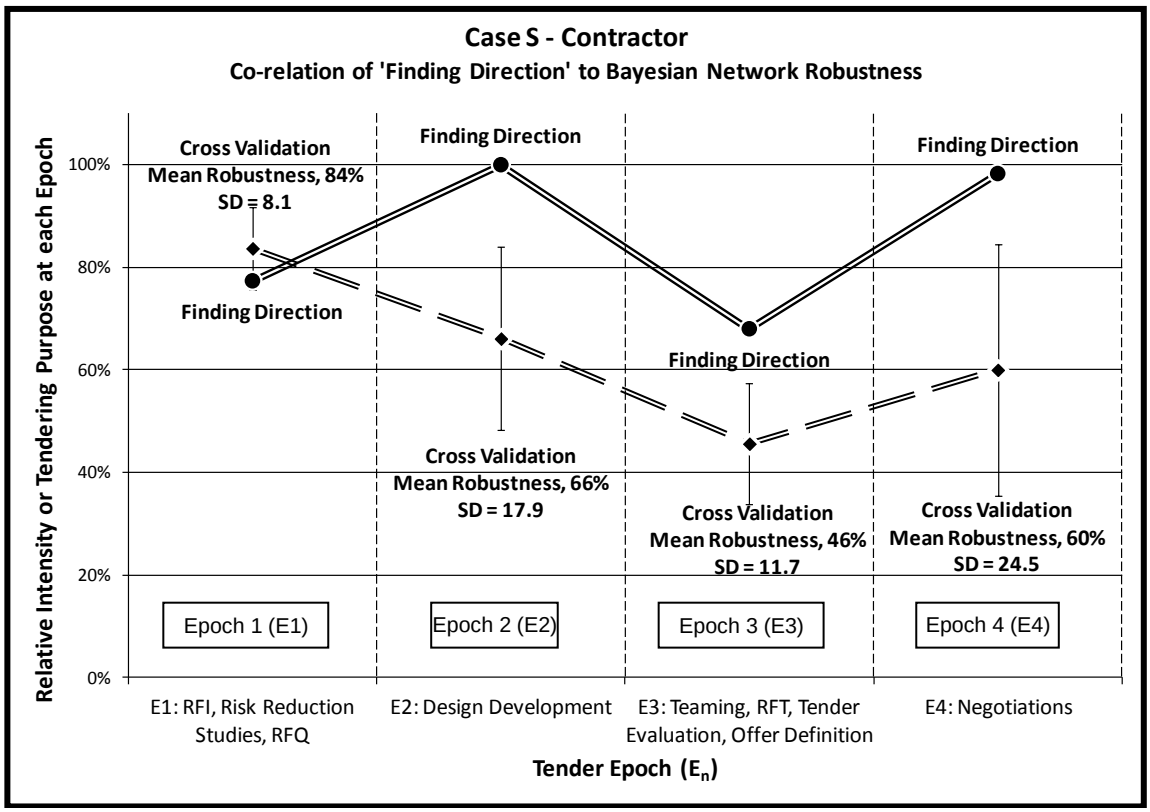


Figure 15.18 (synoptic): Case S Contractor Trends in the actual cross-validation global mean robustness juxtaposed with standardised trends of the Tendering Purpose construct *Finding Direction*

Case L DMO client

Figure 15.19 (below) illustrates the Case L DMO client. It features a co-related declining trend. The SMI constituents of the TP *Finding Direction* display in Table 15.6.

'FINDING DIRECTION'
SMI
24. Auntie Mame: Obtaining high-value insights from a non-contracting party.
30. Machiavelli's Ministrations: A powerful stakeholder changes the game.
35. Call in the Big Guns: A party seeks Ministerial dialogue.
41. Pennies from Heaven: Unsolicited quality information is received from or about the other side or competitor.
47. I Had a Dream: Receiving impeccable non-attributable political direction.
59. Seeds of Doubt: A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.
60. A Moment of Truth: Impeccable official information of strategic importance.
64. Sweet Seduction: Probing for potential intelligence sources.

Table 15.6: The SMI constituents of the Tendering Purpose *Finding Direction*.

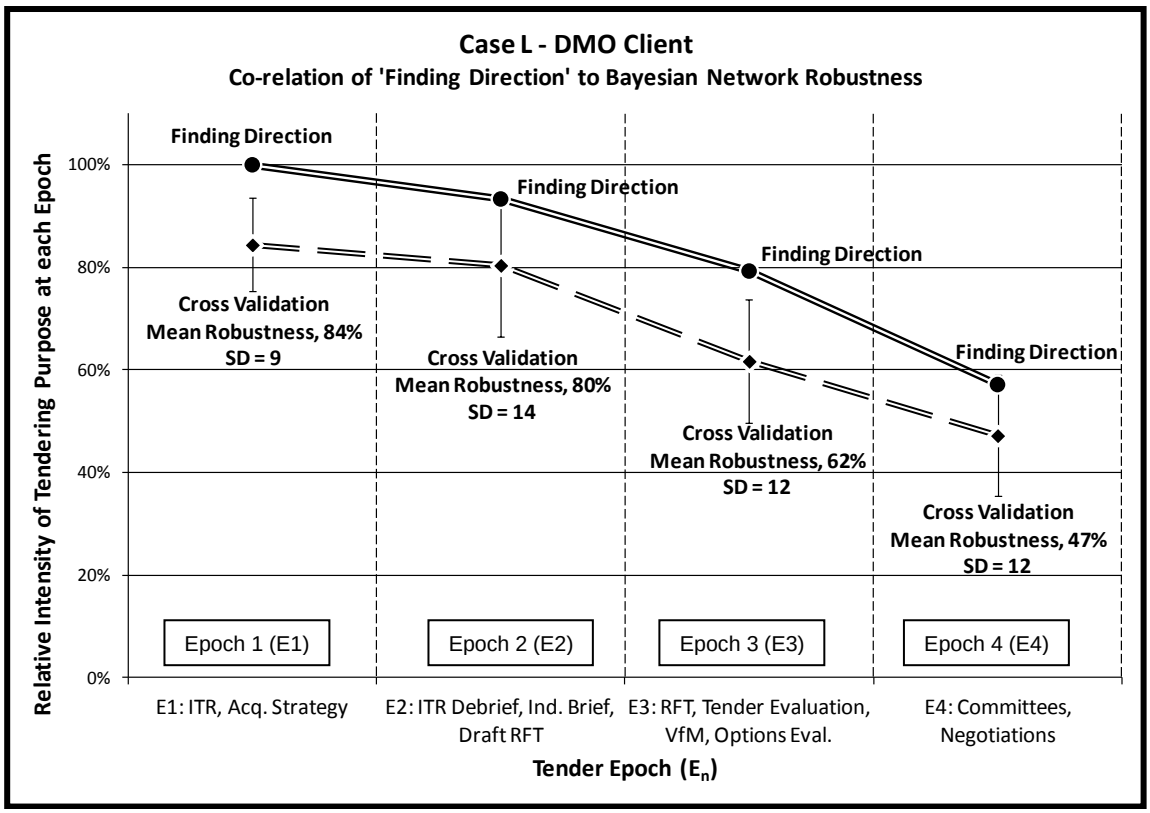


Figure 15.19 (synoptic): Case L DMO Client. Trends in the actual cross-validation global mean robustness juxtaposed with standardised trends of the Tendering Purpose construct *Finding Direction*

The Tendering Purpose construct of 'Finding Direction'

For Case S, the dominant Tendering Purpose construct is *Impacting Trust*. For the problematic tender project Case L, the dominating Tender Purpose construct is *Influencing*. However, neither of these TP constructs exhibits the same co-relation with the global mean robustness, as does *Finding Direction* with its validation based on three data sets.

An examination of Table 15.6 (above) indicates that the communication behaviours (SMIs) that constitute the TP *Finding Direction*, reflect a bias to engagements beyond the confines of the project office or department; the network of external couplings that might provide a leader with awareness-enhancing information resources, resulting in complexity-capability, and hence legitimacy.

Indeed, this reflects a meta-inference for of tender process as one of generating value through connectivity and awareness.

The graphs of the *Finding Direction* TP construct cannot supply quantitative inferences about the temporal cross-validation statistics, and further research is required to disconfirm any useful relationship between the two metrics. Therefore, the question remains open as to whether *Finding Direction* has, in a middle-range theory sense, general interpretive value for monitoring the progressive efficacy of a politicly-sensitive high cost Defence equipment tender project.

Summary

Given that all major Defence equipment projects are, in varying degrees, technically, socially, and politicly complex, the overriding theme of this chapter is to explore possible ways of comparing two identified cases in order to detect contextual and social differences that might help to explain why only one leader is able to deliver a conclusive tender project.

The chapter address several ways of redefining the SMI data in order to present different perspectives on the data.

- The first method considers the translation of SMIs into unique congregations of Tendering Purposes (TPs). Using a standardised abscissa of sequential epochs, the Case S DMO client displays *Impacting Trust* as the Tendering Purpose dominating all epochs. Even after tender submission in Epoch E3, *Creating Value*, *Influencing*, and *Finding Direction* continue to generate high levels of activity.

The Case S contractor behaves in a similar manner, although *Finding Direction* is almost as important as *Impacting Trust*.

In contrast, *Influencing* dominates the Case L DMO client, who becomes aware of *Impacting Trust* during the latter epochs. The high initial awareness of *Finding Direction* decreases progressively throughout the tender project.

The conclusive Case S tender project is characterised by an *integrative* approach to joint gains with its demonstrable bias to matters of trust-building and maintenance. The problematic Case L tender project is characterised by a *distributive* approach that seeks to maximise power in order to deflect the suspected *Influencing* purposes of stakeholders.

- The second method considers the allocation of SMIs into categories *emergent* and *controlling* behaviour. The analyses illustrate a Case S DMO client just balancing emergent behaviour with controlling behaviour, while the Case S contractor exceeds demonstrably the emergent behaviour with 'legitimacy-evincing' controlling behaviour.

  During tender production, the regulatory imposition of a communications blackout (probity) between the Case S DMO client and the Case S contractor impedes the DMO client's ability to redress the imbalance of emergent behaviours.

  The Case L DMO client experiences a minor imbalance of emergent behaviours during the communications blackout period. A near doubling of awareness of controlling behaviours follows this period. The third method considers the disposition of this atypical 'blip' on the chart.

- The third method considers a leader's complexity-capability in corralling the increasing differentiation arising from contextual complexity. When socio-technical complexity exceeds the cognitive limits of an individual, technology or additional people are mobilised to enable enhanced awareness. However, with socio-political complexity, trust, myth and symbolism address cognitive limits.

  The 'discontinuity of persistence' of communication behaviours provides a metric with which to consider the quality of communication behaviours. Erratic short-term behaviours are potentially unsettling, while the persistent and expected communication of a consistent story that uses myth to bridge knowledge gaps has the potential to offer controlling stability. Myth is important, because during a tender process, the focus is on an unknown political future.

Progressive complexity and instability affects the Case S tender project but in the final epoch E4, both client and contractor are able to retrieve significant dimensions of stability in the presence of ongoing instability.

Tight control of the Case L tender project occurs in the first epochs. The 'discontinuity of persistence' increases during epoch E4 and, unlike the Case S client and contractor, there is no expressed capability to redress the situation.

- The fourth method considers the possibility of progressive data trends as a proxy measure of the 'discontinuity of persistence'. Purely from visual inspection, the Tendering Purpose *Finding Direction* offers a close temporal co-relation. At best, this co-relation submits to middle-range theory for ongoing validation, noting that this study is able to validate the co-relation against three data sets, noting that the collective disposition of the SMI constituents of *Finding Direction* is towards connectivity and awareness: a reflection of an open system reality.

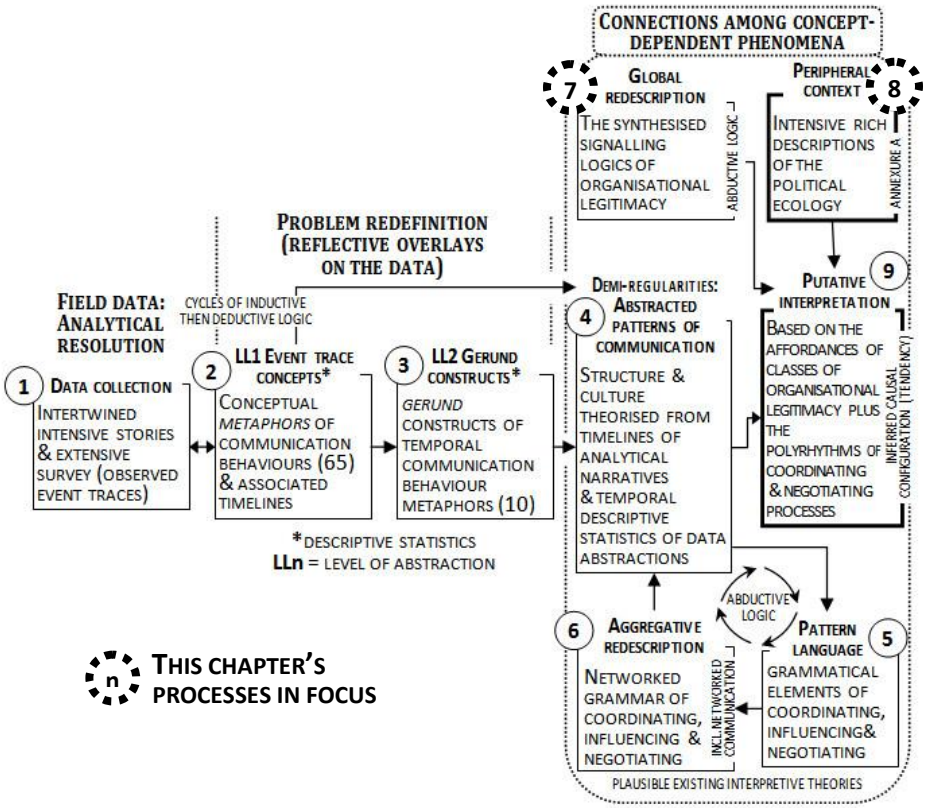
Next chapter

In the following chapter, mutual holistic perceptions of an organisation's legitimacy are offered by other collaborators. That is, each collaborator reflects sequentially on other collaborators in terms of pragmatic legitimacy, moral legitimacy, and cognitive legitimacy. This form of abductive logic reflects back on the tender project through the prism of organisational engagement legitimacy. In this research instance, the data are collected towards the end of the field activities. By this time, the researcher is able to be an informant. The data from the collaborators are moderated by the researcher so that a single dominant impression is associated with each class of legitimacy.

Chapter 16

Analysis:

Organisational Legitimacy



Whereas the previous two chapters relied primarily on *aggregative* methods, this chapter presents mutual *global* perceptions of the legitimacy of individual collaborating organisations and their tender enterprise's haecceity[304]: its political appropriateness.

This form of abductive logic reflects back on the tender project through the prism of organisational engagement legitimacy. At stake is the temporal and coincidental dispositional bias of each collaborator. The political decision-making process reflects on the tender enterprise holistically; its perceived haecceity of political appropriateness at a point in time. One property of the enterprise's haecceity is its perceived capacity to dynamically cover for the limitations of any one organisation; the inbuilt redundancy vital for the survival of a collaboration in a complex open system context.

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[304] **Haecceity**: an uncommon term expressing the idea of the individuality of an entity as conformed by its discrete properties or characteristics.

Table 16.1 was introduced previously as part of the discussion on methodology in Chapter 12. Although the data presentations are supported liberally with field stories and anecdotes, a copy of Table 16.1 is recommended as a guide to the various figures in subsequent pages.

GRAMMATICAL RUBRICS OF ORGANISATIONAL LEGITIMACY: GLOBAL PERCEPTIONS				
A TEMPLATE FOR REGISTERING PERCEIVED LINEAMENTS OF ORGANISATIONAL LEGITIMACY.	THE OPERATIONAL 'BEING' OF AN ORGANISATION IS PERCEIVED AS DESIRABLE, PROPER OR APPROPRIATE WITH ITS BIAS TOWARDS THE REPRODUCTION OF INSTITUTIONAL PROCEDURES, CULTURE AND SOCIETY		THE 'BECOMING' ESSENCE OF AN ORGANISATION IS PERCEIVED AS DESIRABLE, PROPER OR APPROPRIATE BECAUSE IT TRANSFORMS ITS PROCEDURES, CULTURE AND SOCIETY TO CHANGING STRATEGIC RESOURCE REALITIES	
	MORPHOGENETIC OUTCOME BIAS TOWARDS CONSTRAINED RULE-BASED STASIS		MORPHOGENETIC OUTCOME BIAS TOWARDS CREATIVE INTEREST-BASED GENESIS	
CLASSES OF LEGITIMACY / TEMPORAL TEXTURES	EPISODES OF SHARED OPERATIONAL INTERESTS	ENDURING TRUST-BASED RELATIONS	EPISODES OF SHARED OPERATIONAL INTERESTS	ENDURING TRUST-BASED RELATIONS
PRAGMATIC LEGITIMACY - ACCORDED BY STAKEHOLDERS THE SELF-INTERESTED CALCULATIONS OF AN ORGANISATION'S MOST IMMEDIATE STAKEHOLDERS.	**A1. ELEMENT OF PRAGMATIC EXCHANGE LEGITIMACY:** Is based on the expected value of the organisation's policies.	**B1. ELEMENT OF PRAGMATIC INFLUENCE LEGITIMACY:** Is based on a perception that the organisation will be responsive to their strategic interests.	**C1. ELEMENT OF PRAGMATIC INTEREST DISPOSITION:** Personification of the organisation occurs in response to holistically aligned interests and values.	**D1. ELEMENT OF PRAGMATIC CHARACTER DISPOSITION:** Personification of the organisation occurs in response to evinced honesty and trustworthiness.
MORAL LEGITIMACY - ACCORDED BY STAKEHOLDERS A POSITIVE NORMATIVE EVALUATION (DOING THE RIGHT THING) OF THE ORGANISATION AND ITS ACTIVITIES.	**A2. ELEMENT OF MORAL CONSEQUENTIAL LEGITIMACY:** Is based on the instrumentally-rational pursuit of particular goals and the organisation's past performance.	**B2. ELEMENT OF MORAL PROCEDURAL LEGITIMACY:** Is based on the value-rational fulfilment, by the organisation, of temporal rules for proper behaviour against politically acceptable policies and procedures.	**C2. ELEMENT OF MORAL PERSONAL LEGITIMACY:** Is based on the transitory and idiosyncratic wisdom and experience of the organisation's (charismatic) leadership.	**D2. ELEMENT OF MORAL STRUCTURAL LEGITIMACY:** Reflects the organisation's traditional authority based on the longstanding designation of certain actors being worthy of exercising defined powers.
COGNITIVE LEGITIMACY - ACCORDED BY STAKEHOLDERS • **COMPREHENSIBILITY LEGITIMATION – AN EPISODIC COGNITIVE DYNAMIC:** CULTURAL MODELS FURNISH PLAUSIBLE EXPLANATIONS FOR THE ORGANISATION AND ITS ENDEAVOURS WITHIN A COMPLEX COGNITIVE SOCIO-POLITICAL ENVIRONMENT.	**A3. ELEMENT OF COMPREHENSIBLE PREDICTABILITY:** Is based on available cultural models that provide a frame for meaningful predictability about the organisation's operations.	NOT APPLICABLE	**C4. ELEMENT OF COMPREHENSIBLE PLAUSIBILITY:** Is based on available cultural models that provide a frame for plausible explanations of the organisation's holistic essence.	NOT APPLICABLE
• **TAKEN-FOR-GRANTED LEGITIMATION - A MORE LASTING FORM OF COGNITIVE SUPPORT:** INSTITUTIONS RENDER SOCIO-POLITICAL COMPLEXITY MANAGEABLE AND TRANSFORM IT INTO A SET OF INTER-SUBJECTIVE "GIVENS" WITHOUT QUESTIONING.	NOT APPLICABLE	**B5. ELEMENT OF TAKEN-FOR-GRANTED INEVITABILITY:** Is based on the organisation's operations being exposed to prudential oversight and government audit.	NOT APPLICABLE	**D6. ELEMENT OF TAKEN-FOR-GRANTED PERMANENCE:** Is based on the organisation being recognised in Acts of Parliament or in the Constitution of States.
ORGANISATION DISPOSITION:	**[A1+A2+A3]** ORGANISATION ENGAGES WITH VALUED TRANSACTIONS, HAVING A RECOGNISED TRACK RECORD WITH OUTCOMES THAT ARE PREDICTABLE.	**[B1+B2+B5]** ORGANISATION ENGAGES WITH STRATEGIC NEEDS WITHIN SOCIAL AND POLITICAL CONSTRAINTS, REGULATIONS AND ACCREDITATION.	**[C1+C2+C4]** ORGANISATION ENGAGES WITH STRATEGIC NEEDS AND VALUES BY OFFERING EXPERIENCE, GUIDANCE AND WISDOM.	**[D1+D2+D6]** ORGANISATION ENGAGES WITH A PANOPLY OF SOCIAL AND POLITICAL STRUCTURES WHILST MAINTAINING IMPECCABLE ETHICAL STANDARDS.
ENTERPRISE EXAMPLES:	FAST FOOD FRANCHISES AND PETROL STATIONS	MEDICAL CLINICS AND SCHOOLS	POPULAR POLITICAL MOVEMENT	THE HIGH COURT
SIGNAL CATEGORIES:	INSTITUTIONAL SIGNALS	INDEX SIGNALS	AGILE SIGNALS	ASSESSMENT SIGNALS

Table 16.1: Grammatical elements of a pattern language of morphogenetic engagement legitimacy. Informed by: Archer (1998), Scott (2012b, pp. 228-230), Suchman (2012, pp. 13-16), Thursfield & Hamblett (2004, p. 119),Volkoff & Strong (2013, pp. 819-834) and Wynn & Williams (2012, pp. 799-800).

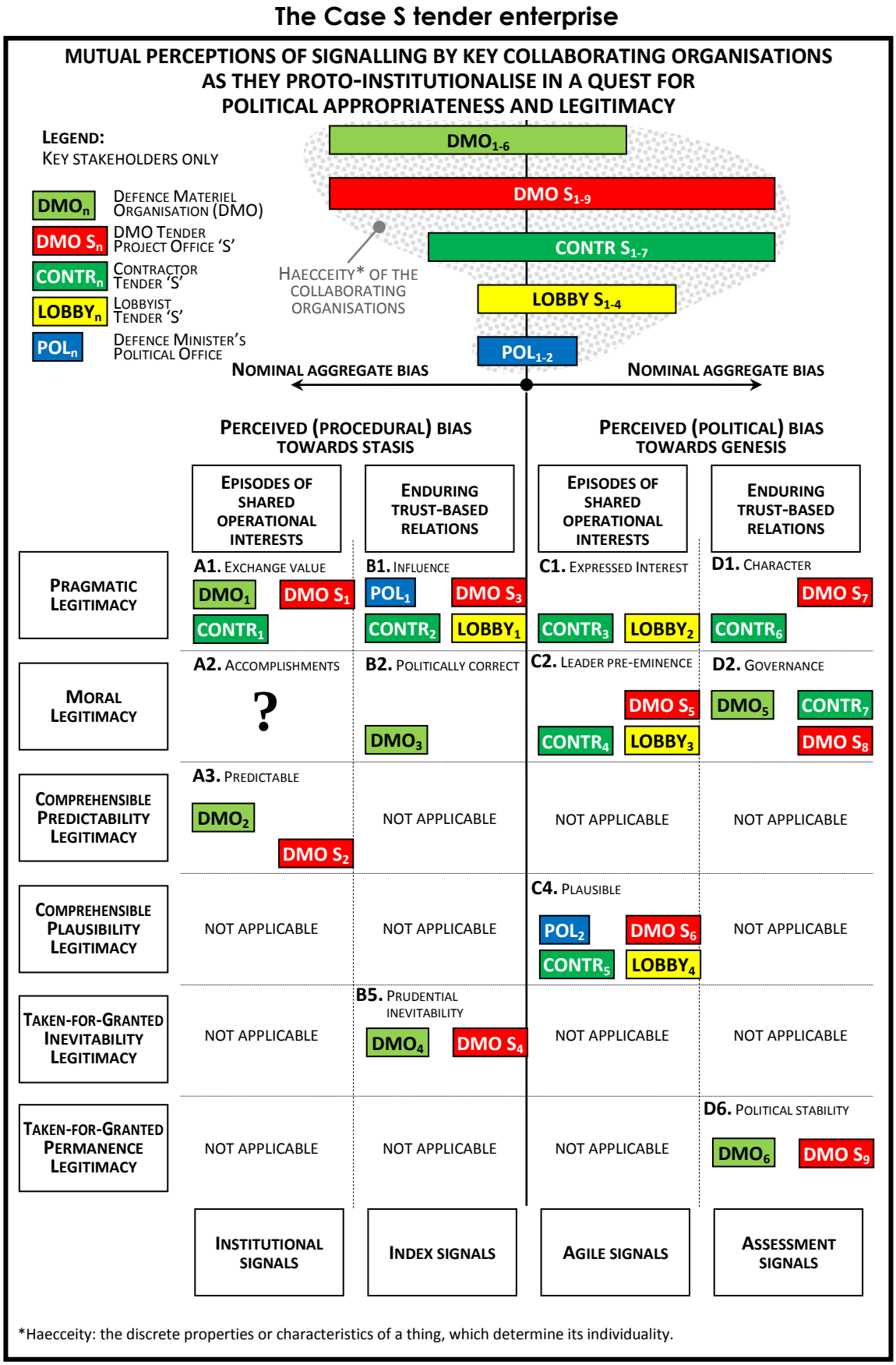

Figure 16.1: (Case S) a reasoning model employing signalling theory and a plurality of logics combined with a measurement model of mutually-accorded organisational legitimacy: to be read in conjunction with Table 16.1

Figure 16.1 comprises tandem parts: the lower matrix of informant data, and the upper bar graph comprising a nominal aggregation of the matrix data. Importantly, Figure 16.1 divides vertically with a procedural bias to the left and a political bias to the right.

The shaded foil to the bar graph (its haecceity) reinforces the idea that all of the organisational dispositions are coincidental and mutually informing. Any change in the disposition of any one organisation might reflect in changed behaviours of the other coalition members and hence, the political appropriateness of the entire enterprise.

The measurement model bar graph and the reasoning model matrix delimit the five key stakeholders that together represent a generative mechanism of influence focussed on the political decision-making process.

The DMO Organisation compared to the DMO Case S tender project

In Figure 16.1, the DMO – being a substantial bureaucratic organisation – displays a procedural bias to the left of the graph.

The tender project manager for Case S – DMO S – appears capable of engaging with a wider constituency of commercial and political stakeholders (right hand side), while maintaining its bureaucratic roots (left hand side).

While the DMO organisation appears beholden to cultural interpretations of political correctness and due process; the DMO *project* organisation needs to provide stewardship for the ongoing enterprise dealing with an unknown future. How this agility[305] might be implemented was the subject of pre-eminent legal advice[306].

The defence minister's Political Office provides guidance and directs (perhaps orchestrates) the formalities of due process and the tender's political strategy.

The contractor's lobbyist facilitates strategic engagement between all stakeholders, including the defence minister; an activity of mutual value for the governance of the tender project. The contractor needs to be on top of everything, including the tempering of bureaucratic procedures.

Relative to the DMO, the DMO S project organisation appears to provide a superior ability to evince organisational legitimacy (bar graph **DMO $S_{1\text{-}9}$** relative the **$DMO_{1\text{-}6}$**).

---

[305] see Figure 16.2, zone ③; the fine 'Agility metric' line passing through the bars
[306] a retired Chief Justice

The Helmsman Institute (2009) reflects on the importance of this management capability:

> DMO project managers must be able to work independently as senior executives, as the DMO systems cannot provide sufficient support.

Surprise for new players

The contractor appears surprised to discover the irrelevance of past performance (see Figure 16.1, matrix **(A2)?**).

The contrasting comments from both the DMO client and the contractor illuminate the absence of data in Figure 16.1, matrix cell **(A2)**.

> **CONTRACTOR:** In the rest of our lives, we tend to buy our products based on what the record of performance is. We thought that was important but in Defence tendering, it's almost like you start with a totally clean sheet of paper and it's based on the case that you can present on paper as to why they should select you and you have to make that case against the criteria they specify in their Request For Tender (RFT).

> **CLIENT:** I noticed early in the process that I had a couple of people on my own team who had had poor experiences with one or both of the short-listed contractors. 'Why are we wasting our time with these tenderers because they always treat us like crap?' My view is that organisations change and their behaviours change with changing leadership. I wanted to see what the company is like *now*.

Figure 16.2 following, provides a lens over the DMO and the two case-based DMO tender project offices, where Case S is conclusive and Case L is problematic.

DMO organisation, DMO Case S and DMO Case L compared

Figure 16.2 matrix cell dispositions

(A3): Together, the DMO parent organisation, the DMO Case S project office, and the DMO Case L project office appear to offer a stable framework for stakeholder predictions about the operations of these organisations during the complex tender project.

(B5): There is ongoing prudential oversight by other government agencies including the Australian National Audit Office. Further insights arise during scheduled parliamentary Senate Hearings.

(D2): Tender governance is framed by the Commonwealth Government's procurement guidelines (Department of Finance and Deregulation, 2008) and the DMO adaptation of these guidelines (DMO, 1 July 2009).

(D6): The longevity of these bureaucratic organisations is assured in terms of function, if not form.

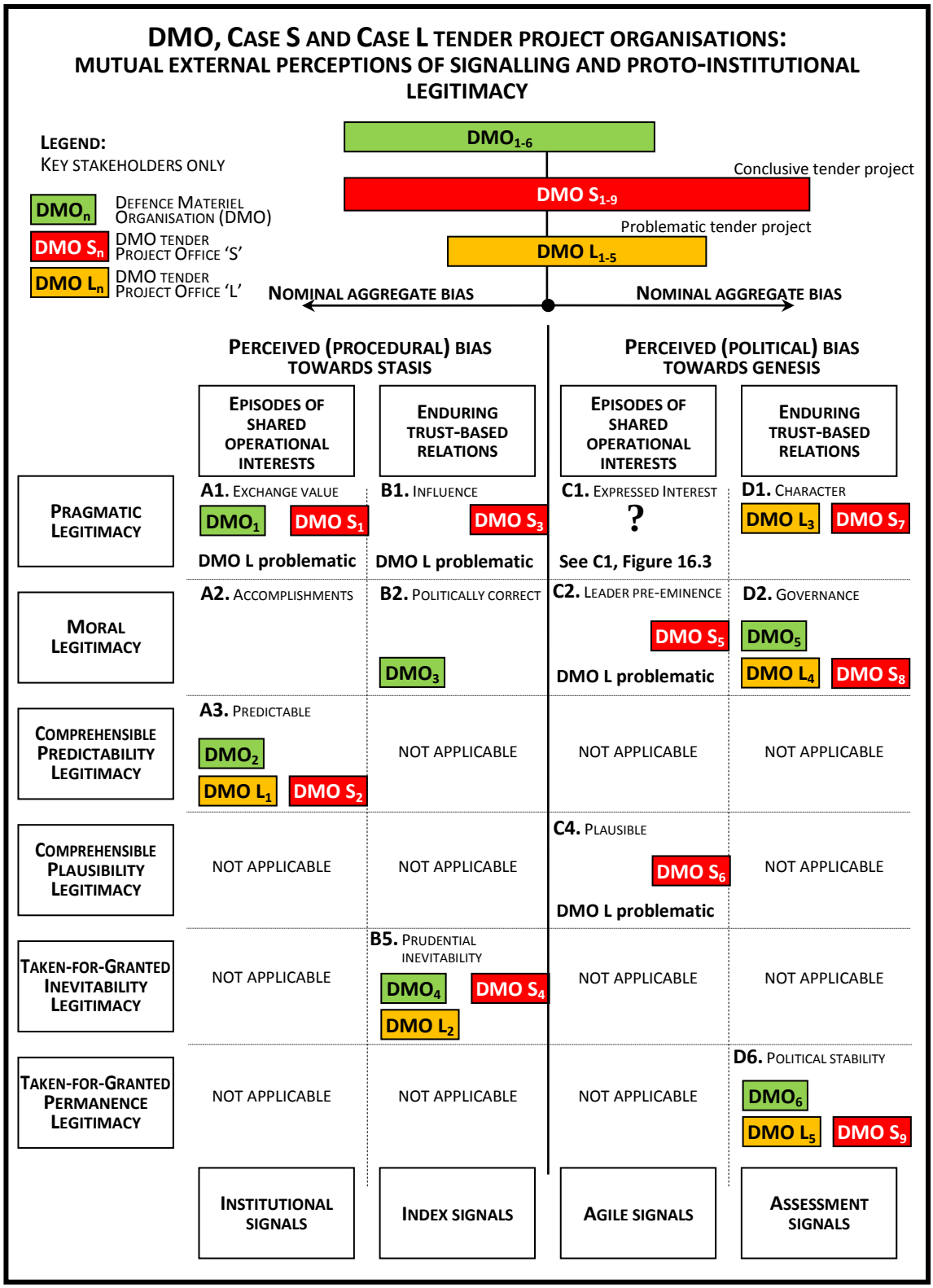

Figure 16.2: (Defence Materiel Organisation, DMO's Case S and Case L tender project offices) - a reasoning model employing signalling theory and a plurality of logics combined with a measurement model of mutually-accorded organisational legitimacy: to be read in conjunction with Table 16.1.

(C2) & (C4): The apparent absence of the DMO parent organisation and the DMO Case L project organisation suggests that their provision of empathetic guidance to stakeholders is potentially ineffective or absent during these specific tender instances. Unilateral industry briefings by the DMO might not represent an empathetic conversation.

(C2) & (C4) cont.: For Case S, the DMO project office (together with the contractor in Figure 16.4 and the contractor's lobbyist in Figure 16.5), appear to address the need for bilateral communications with stakeholders. Case S is a successful (conclusive) tender campaign.

(**A1; B1; C2; C4**): DMO Case L appears unable to evince a presence that reflects: pragmatic exchange legitimacy **A1**; pragmatic influence legitimacy **B1**; moral personal legitimacy **C2;** comprehensible plausibility **C4**.

Bar graphs (see Figure 16.2)

The (conclusive) **DMO $S_{1\text{-}9}$** graph illustrates the tender project team inculcating the culture of the **$DMO_{1\text{-}6}$** organisation, as well as extending its cultural disposition to engage with commercial and political interests.

In contrast, the problematic **DMO $L_{1\text{-}5}$** project team is able to extend its industry reach beyond that achieved by its parent **$DMO_{1\text{-}6}$** organisation. Additionally, the **DMO $L_{1\text{-}5}$** project team is unable to reflect completely, the procedural bias of the **$DMO_{1\text{-}6}$** organisation (and **DMO $S_{1\text{-}9}$**). Potentially, this reflects insufficient support or interest within the Defence organisation.

Contrasting reflections and explanations: the bureaucrat and the politician

The then Deputy CEO of the DMO comments:

> Your Case L was going out of control because of a whole bunch of political influences, because they didn't have the where-with-all to get the alignment between contractor and DMO at the end. That is a recipe for failure.
>
> Because say, somebody makes the rank of Brigadier, he is a smart individual, but trying to deal with this level of complexity and business behaviour and ambiguity etc., it's not necessarily their forte. They want to follow a controlling structure. You can't control these things. If you are controlling then you are missing out on listening to the underlying messages. You have to be adaptive. You dealt with emerging issues, you listened to them, you adapted etc.

> I've seen very large projects run by well meaning but unskilled individuals who are great military leaders; but this is not what they should be doing. Because, for example, if he was say an army brigadier, he was getting a lot of external influences from the army end.
>
> A brigadier is getting controlled by those external mechanisms rather than controlling them as higher ranks do at three star level. He doesn't have job security beyond a year. He doesn't know where he's going to go [future postings].
>
> The more in control of that mechanism as an individual, the more successful you can be.
>
> In this level of complexity, the thing that everybody forgets is that when that's finished [the tender], you've actually got the next 6 years or 8 years in front of you where you have actually got to deliver [the equipment].
>
> And if you have 'poisoned the well' in the way you play the game, you've almost got a guarantee that you haven't either understood each other, you haven't communicated well enough, you haven't resolved outstanding issues, or set yourself up to be successful.
>
> Because if you don't use the game for the purpose of actual enjoyment and the *betterment of both CEOs*, you will lose at the end of the day.
>
> Equally, the Prime Minister and the defence minister are assessing whether a 'poisoned well' has been the outcome of the tender campaign. Do we have a poisoned well?

The then Defence minister Nelson expresses his experience:

> When there's little interest by the senior managers in the project, there's a tendency for a company to get in there and say [to the junior ranks], 'aw, you better not buy that particular equipment you know, because this and that can happen'. The next thing you know, coming up through the system, through the ranks... So, there's a bit of a tendency there, I suspect again, for the specifications and the preferences to change as we are going through the process because the advocacy of the companies is actually having an impact at the lower level.
>
> This explains why Case L project manager could not activate much political support from more senior officers as they had very little to do with it anyway.
>
> For Case L, political support came in the form of a lifeline thrown by the minister by placing the tender project on the minister's 'projects of concern list'.

Bringing these themes together suggests that the ingredients of a ‘perfect storm’ comprise:

- disinterest from the senior military ranks
- that opens the way for commercial manipulation of the lower ranks
- who feed the tender project manager
- who in turn, has insufficient military rank to control the situation, and
    - resorts to managing a process, while
    - avoiding the idea of socio-political complexity and its demands on awareness and intervention

Comment

Importantly, these reflections were not forthcoming until follow-up audit interviews presented the model of morphogenetic engagement legitimacy to the two senior informants. The continuing feedback from data analyses appears to be vital for research validity.

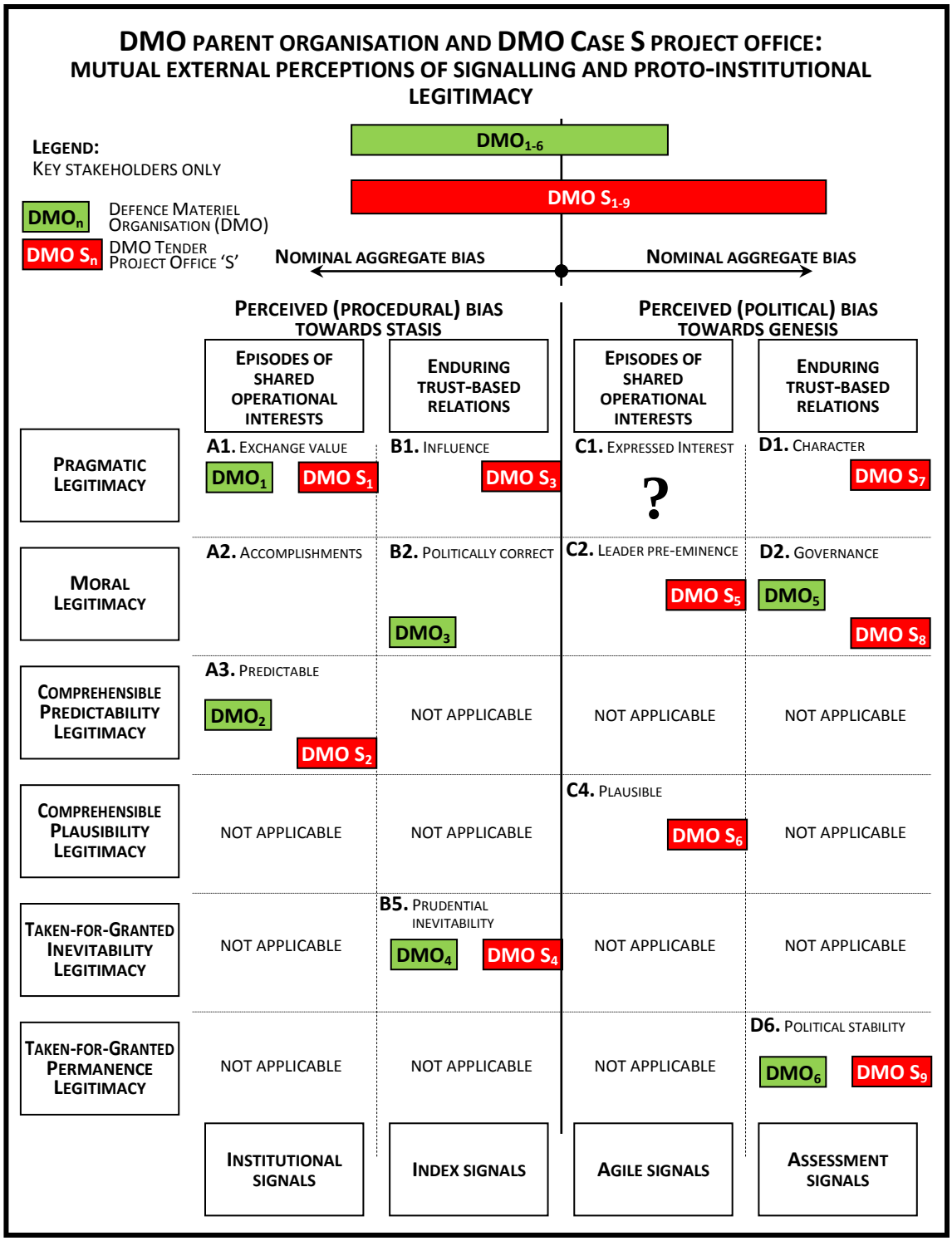

Figure 16.3: (DMO organisation and DMO's Case S tender project office) - a reasoning model employing signalling theory and a plurality of logics combined with a measurement model of mutually-accorded organisational legitimacy: to be read in conjunction with Table 16.1.

Figure 16.3 matrix cell dispositions

(C1?): During the Case S tendering project, neither the DMO nor its subordinate DMO Case S project office, appears to reflect an element of organisational legitimacy based

on *pragmatic interest disposition* (see Table 16.1). That is, both organisations appear to not embrace or inculcate the commercial or political interests and values of key stakeholders; their interests are framed within government service.

(B1): The DMO Case S project office (in contrast to its DMO parent organisation) appears to be receptive to the strategic political interests of key stakeholders, including the identification of acceptable subcontractors.

(B2): While moral procedural legitimacy accrues to DMO_3, such regard appears withheld from the DMO Case S project office that might engage with perhaps unorthodox or unexpected negotiating games.

> When we negotiate, the people sitting on the other side of the negotiating table are often former officers of the Department [of Defence] or DMO. So they sit there, sometimes on chairs that we had deliberately lowered, knowing what we are doing because they used to do it.

(D1): Enduring Trust becomes the vital ingredient for the commercial relationship between the DMO S_7 and the contractor. It appears that the DMO parent organisation is unable to generate a similar level of mutual engagement.

> **CONTRACTOR:** I walked out of that whole thing with a real lesson: in big projects, establish the relationships first. When rumours abound and you have self-doubts, you have to have some form of strength because you go home every night tied up with knots and you have to get out of bed the next day and go right back in, and it's hard to hold the course for well over a year.
>
> My role is to really ensure that the relationship is right. You want to go into a competition having the top people in DMO of a frame of mind that hey, if all other things are equal, we are their preferred choice. It's just based on relationships.
>
> And I just think that some of the rules that DMO uses of having to solicit off-the-shelf prices and stuff as an option[307]; it undermines certain issues of trust.
>
> **CLIENT (DMO S):** You must listen to what your counterpart is telling you about the teams because we have to work together for at least 10 years. It all comes down to the relationship between the two leaders. If you don't trust each other, it's almost impossible for the rest of the team to trust each other. Relationship is absolutely critical to ensure that the project is successful.

---

[307] (Kinnaird et al., 2003) A recommendation from the Kinnaird Review that there should be an off-the-shelf option for comparison.

(C4): Only the DMO Case S *project* office appears in general, to be able to provide key stakeholders with a governance perspective, in an otherwise politicised and ambiguous context.

CLIENT (DMO S):

- And my staff played games too. In the evenings, I would call both of the contractors' CEOs as I was driving home and we would discuss the games, have a chuckle, and then each of us would indicate how we intended to control, curb or stop a particular game playing between our subordinates. And by the morning; a miraculous change in behaviours! We even used 'red cards' to indicate that someone had broken the 'rules'. It was a bilateral process and it worked because we were on the same wavelength. I made sure of that.[308]
- For instance, I was interested in how the respective contracting teams would work together. In one case, I could not envisage how that meta-team could work. They had a number of nationalities with very different Asian and European cultures who needed to cooperate. This is serious social complexity.
- I think that the existing DMO constrained interpretation of the Commonwealth Procurement Guidelines is very naïve. It can't give the Commonwealth a good result. In industry, if you find that you have two very different propositions on offer, you wouldn't go back to the original tender document to do your evaluation, because now you have information that you weren't originally aware of. You would end up with a fundamentally flawed decision because you didn't understand the value proposition on offer.

[308] The DMO's written comments to the draft dissertation indicate that the bid manager was not following DMO procedures (Gumley, 12 October 2009).

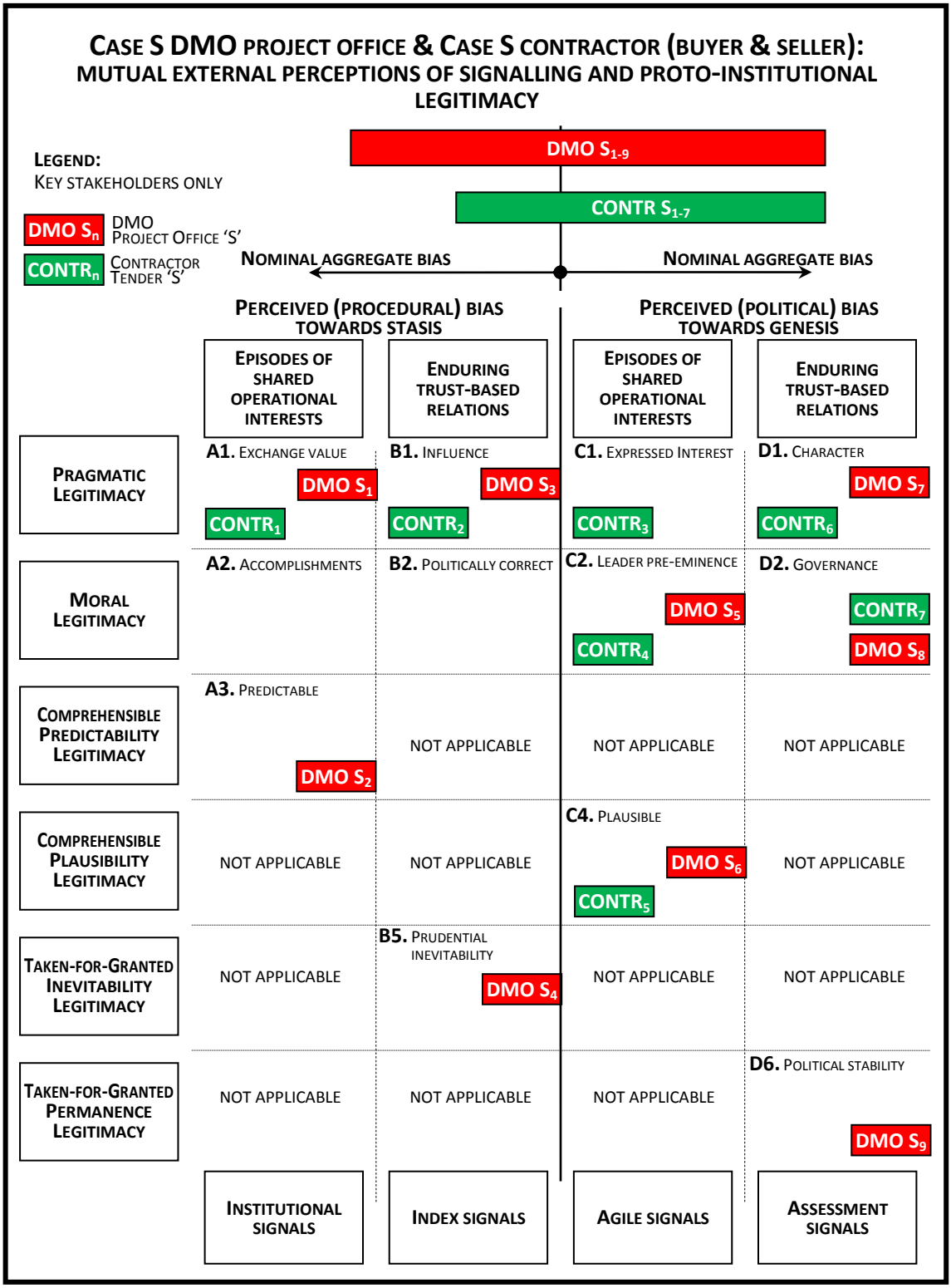

Figure 16.4: (Case S: DMO's tender project office and Contractor's tender project office) - a reasoning model employing signalling theory and a plurality of logics combined with a measurement model of mutually-accorded organisational legitimacy: to be read in conjunction with Table 16.1.

Figure 16.4 matrix cell dispositions

(C1): Only the Case S contractor appears to inculcate the personal interests and values of key stakeholders. As a matter of policy, the Case S contractor outwardly reflects an engineering culture similar to the DMO.

(A3): The DMO Case S project office applies government procurement policies and procedures.

(B5): In order to reduce procedural ambiguity and uncertainty, the DMO Case S project office operates within the government's prudential oversight and the project office's routine tasks are standardised in procurement manuals.

(D6): The DMO Case S project office inherits the 'prescribed' status of the DMO organisation. That is, they report directly to the defence minister and to both heads of the Defence diarchy. The outcome is a perceived presence of an honest broker in a field of vested interests.

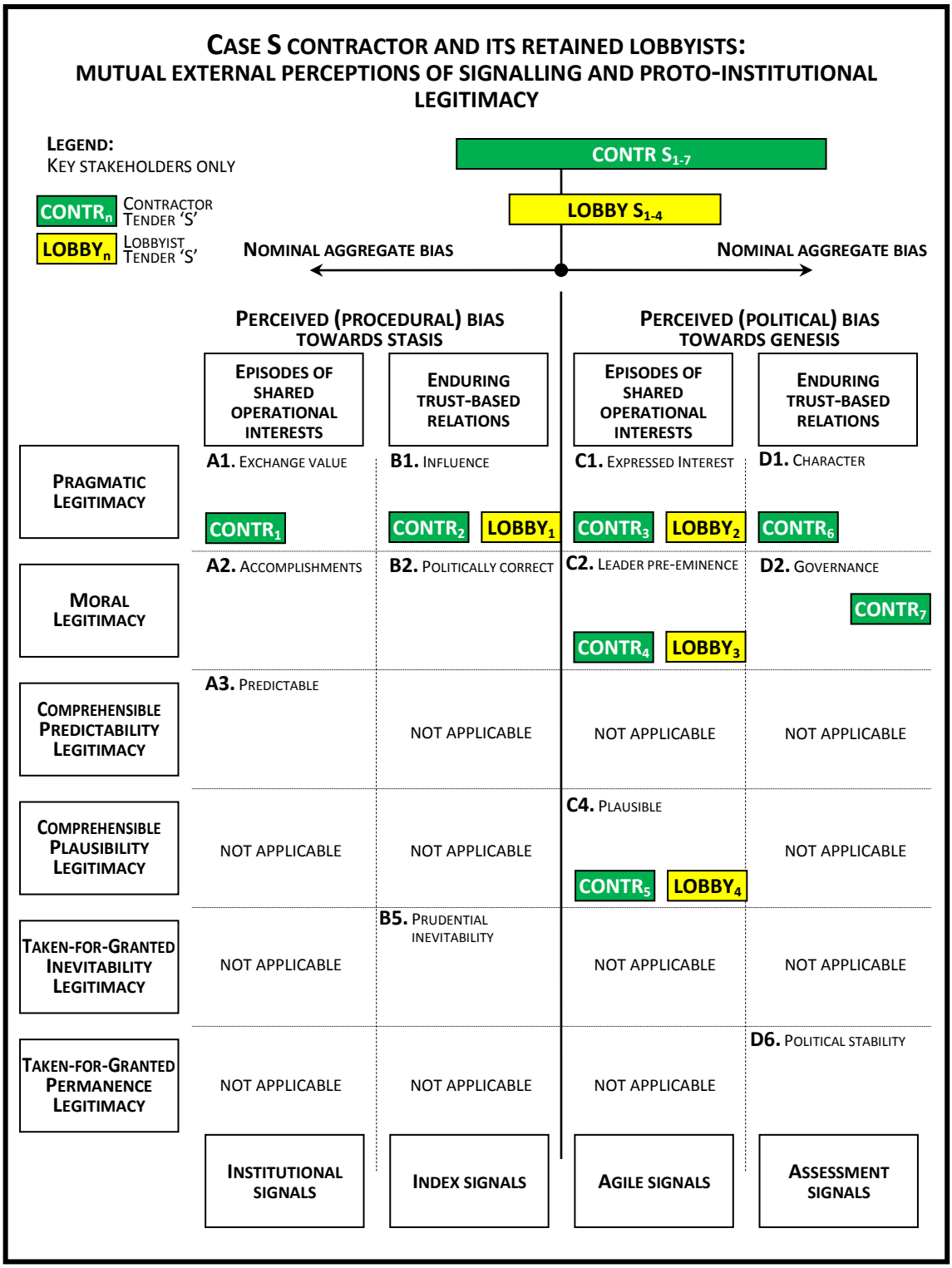

Figure 16.5: (Case S: Contractor's tender project office and Contractor's lobbyist) - a reasoning model employing signalling theory and a plurality of logics combined with a measurement model of mutually-accorded organisational legitimacy: to be read in conjunction with Table 16.1.

Figure 16.5 matrix cell dispositions

(A1, B1, C1, D1): The Case S contractor's bid management office ('the contractor') reflects a pragmatic disposition in both tender-specific and parent-organisation contexts. Its resource-dependence (political) bias is evident (right-hand side of bar graph).

(C1, C2, C4): The Case S contractor and its retained lobbyist(s) appear to focus on aligning and shaping the perceptions of its clients and key stakeholders, who in turn, might afford 'pragmatic', 'moral' and 'cognitive' legitimacy, the latter expressed as 'comprehensible plausible' legitimacy.

(B1, C1, C2, C4): For the duration of the tender campaign, the lobbyist(s) retained by the Case S contractor, displays a shared disposition with their client. As agent and principal, they project a common holistic organisational essence in their quest for stakeholder-accorded political legitimacy.

Both the Case S contractor and its major subcontractor retain different international and Australian lobbyists. This is indicative of the energy required to achieve a workable alignment of political interests. The lobbyists are able to provide a plurality of communication conduits between all stakeholders; a facilitation prized by politicians who might not wish personal attribution of a strategic interest.

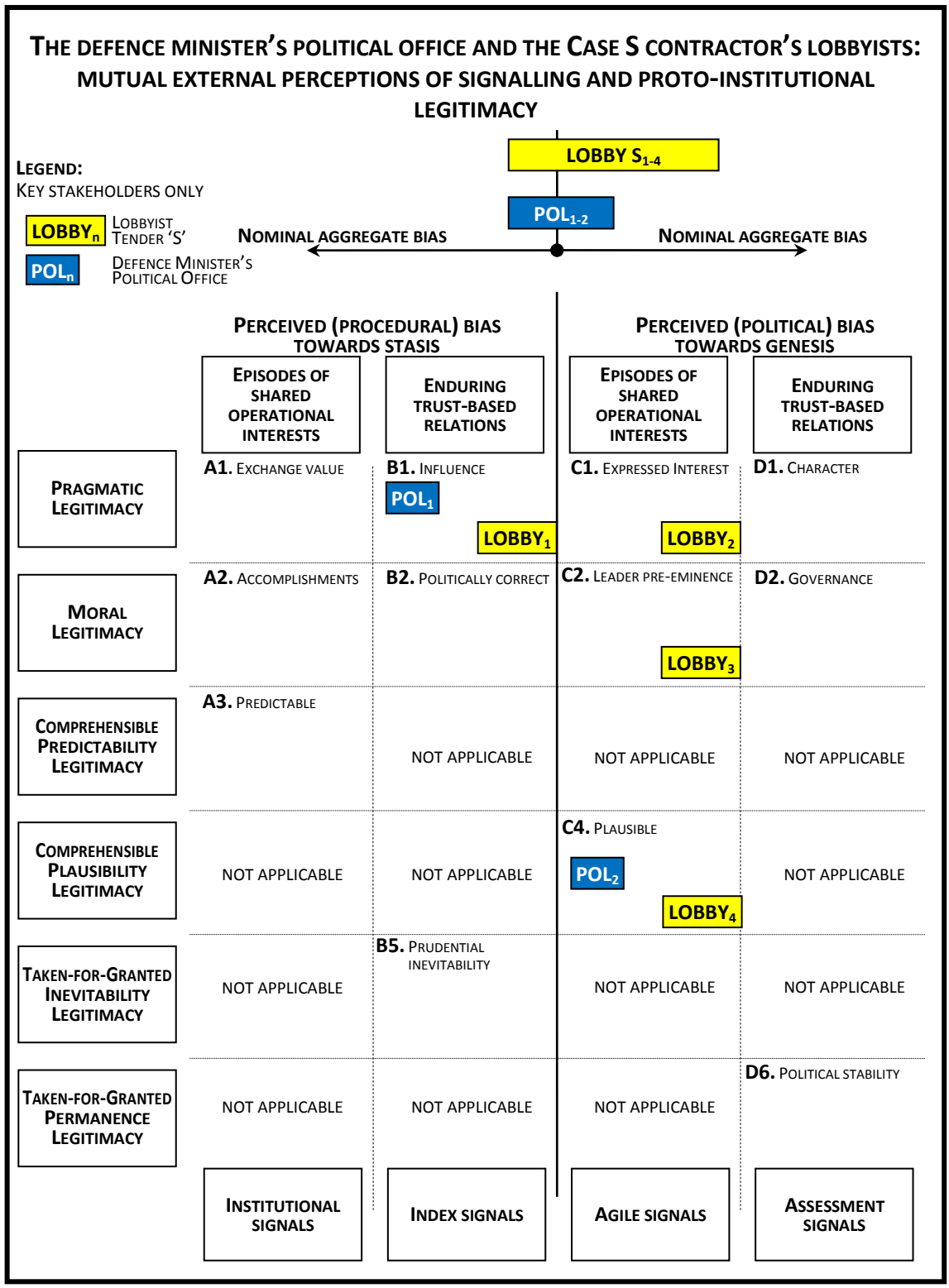

Figure 16.6: (Case S: The contractor's lobbyists and the defence minister's political office) - a reasoning model employing signalling theory and a plurality of logics combined with a measurement model of mutually-accorded organisational legitimacy: to be read in conjunction with Table 16.1.

Figure 16.6 matrix cell dispositions

Together with journalists, lobbyists and the minister's Political Office have commensurable perspectives. This affords a fluid churn of interdependent individuals, whose careers reflect extensive national and international social and political networks.

(B1; C4): The defence minister's Political Office might provide beneficial influence on behalf of the coalition of stakeholders. The Political Office arranges meetings between lobbyists and the minister, as well as other political introductions. An advisor in the defence minister's political office recalls:

> We told the contractors not to listen to all the vested interests in Defence and other government departments. They are going to make it more complicated and when they do make it more complicated, come and tell us and we will use our influence to keep them on track. We had very clear directions from government on what we were to return in terms of the project outcomes.
>
> We had sessions with consulting economists that went like this; we have billions of dollars coming across the desk and we are trying to do it this way so that's the policy, now go away and justify it theoretically. In other words, write the microeconomic rationale to match the politics.
>
> It's almost like there are two systems running. There's the black and white technical world of the equipment performance, cost and the analysis of tenders, and then there's the political outcome that I deal with. But DMO are sort of encouraged to get to the right outcome along the way.
>
> We weren't going to sacrifice things like local industry content or price for a very marginal capability gain; that was our view. Again, taking that broad picture, we instructed the department to follow that path. I think or I would presume that the contractors knew about this [via the lobbyist]. But you see Defence is very quick to take ownership of a decision. They don't want to look like they have been pushed around politically.
>
> The companies had their commercial interests of course. There would have been a lot of gamesmanship around influencing the Minister's office. We were seeing that from our side. The process was officially open and they had to establish a relationship with government to explain what their view was commercially.
>
> I think the point to note is that the political office had a direct commercial role here because it is about the relationship. The political office shapes the relationships.

The narrow range of legitimacy afforded to the political office is mirrored (**B1 & C4**) and expanded (perhaps glossed) by the lobbyist (**C1 & C2**) during tendering instances.

The lobbyist can transmit to pundits and journalists non-attributable politician-inspired ideas. Targeted individuals are offered 'helpful' advice[309], noting however, that the contractor retains the lobbyist.

Former defence minister Nelson comments:

> I wouldn't just meet a lobbyist on his or her own, but the reason I'd meet them is because I'd be testing the information all the time. Like Defence would give me information, DMO would give me advice but I am always interested to hear what the prospective supplier thinks and why they think it. It's a way of me then taking these arguments back to them [DMO] and saying [that] they say this or that.

Summary

- The organisational units of analysis comprise the DMO, the DMO tender project for Case S, the DMO tender project for Case L, the Case S contractor, the contractor's lobbyist, and the defence minister's Political Office.
- As a tender project coalition, these organisations mutually confer elements of organisational legitimacy. The researcher moderates categorical positions into a matrix cell allocation. Several cells received no expression of legitimacy.
- The affordances (haecceity) emanating holistically from the coalition reflects the coincidental dispositions of all interdependent tender project stakeholders: the politicly-perceived enterprise appropriateness.
- The DMO Case S project office is conferred with more elements of organisational legitimacy than is its parent DMO. Depending on the leader's disposition, the DMO project office is capable of providing empathetic guidance to a contractor.
- The Defence minister's Political Office provides strategic direction to the DMO and orchestrates the participation of commercial entities with respect to the tender competition and relationships with government.
- A contractor's past performance might not be a consideration, but political exigencies have to capacity to outweigh past performance.
- Although the contractor retains the lobbyist, the social and political networks that accompany a lobbyist are beneficial to all coalition stakeholders.

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[309] or advised that some activity or comment was 'not helpful'

- Mutual trust is the reserve currency as contracts are necessarily incomplete and the socio-political context is emergent.
- A potential recipe for failure has the following ingredients:
    - a project manager with insufficient status, power and authority
    - contractors manipulate the dominating discourse so that DMO staff become *de facto* sales representatives for the contractor
    - the project manager resorts or withdraws to managing a process defined by existing procedures
    - the project manager avoids the idea of socio-political complexity and its demands on connectivity, awareness and intervention

The next chapter

The presentation of the research program comes to a conclusion in the next chapter. It is prefaced with the reality that there is a very thin corpus of tendering theory and no substantive unified theory exists. Theory-for-tendering might be more appropriate at this stage of mid-range theory-building. This initial canvas is wide and dense. Taking into account an open system perspective and the politicisation of the tender process, future research directions are more likely to be in terms of context driven processes and practices. That is, contributions to theory are likely to enlarge tender process theory and tender practice theory. Any idea of a micro-economic foundation for tendering theory might need reconsideration but never abandoned.

Chapter 17
Summary and Prospects

In contrast to the tenets of social research, this inquiry took guidance from the tenets of management research in which reality is reflected in suggestive rather than exhaustive theory; there is an interest in behavioural tendencies, and a need for managers to shape the frames of awareness and understanding of internal and external stakeholders.

Within the limitations of the research and the propositions identified in Chapter 1, this chapter reflects on the study's contributions to theory and practice. As analytical (rather than predictive) generalisation contributes to middle-range theory, the ideas framing conceptual research, together with their propositions, remain present during an evaluation of the research.

The chapter begins with a summary of the tenets that frame the study, and concludes with suggestions for future work so vital for the ongoing development of middle-range theory.

Tenets framing the study

A linguistic project

In the absence of a substantive tendering theory, but with the support of the literature, the research defers to existing theory as a resource. Language emerges to dominate a framework for reasoning about the progressive efficacy of a tender project.

In the context of major Defence equipment tenders, this study builds a progressive argument in favour of approaching the *idea* of a tender project, and the *prospect* of explanatory theory, by considering:

- the potential for language to transform practices
- the presence of connectivity and situational awareness that together, offer the potential for language to shape meaning in the quest for political alignment with the political decision-makers

The human dimension of management research

Thorpe & Holt (2008b, pp. 1-9) reference Alfred Whitehead (1929/1978), who confronts the essence of management research in which multiple disciplines 'enter a lens' and converge on a human problem. Whitehead rises above the confounding units-of-analysis associated with each discipline, to reflect on the nature of human inquiry and its influence on human problems. For Whitehead, the essence of good science is the ability to (a) see things anew, to (b) see how the world is, and (c) how it might be improved.

Management and organisation research, according to MacLean & MacIntosh (2008, p. 49), become a complex unpredictable dynamic, *whose practices, processes and outcomes emerge from the conduct of the research as it proceeds*, and which can neither be specified in advance nor controlled to any great degree.

The idea and prospect of management research

Because human action is not predictable, it makes no sense to attempt to define law-like explanations[310]. Crucially, a constant conjunction of elements or variables is not a causal explanation or indeed an explanation of any kind. It is simply an atheoretical statement about the world. It doesn't answer the question 'why' (Easton, 2010).

In expanding this idea, Thiétart & Forgues (1995) and Whetten (1989, p. 492) suggest that managerial practices and related research findings are neither universal nor time-relevant, and in addition:

- their external validity (transferability) is frequently low
- idiographic findings are often not durable even within the case-based organisation
- findings derived from experiences and conditions, rarely replicate in the future

As Thorpe & Holt (2008b) suggest, 'The researcher's job is to reflect and attempt to make sense of this; and the task becomes comprehensible when management is understood in terms of its *potential* [to transform practice], rather than as a formally defined field' (p. 2, emphasis added).

[310] reflecting a nomothetic epistemological stance (positivism) which implies that there exist regularities or law-like generalisations in material or social settings that provide the basis for both explanation and prediction (Easton, 2010)

Therefore, what defines managerial research activity is not the provision of definitive solutions (a 'being' ontology) seeking to set habitual and acceptable limits to what we do and say. Rather, the continuing interest (a 'becoming' ontology) in the idea of how an *awareness* of what we do and say, can *transform* our practices (Thorpe & Holt, 2008b, p. 3, emphasis added). That is, the meaning of what we do and say remains in abeyance until it is reflected back to us in the actions of others.

For this study, Thorpe & Holt's idea suggests that the ongoing connectivity (relationalism) and resulting awareness of the communication behaviours and atmospherics emanating from a politicised tendering campaign, and its tender project instance, might be sufficient to transform our practices. Such transformations reflect in the changing efficacy of the tender project: its political legitimacy, appropriateness and alignment.

Language, the kernel of this inquiry, translates this situational awareness into conceptual symbols of sense-making (Sense-Making Items). The temporal presence of these symbols congregate into purposive constructs and the clustering of these constructs appear to align with the trend characteristics of a successful (conclusive) tender project or a problematic tender project; not in terms of win or loss but rather, in terms of parties reaching an agreement or failing to reach an agreement.

As a result, these conceptual symbols combine to provide a plurality of description about *what* is 'done' and 'said', and in addition, offer an interpretation of *how* the tendencies of relationships between (conceptual) symbols, develop over time. For the researcher and manager, these outcomes enable a framework for reasoning within which to engage a holistic appraisal of the progressive efficacy of a tender project: a linguistic process.

Thorpe & Holt (2008b, p. 5) suggest that management theory founded on an adequate explanations of events, is theory-in-evolution (middle-range explanatory theory), being *suggestive* rather than *exhaustive and predictive*, precisely because it retains its connection to the open-ended phenomena under investigation.

Theory-building research and theory-driven research

Instrumental case study[311] is a case of some phenomena (a case of something) of interest.

Asking 'how' and 'why' (theory-building research) can lead to explanations, while the 'what' and 'when' (theory-driven research) provides indicators of frequency, regularity and quantum, but little insight into policy options. This study considers both as mutually informing, and the research progresses accordingly.

Inductive data analysis involves arguing from particular facts or data to a general theme or conclusion; it seeks to capture aspects of the social world from the perspective of the actors involved.

A key feature of 'analytic induction' is *negative case* analysis, which involves searching for cases that do not fit the 'expected pattern' in the qualitative data. Such negative cases might have a moderating influence on emerging theory, particularly if they produce repeated contrary findings (Schwandt, 2007, p. 55).

Rather than moderating emerging theory, the presence of an atypical[312] case might expose influences that might otherwise have remained latent, thereby enhancing the emerging theory (S. L. Brown & Eisenhardt, 1997; Teddlie & Tashakkori, 2009, p. 251).

Analytic generalisation

To this end, Easton reflects on the *logic of generalisability* (external validity), which he argues, is *different* for case research. He defines case research as:

> ...a research method that involves investigating *one* or *a small number* of social entities or situations about which data are collected using multiple sources of data and developing a *holistic* description through an iterative research process (Easton, 2010, emphasis added).

Importantly, Yin (2009, p. 15) considers that *generalisability* from case-based social inquiry relates to *theoretical propositions* (potential generalisations about methodology

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[311] Stake (1995) delimits instrumental case study (in contrast to intrinsic and collective case study) whereby a case is studied because it can shed light on a particular pre-given issue, concept or problem (Schwandt, 2007, p. 55).

[312] Teddlie & Tashakkori (2009, p. 251) refer to *negative* cases and expected patterns but Flyvbjerg's (2011) use of *atypical* or *extreme* implies that an "expected pattern" is not a prerequisite and that an atypical case has a potential positive contribution to theory.

and mechanisms) arising from the research and *not* to specific data populations or universes; this theoretical form of generalisation is known as *analytic generalisation*: suggestive theory rather than exhaustive and predictive (Thorpe & Holt, 2008b, p. 5).

It is an idea that approaches or equates to Easton's *logic of generalisability*. Yin also argues clearly for case-based research to generalise *to* theory (analytical generalisation), rather than to produce generalised theory. This is the purpose of middle-range explanatory theory (Gregor, 2006). Middle-range theory is never complete.

Eisenhardt asks rhetorically, "How can the theory generalise if the cases are not representative [of a large population]?" When the research is proposing theory-development (suggestive theory), rather than theory-testing (exhaustive and predictive), the sample size (theoretical sampling[313]) is not an issue as prediction is not a required capability of a developing theory (middle-range explanatory theory) (Eisenhardt & Graebner, 2007, p. 27).

According to Easton (2010), 'generalization to theory via case research occurs by virtue of *clarifying* the theoretical nature of the entities involved, the ways in which they act and the nature and variety of mechanisms through which they exert their powers, or acted upon by other entities' (p. 128).

Therefore, future researchers need to assume the mantle for external validity (transferability to other research projects) through ongoing replication and moderation of the research.

As a result, criticality within a discipline becomes essential, since only by seeing the same data through the different theoretical lenses employed by different researchers can understanding of some of the features of the real world occur (Woodside, Sood, & Miller, 2005; Woodside & Wilson, 2003).

Practice transformation, and language

From a tender practice perspective, the idea that an awareness of what we do and say can transform our practices is, of itself, profound for at least two superficial reasons. The first is the idea that management, in a socially complex and messy environment, is about transformation that is *resourced* through connectivity and situational awareness. The second suggests that insufficient resources reflect in the quality of transformation.

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[313] Theoretical sampling, as applied to this research project, uses cases that are selected because they are particularly suitable for illuminating or revealing a phenomenon of interest (Eisenhardt & Graebner, 2007, p. 27).

Green & Li (2011) explore this idea in terms of *framing*; that is, ways in which sense derives from information or data. Easterby-Smith, Thorpe, & Jackson (2012, p. 162) offer the analogy of a window that both frames a perspective and limits that which can be observed.

From a deeper rhetorical perspective, frames can be 'hot' or 'cold'. 'Hot' frames can enable persuasion by intentional exploitation of an individual's *cognitive limits* through the purposeful deployment of symbols (T. Deacon, 1998; S. E. Green & Li, 2011, p. 1687). Such exhortations rely on trust (Designdialogues, 2010), and hence, its political value.

In contrast, 'cold' unintentional frames are able to persuade, because symbols *move our thoughts and cognition* in ways unrecognised by both speakers and audiences (S. E. Green & Li, 2011, p. 1687). Weick (1995a) reflects on this ideas with his iconic question: "How can I know what I think until I see what I say?" The quest for identity construction, such as organisational legitimacy, is about making sense of the individuals and organisations. Cold unintentional frames are a deeper form of practice transformation. However, there might be no sense of awareness in the absence of connectivity (relationalism), in which case, non-pejorative myth replaces situational awareness (Hulme, 2009b).

Knowledge and awareness

Knowledge is largely - though not exclusively - linguistic, and the nature of language and the *way* we communicate is not incidental to *what* is known and communicated. Awareness of the *disposition* of communication is vital in evaluating knowledge (Easton, 2010, emphasis added).

From Easton's (2010) perspective, if managers could simply try to employ causal language ("what the world would need to be like" in the critical realism sense) and, at the same time, become more inquisitive[314] about the situations they face, then there could be real benefits to be gained.

At play is connectivity that reflects a) the contingent relationships that conform the 'ways of acting of things', which in turn, b) shape actual behaviour and make a difference, and further c) the situational awareness that offers a framework for reasoning.

[314] Being more inquisitive by using networks as a source of opinion.

Easton (2010, p. 127) brings this discussion to focus.

He proposes a reorientation to a *holistic*[315] assessment of a disordered, complex and messy project context that requires a pluralism of reasoning. Hulme (2009b) concurs. It is, they both suggest, a linguistic project.

Language, connectivity and holistic awareness are themes that characterise this study. This is not to deny the relevance of policy and procedures manuals to guide a tendering process. However, I posit that the idea and prospect of a theoretical treatment of tendering needs to recognise that tendering is a linguistic project.

Next section

Against the propositions in Chapter 1, the next section reflects on the contributions, limitations and future work that frame this study.

Contributions

Meeting the need for action

PROPOSITION #1:

A rationale exists for a paradigm shift in management thinking and a fresh approach to theory as it relates to tendering and project delivery in the Defence context: a need for explanatory action.

Contribution #1

In contrast to the existing attribute scoring of tender status[316] (the 'what' and 'when'), this study addresses the socio-political complexity and its latent causes in order to understand 'why'. The paradigm shift moves from a closed system of contractual accounting, to language, connectivity, and holistic awareness. This fresh approach to theory embraces open systems theory and the idea of a framework for reasoning that engages 'theory for tendering': middle-range explanatory theory (Chapter 1). That is,

[315] The potential of the system outcome is more than the sum of the individual activities. In this research instance, the 'individual activities' are the multiple paths of reasoning, and the encompassing framework facilitates their holistic assessment.
[316] Project Maturity Score.

complementing paths of reasoning about the contingent arrangements that shape the progressive efficacy of the tender project.

‘Theory for tendering’ is open-ended but this study demonstrates the validity of engagements with a) institutional theory focussed on the legitimacy of collaborating organisations (Chapter 16), b) coordinating process mechanisms (Chapter 15), and c) leader complexity capability that profiles holistically, the situational awareness of the tender project team (Chapter 15).

This study extends the theory of reciprocating sense-making and sense-giving behaviours. Existing theory suggests sequential and reciprocal cycles of sense-making and sense-giving, and this study suggests that a dyad of client and contractor are 180 degrees out of phase generally. However, as part of the last phases of the tender project, the activities of *Offer Definition* and deliberations by the *Defence Committee* deliver sense-giving to both parties. During *Final Negotiations*, both parties are in phase with rapid switching between sense-making and sense-giving (Chapter 14). These results form a contribution to negotiation theory (Weingart & Olekalns, 2004, pp. 143-154).

The tender project is a collaboration of a coalition of key stakeholders including the DMO project client, the DMO (organisation), the contractor, the contractor’s lobbyist, the defence minister, and the minister’s Political Office. Their mutual objective is to align their constituent organisations, and therefore the collaboration, with the government’s political priorities at the decision-making date.

PROPOSITION #2.

Because of a fundamental difference with commercial project delivery, there is a need to describe and explain the defence contractor’s modality in terms of information management and political alignment: a need for explanatory action.

Contribution #2

For the purpose of this contribution, the defence contractor and its retained lobbyist become a single unit. Annexure J illustrates the central communication position of the contractor. (The respective managers provided hand-drawn graphics.) Importantly, Annexure J displays differences in the respective CEO *awareness* of connectivity within the tender project.

In a commercial tender, the client controls information and its dissemination. However, Chapter 1 details how the government appreciates contact with contractors and their lobbyists. In part, this is a reaction to a defensive bureaucracy. For the contractor and lobbyist, it represents an opportunity to shape the dominant discourse and meaning. For the minister, it is, *inter alia*, an opportunity to utilise the lobbyist as a messenger.

Chapter 8 illustrates the cultural relationship between the lobbyist and the defence minister's Political Office. The contractors maintain their communications with government, between and across tender projects in the form of an industrial marketing campaign.

A recent government report (National Commission of Audit, February 2014) indicates the need to transfer *project management* from the DMO to the contractor or specialist organisations: leaving the DMO as a *contract manager*. Therefore, this study no longer needs to register a policy option along similar lines, noting however, that the policy option reflects one side of the debate. The other side argues the need for a public (civil) service that has product knowledge.

PROPOSITION #3.

During the life of a tender project, the DMO appears not to have an effective means of recognising and monitoring inherent disorder and modalities of behaviour that might indicate a progression towards a successful (conclusive) tender outcome or one that is progressively problematic: a need for operational action.

PROPOSITION #4.

The focus needs to orient towards a holistic assessment of the project's socio-political complexity as a foundation from which to frame ongoing management thinking and reasoning about tendering: a need for action.

Contributions #3 and #4

The methods described in Chapters 8, 12 through 16, are research methods rather than operational methods. However, in their current form, two methods are amenable for operations.

Method 1. The coalition of stakeholders, that comprise the tender project, progressively accords elements of organisational legitimacy to every constituent organisation. One or more organisations might cover the deficiencies of another. The

defence minister addresses severe deficiencies following advice from collaborators. Chapter 12 describes the process of according elements of organisational legitimacy.

By considering the haecceity of the entire collaborative enterprise, certain deficiencies in one organisation might present as politicly unexceptional from the holistic perspective of tender enterprise's political appropriateness.

Method 2. This method requires further validation, as only three data sets are available to this study. However, all three data sets offer a common result as demonstrated in Chapter 15. The Tendering Purpose *Finding Direction* is co-related positively with the quality of coincidental correlation of all Tendering Purposes – the two data sets have comparable temporal trends.

I terms of the research method, a high correlation coefficient implies a low level of discontinuity of persistence in the data. A high level of discontinuity in the persistence of the data implies that there is inconsistency in the character and timing of observations of communication behaviours. Bayesian Belief Learning Networks (BBLN) incorporate a measurement model with which to quantify the discontinuity of persistence of observations of behaviours for the tender enterprise as a whole.

The observed co-relation is between two variables that are incommensurate: *Finding Direction*, and the metric of 'discontinuity of persistence'. They just happen to trend together. Given that this relationship extends to both a conclusive and a problematic tender enterprise, further investigation is proffered.

Together, methods 1 and 2 offer complementing paths of reasoning that might indicate the progressive efficacy of a major Defence equipment tender project.

Proposition #5.

In a wicked, messy and complex socio-political context, connectivity and the resulting awareness of what we do and say, can transform our prevailing tender practices and refocus their political objectives: a need for validation.

Contribution #5

Chapter 15 provides an insight into the consequence of an enforced reduction of connectivity. The data contrasts the client and the contractor. With reduced client connectivity, its situational awareness plateaus and then declines. With intelligence no longer available from the client, the contractor is, in his terms, 'flying blind'. The research data suggests that significant path-finding energy is deployed by the

contractor. There is no guidance as to how much compensation is necessary, or the replacement sources of intelligence for situational awareness. The cost might be in the millions of dollars; noting *inter alia*, that the US Congress is a source of free information about Australian defence matters not otherwise available from Australian sources.

Chapter 15 illustrates that for the limited period in which the client reduces connectivity, the energy devoted to recognising emergent communication behaviours just exceeds the client's energy devoted to controlling communication behaviours. To evince necessary legitimacy, the contractor ensures that its controlling communication behaviours exceed significantly the energy devoted to recognising emergent communication behaviours.

Further, Chapter 15 illustrates that in the case of a problematic tender project, a slight increase in recognised emergent communication behaviours evokes an excessive and erratic deployment of controlling behaviours. Because of the staccato disposition of these controlling communication behaviours, they are perceived as short-term *emergent* (unexpected) behaviours: an example of Weick's (1995a) iconic question: 'How can I know what I think until I see what I say?'

Substantive contributions: fresh knowledge about the world of tender projects for high-cost politicly-sensitive Defence equipment.

Chapter 1 and Annexure A suggest that:

- Disorder, rather than the pretence of order, is the natural way of things.
- This world of tendering is socially complex, messy (puzzles), and wicked in terms of competing political certitudes. As such, mutual trust is vital, as is the energy devoted to its maintenance and remediation.
- It is also a world of desired political 'ends' moulded by political reasoning, rather than 'means'. Political decision-making is not problem solving. Therefore, the defence minister's political office is a major player.
- The presence of conceptual social complexity is a carrier of socially constructed ideologies. Symbols and myths bridge knowledge gaps as tenders are necessarily incomplete for security reasons and forthcoming advanced technology that might be the subject of ongoing diplomatic and alliance bargains.

- Major Defence equipment tenders and government policy that leverages support for industry policy might be interdependent in terms of policy and funding.

Project management

The results from Chapter 16 indicate that during the currency of a tender project, the DMO tender project office is accorded more elements of organisational legitimacy than its parent DMO. The demands on a Defence tender project manager are recognised, rather than suggested, as being potentially unrealistic owing to the lack of parent organisation capability (Ferguson, 31 March 2008).

Contractor past performance and bid price

Additionally, the results from Chapter 16 indicate that in assessing a submitted tender (bid), a contractor's past performance might not be a consideration, and capital cost does not generally receive high priority.

Government-supplied project cost ceilings might not be realistic and such published data are better characterised as a 'ruse' in order to tease out those suppliers who can demonstrate back to the government the lack of robustness in the government-supplied budget ceiling. The budget ceiling becomes a test rather than a constraint.

Theoretical contribution: ideas.

Fresh ideas

Multiple methodologies and complementing theories ('theory for tendering') contribute to a holistic framework for reasoning within the ambit of middle-range explanatory theory.

In the context of major Defence equipment tenders, this study builds a progressive argument in favour of approaching the *idea* of a tender project, and the *prospect* of explanatory theory, by considering:

- the potential for the transformation of practices through language, and
- the presence of connectivity and situational awareness that together, offer the potential of shaping meaning in the quest for political alignment

A fresh approach to the idea of a major Defence tender, engages with an industrial marketing campaign consumed with information management and shaping the dominant discourse.

- Chapter 1 finds that a tender instance punctuates an ongoing marketing/purchasing campaign pursued actively by *both* the client and the contractor.
- Politicians, who select a winning supplier, also design the tender strategy; the implication being that theory related to major Defence equipment tendering is likely to be context sensitive and idiographic.
- The client and the contractor alone do not define the tender project. It includes, *inter alia*, a coalition of collaborating stakeholders comprising the defence minister, the minister's Political Office, and the contractor's lobbyist. They accord each other with legitimacy and attempt to cover individual organisational deficiencies. The objective is to present a politicly appropriate (aligned) enterprise to the decision-making politicians. A 'successful' tender project enjoys a competition for political ownership; the converse is also true.
- Chapter 14 illustrates the tender project characterised in terms of sequential and reciprocating cycles of sense-making and sense-giving. This is not new. However, this study's contribution to negotiation theory, relates to the contractor/client dyad and the phase-shift relationships of these reciprocating cycles. That is, while each party to the dyad has sequential phases of sense-giving followed by sense-making (or vice-versa), the client and the contractor are 180 degrees out of phase up to final negotiations, which then sees them in phase.
    - Grammatical elements of coordinating process mechanisms are coincident with these reciprocating cycles of sense-making and sense-giving. Existing theory identifies the process as: *orienting to absence*; *enforced disruption*; *enacting [negotiating] games*, and *stabilising [negotiating] patterns*.
      This study finds additional elements of *defining value propositions*, *value positioning*, *co-evolution*, and *issuing mutual legitimacy*. In addition, it explicates the influence logic enjoining these elements.
    - The combination of these reciprocating phased behaviours and the logical architecture of the coordinating process mechanisms are potential

markers of the efficacy of a tender for high-cost politicly-sensitive Defence equipment.

Methodological contribution: novel methods of investigation.

Two particular methods present novel applications of existing techniques.

Data presentation and participant buy-in

- In a Defence context, military officers are experienced with the use of radar sets and the observation of weak signals. Chapter 14 presents the Sense-Making Item (SMI) field data in the form of a radar/polar chart. Participants requested the radar charts, with their inherent distortions, in preference to the technically correct bar graph presentation. The success of this presentation form is not in the data *per se*, but rather in the manner in which participants took progressive ownership of the interim data. These euphemistic 'MRI' charts appeared on office walls, and otherwise uninvolved Defence staff engaged in earnest recollections and interpretations. The departmental linguistics started to inculcate the SMI idioms.

Leader complexity capability

- Chapter 15 addresses the idea of 'leader complexity capability' as an expression of the entire tender project team and its dealing with socio-political complexity, mess, and a wicked political context. At stake is a balancing trick between order and disorder (unorder). With such overwhelming complexity, there are inherent cognitive limits for an individual. This idea is not new. What is new is the generation of a proxy metric to describe the overall trend in complexity. Bayesian Belief Learning Networks (BBLN) evaluated the coincidental correlation of all Tendering Purposes. The outcome is a measure of overall discontinuity of persistence of the Sense-Making Item data, in terms of a Mean value and a Standard Deviation. The assumption is that high levels of persistence of communication behaviours are analogous to an ordered context and high levels of discontinuity of persistence are analogous to disorder. Chapter 15 illustrates the robustness of this *holistic* proxy metric to distinguish successful and problematic tender projects.

Morphogenetic reasoning

Chapter 8 advances the idea of socially-constructed morphogenetic reasoning as a mechanism for interpreting the degree of structural and cultural coupling between two organisations. While its antecedents can be found in Archer (1995, p. 295), the fully formed model is a contribution to practice theory.

Organisational legitimacy

The tender enterprise of collaborating organisations is a synthetic collation of disparate social pathologies. Each collaborator is in a state of constant critical reflection on the legitimacy of every other collaborator with respect to the political appropriateness of the overall enterprise. Chapter 12 and Chapter 16 enjoin signalling theory, the institutional theory of organisational legitimacy, and the morphogenetic approach into a mechanism for both recording temporal perceptions of legitimacy and the analysis of the data in terms of the haecceity of the tender enterprise. This process is a contribution to method.

Fresh theory

Any theory related to tendering is for the present, confined to middle-range explanatory theory (analytical generalisation) that employs multiple theories (‘theory for tendering’) offering complementing paths of reasoning about the contingent arrangements shaping the progressive efficacy (political appropriateness) of major Defence equipment tenders.

Importantly, this research proffers a linguistic approach to the generation of theory for tendering.

Limitations

Theory

The research did not seek to progress to a general tendering theory. Indeed this study argues that the nature of management might not be amenable to exhaustive and predictive (generalised) theory. At best, suggestive theory offers an initial middle-level framework for reasoning based on multiple existing theories (‘theory for tendering’).

Sample size

Chapter 1 focuses on the adequacy of a limited sample size (three data sets) for the purpose of middle-range theory, noting that in management research, scholars are quite comfortable with one or a few samples. External validity is 'the mantle' of future studies as they contribute to middle-range theory.

Purposive sample

On request, the CEO DMO nominated contrasting successful and problematic tender project cases.

Client/contractor dyad

The Case S tender project dyad provides one data set for the client and another for the contractor.

The Case L tender project dyad provides both data sets, but only the client data set may be used. The defence minister withdrew this problematic tender project from the market. As a revised tender strategy is forthcoming, the (preferred) contractor embargoed its research data. However, several contractors maintained a conversation with the research project and audited the results. This engagement is ongoing.

Future directions

Bayesian Belief Networks

Chapter 13 refers to the application of Bayesian Belief Networks and its contribution to this study. The BBLN measurement model provides instrumental analysis for correlation, and inductive reasoning. The BBLN model 'learns' its structure and parameters from the data rather than from researcher modelling or intervention if required.

Inadvertently, Annexure E is an actual BBLN model of retroductive logic. That is, what (a part of) the world would need to be like for the observed events to have occurred: the logical interplay of Tendering Purposes. This is an intransitive (hidden) world, and the BBLN explicates a structure and parameters for this world from transformations of the socially constructed empirical data. The many iterations displayed in Annexure E, reflect the BBLN computations searching for the most

accurate (robust) possible structure capable of describing the relationships hidden in the data. At best, it is the social construction of alternative realities; that is, we invent concepts, models, and schemes to make sense of experience, and we continually test and modify these constructions in the light of new experience: a Bayesian modality.

Refining the middle-range theory engaging 'theory for tendering'

The refinement of theory requires the investigation of qualitative changes at the boundaries of theory, that is, under different contingent conditions. This is the domain of further work.

Guidance

The domain of politicly-sensitive Defence equipment engages with matters of national security and government. As a research venue, Defence is a sponsor of higher degree research and it funds a research institute[317]. However, gaining access might require political patronage: the project champion being the CEO DMO in this instance. The PhD research plan should consider an eighteen-month period for research project acceptance by the relevant national security agencies. Following security clearance and project champion comfort, a further 6-9 months should be budgeted for academic contestations.

[317] ASPI: Australian Strategic Policy Institute. For example, see Thomson (Febuary 2014).

So what?

Throughout the dissertation, stories and anecdotes reflect on relationships and trust.

To give voice to this essential issue, selected extracts from the interviews in Annexure A are combined to explicate the depth of feeling.

> Over time, that basis of relationship, counted far more than the dollars and cents.
>
> I walked out of that whole thing with a real lesson: in big projects, establish the relationships first.
>
> It all comes down to the relationship between the two leaders. If you don't trust each other, it's almost impossible for the rest of the team to trust each other.
>
> In essence, we are buying a complex project delivering relationship...
>
> So, when I go to Paris, the French Minister's talking to me about satellite systems and reminding me of the relationship between the two countries; you know that sort of thing.
>
> I think comparing the two contracting structures, the alliance model versus the fixed-price model, and the issue of managing relationships is much more intense in an alliance.
>
> ...the political relationships are important, particularly when a parliamentarian's seat is marginally held, or the government is in a precarious position.
>
> I think the point to note is that the political office had a direct commercial role here because it is about the relationship. The political office shapes the relationships.
>
> If this goes sour, the best thing we have is our ambassador to a country with whom we had a fairly weak relationship, versus almost a direct line into the administrations of foreign countries where the other companies were based or indeed, are sovereign owned.
>
> One aspect ... is the importance of informal relationships with people within Defence [in order] to understand where a project is up to both pre-tender and post-tender.

Diplomacy

Relationalism as theory, deals with the intersubjectivity of experience and meaning as well as the content of interactions and their historical (cultural) setting (Erikson, Sep 2013). In the context of an industrial marketing campaign and its tender project

instance, the practice of relationalism reflects in certain characteristics of diplomacy (Adler-Nissen, 2015).

None of the extracts above refers explicitly to diplomacy, but diplomacy is about the sustainment of such relationships. Diplomacy takes many forms; from the broadest objective of managing communication channels to, in this instance, the social construction of a new institutional entity – the tender enterprise – that requires polity building and multilateral governance.

The unit of analysis is the relationship *per se*; that is, additional to the analysis of the patterns of perceived behaviours of the constituent organisations in the collaboration. The relationship reflects a 'becoming' ontology; the reality of the emerging political entities that present as the industrial marketing campaign and its tender project instance. These relationships are the making of emergent tender politics which, in turn, are reflected in the prevailing discourse.

Figure 17.1 illustrates the similarity between the social construction of a competition (a tender) for the supply of Defence equipment, and the social construction of judicial reasoning.

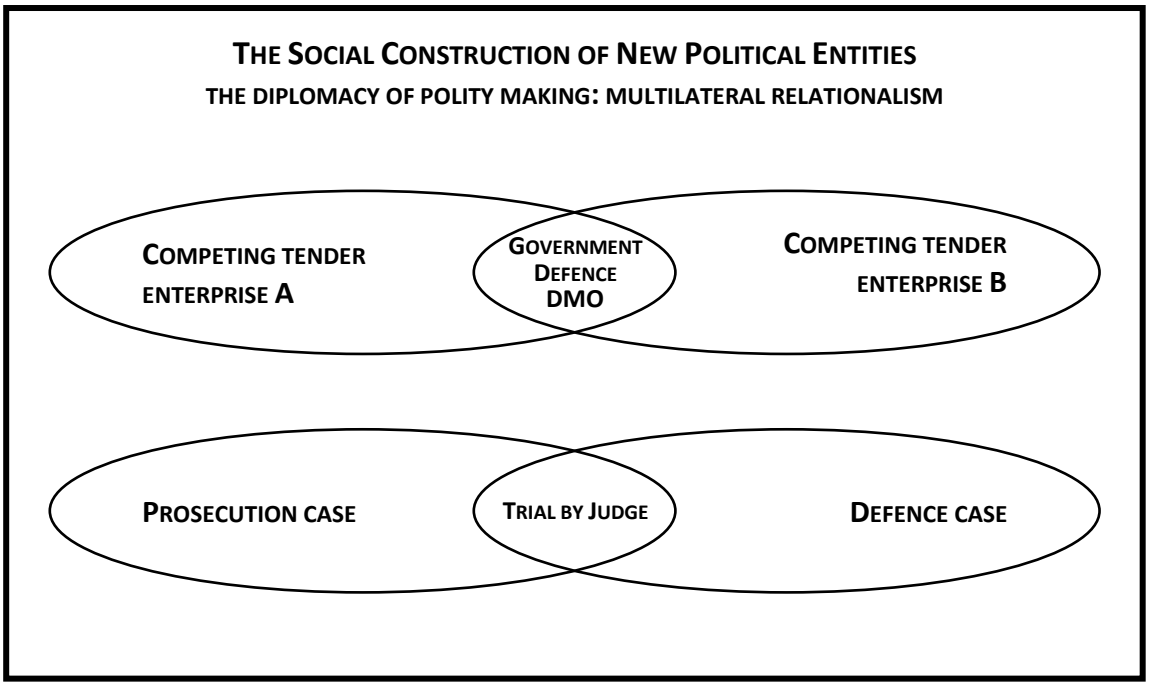

Figure 17.1: The polity of competitions for the supply of politicly-sensitive Defence equipment compared with a trial by judge.

In both examples within Figure 17.1, collaborations of organisations and individuals develop competing manifestos. However, all collaborations share common elements.

In the case of the Defence tender, the Government, Defence and the DMO work with both tender enterprises. In the case of a trial, the judge participates with both sides.

If mid-range theory for socio-politicly complex tendering is to mature, then multilateral relationalism is likely to be an important framework for reasoning. This cannot be surprising, particularly for the contributors in the above assembly of interview extracts; politics is deeply relational – a 'becoming' ontology with its lexicon of gerunds.

Lineaments of diplomacy

The idea of diplomacy is bifurcated. There might be a historical understanding of diplomacy in the context of the mediation of estrangement (warring parties). The other understanding of diplomacy reflects on the mediation of distinct identities: the relations of mutuality or intersubjectivity.

To understand this difference requires an analysis of diplomacy from at least two perspectives (Adler-Nissen, 2015, p. 291): an 'action' approach and a 'relational' approach. I posit is that there is no 'right' approach to diplomacy in the context of politicly-sensitive Defence tenders; rather, from the portfolio of options, different tender phases are likely to be more relevant for specific forms of diplomacy. Additionally, multiple forms of diplomacy are likely to co-exist for periods of time. These co-occurring modalities of diplomatic capacity and capability do not materialise voluntarily or spontaneously.

Possessing the phronetic insight to obtain and deploy such diplomatic resources might not only lead to the political appropriateness of a tender submission[318], but also, might contribute to the framing of the idea of political appropriateness. The converse approach might lead to the destruction of value.

Inter-action diplomacy: (unilateral signalling)

The inter-actionist approach is also detectible in diplomatic language itself: deep rooted expressions such as 'red cards', 'unhelpful', 'well-earned rest'. That is, a signalling device is used for approval or recognition, dissatisfaction, and reasons for removal.

Adler-Nissen (2015, p. 307) suggests that this is a constructivist interpretation of diplomacy. That is, constructivists interpret diplomacy as inter-action with mutual

[318] Note that this does not suggest the winning tender. Ideally, both competing tender enterprises are politicly appropriate.

signalling of values and identities. The simile offered is an image of billiard balls bumping into one another resulting in changes to ball vectors, but no change within the 'ball' itself. Such an impression of diplomacy, of unilateral signalling, might find little resonance with diplomats. Diplomacy is much more than the mediation of estrangement (billiard balls going in opposite directions).

Relational approaches to diplomacy: (reciprocal signalling)

For Wendt (1992), diplomacy is understood as a system of *reciprocal* signalling that affects identities and interests. At play is the interdependent and uncertain nature of the politics of vested interests (Tavistock Institute, 1966).

Soft power diplomacy

According to Adler-Nissen (2015, p. 293), soft power occurs when a country may obtain the outcomes it wants in world politics principally because other countries want to 'follow' it; admiring its values, emulating its example, aspiring to its level of prosperity, openness, and so forth. The same applies to institutions and organisations. Soft power is about getting others to want what you want (Nye, 2004, p. 5).

Soft power in action:

> The really scary part about the Lockheed Martin marketing strategy was that they were able to get people in the departments and ministries of defence around the western world; they actually got those people to do their marketing for them. And by having people in the departments and ministries of defence doing the marketing was an easy way of getting a decision early, and that's what they achieved. Lockheed Martin's marketing strategy is basically designed to enable Lockheed Martin to rape, plunder and pillage taxpayers around the western world for the next 40 to 50 years. (ABC TV: Four Corners, 18 February 2013)

Polylateral (or mutual adaption) diplomacy

As with Lockheed Martin above, diplomatic activity might be conducted by private companies or individuals. Indeed, some organisations of significance (often larger than some nation states) facilitate contact between respective administrations and heads of government.

Similarly, former heads of state, retired politicians, senior bureaucrats and key community leaders are retained from time-to-time to establish dialogue within cultural and political contexts.

Relationalism: Trans-action or relational diplomacy

Trans-action is the process of inter-action in which the entities themselves change in the process.

Adler-Nissen (2015, p. 295) considers the dynamic and unfolding nature of relationships in which patterns of change support reasoning about meaning, significance and identity within a particular relation.

As with this dissertation, systems of description and terminology or characterisation are socially constructed to distinguish phases of action. Marx saw class as a socially constructed relational phenomenon and not the outcome of conditioning ('false consciousness' (Habermas, 1979) (Crotty, 1998, p. 157)) (Ospina & Sorenson, 2006, p. 189).

Diplomacy in this sense is co-constitutive of other practices. The diplomatic system cannot be defined by its structure; rather it is defined by the conflicting relations that maintain, reproduce and transform it: its morphogenesis. These conflicting relations involve the war fighters, consultants, and stakeholders. In this sense, diplomacy is entangled with practice and politics. There is a mediation of 'distinct identities' in contrast to the diplomacy that seeks 'mediation of estrangement' (Adler-Nissen, 2015, p. 297).

Each collaborator within a tender enterprise represents a culturally distinct political entity open to mediation. However, the presence of 'the tender enterprise', in contrast to just an association of organisations, implies that 'diplomats' are considering matters of governance and policy making: the social construction of an integrated political order.

Multilateral diplomacy

Multilateral diplomacy addresses multiple audiences simultaneously. In such arenas (for example, a tender enterprise), there is likely to be significant information asymmetry. If that was not the case, then relationships would be unnecessary.

In contrast to mediation that allows life to go on in the face of unresolved differences, *multilateralism of itself* must be successful for the tender enterprise to present as politicly appropriate. In the purest form of multilateralism within a tender enterprise, each collaborator 'has' one or more diplomats assigned to the success of the enterprise. (In the USA, these individuals are identified as corporate ambassadors.) Collectively, they identify individual collaborator weaknesses and facilitate remediation as a

collective effort. The dissertation refers to the collective essence (haecceity) of the tender enterprise.

The multilateral context sees much 'outsourcing' of diplomatic services. At play are market logics and the creation of new information in the form of value propositions; recognising that new information for some is an information problem for others.

While diplomacy remains engaged with 'living together in difference' (Adler-Nissen, 2015, p. 303), the sustainment and growth of a multilateral venture presents ongoing and increasing demands on all parties. In progress is the social construction of a progressively institutionalised organisation. The diplomatic representation of ideas and interests is supplanted by metaphors of creating, building and change. Diplomacy is not just representing, it constitutes the substance of tender politics. (Some journalists believe that they have a similar purpose.)

Such diplomacy represents a culture in its own right and these cultural power structures contribute to Defence planning, organising, mediation, polity building and multilateral governance.

A reversion to matters ontological

How this discussion progresses is a matter for ontological reasoning in the first instance. Daniel Little (01 October 2015) asks, "What is *morphogenic* society?" He explains that while *morphogenetic* refers to the intrinsic tendency of all human societies to generate and change social forms, *morphogenic* refers to the specific societal syndrome characterised by the situational logic of opportunity stemming from 'unbound morphogenesis' (predominately agnostic to morphostasis) that leads to a wholly novel societal formation (the tender enterprise). Such a society is largely characterised by morphogenetic mechanisms with a relative lack of morphostatic mechanisms. Society experiences large structural change (such as the demise of the DMO) and appears not to converge to a stable equilibrium.

Maccarini (2015) takes this line of reasoning further by proposing that the idea of a relative lack of morphostatic mechanisms might be unhelpful. Rather, there are new 'stabilities' that are contingent and subject to *future* change; and this is where the relevance for a tender project becomes evident. The purpose of any project is a matter of future change, and the project is the agent of change.

Maccarini introduces to the project ontology the analogies of 'enclaves and vortices'; temporal and local forms of stability within a larger process of change. A vortex is a

secondary motion (eddy) within a moving fluid. Within this view of the social world, persistence in the focus of a tender project is bounded and embedded within larger fields of change (the tender campaign as a political exercise by both client and contractors).

As Daniel Little (01 October 2015) suggests:

> Such studies allow us to model morphogenetic / morphostatic cycles, comprising gradual change, catastrophes and sudden collapses, social de-generation and re-generation.
>
> In other words, they describe and model the possible 'rhythm' of social morphogenesis within particular time spans, characterised by given conditions and structures, in concrete case studies.
>
> The pivotal concept of the whole argument is that of turbulence.

Little's second paragraph (above) describes the essence of this research inquiry.

In the future, middle-range theory for socio-politicly complex tendering might be well served by the ontology of 'enclaves and vortices'; temporal and local forms of stability (persistence in the tender project instance) within a larger process of change (the tender campaign as a political process of change).

Theswe researchers are provided with a robust foundation for dealing with the world of tendering as social morphogenesis. Together, the morphogenic texture of 'enclaves and vortices' and the situational logic of *opportunity arising from unbounded morphogenesis*, will present research challenges. However, the quality of middle-range 'theory for tendering' is likely to be enhanced.

Reflection

This dissertation provides a study of patterns of change in relationships. It reflects the tenets of relationalism that insists upon the intersubjectivity of experience and meaning as well as the importance of social interactions and their historical setting (Erikson, Sep 2013).

Tendering is a game with an evolving storyline that receives contributions from players; where success reflects trust in a perceived ability to deliver the product in a politicly appropriate manner. It requires knowledge about an interdependent game, an ability to provide text to an ongoing story and thereby change the rules of the game, and a capability and capacity to 'hedge' the reserve currency of trust, all of which requires language, reasoning and diplomacy in order to generate (political) value from multiple

perspectives. These perspectives evolve, transform and fade but traces of their patterns of relationships endure in their passing. This is the murky world of industrial marketing campaigns for defence equipment; and when a political choice is made, it is justified publicly as the tender enterprise representing the best ‘value-for-money’.

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ANNEXES

TO

TENDERING CAMPAIGNS FOR MAJOR DEFENCE EQUIPMENT

2014

OVERVIEW TO THE ANNEXES

Annexure A

The Political Ecology of Major Defence Equipment Procurement: voices from the field

The primary purpose of this annexure is to convey an impression of the social and political complexity, ambiguity and the disordered realpolitik that engulfs a major Defence equipment procurement project.

The wide-ranging contributions reflect different political perspectives and agendas. In this wicked context, the government makes decisions rather than solving problems. If the primary purpose of this annexure is to express contextual socio-political complexity, then the secondary purpose is to position tendering in a linguistic domain.

Together with the Prologue, Annexure A is a product of personalities and their quest for survival. Their identities and their missions are a matter of history as the mess moves on. However, constancy exists in the different shades of political mess, starting at the top: *Der Fisch stinkt vom Kopf her*.

Neither department nor budget size explains why the department head is the highest paid Commonwealth officer in Australia. In addressing the third purpose of Annexure A, this murky work of Defence tendering aligns inextricably with matters of international alliances, national security and the certainty of control of civilian government over the military. Suffice to say that the Defence procurement agency (DMO) is central to these endeavours, and therefore, has a potential to map the mess, while the actual guns and ships might just be catalysts in a much bigger game.

The individual stories in Annexure A are interesting and at times entertaining, but when seen holistically as a mélange, the takeaway impression is that to be a player requires constant situational awareness through connectivity in order to map bits of the mess. Annexure A is a never-ending story.

Annexure B

Conceptual sense-making data

All Sense-Making Item (SMI) data present in polar (radar) client-contractor dyadic charts. Additionally, SMIs group within the tender project epochs. The juxtaposed sensibilities of the DMO client and contractor display in this dyadic presentation.

Importantly, the charts reflect the ongoing situational awareness of the client and contractor respectively: a linguistic awareness that is conceptualised in the inducted communication behaviour (SMI).

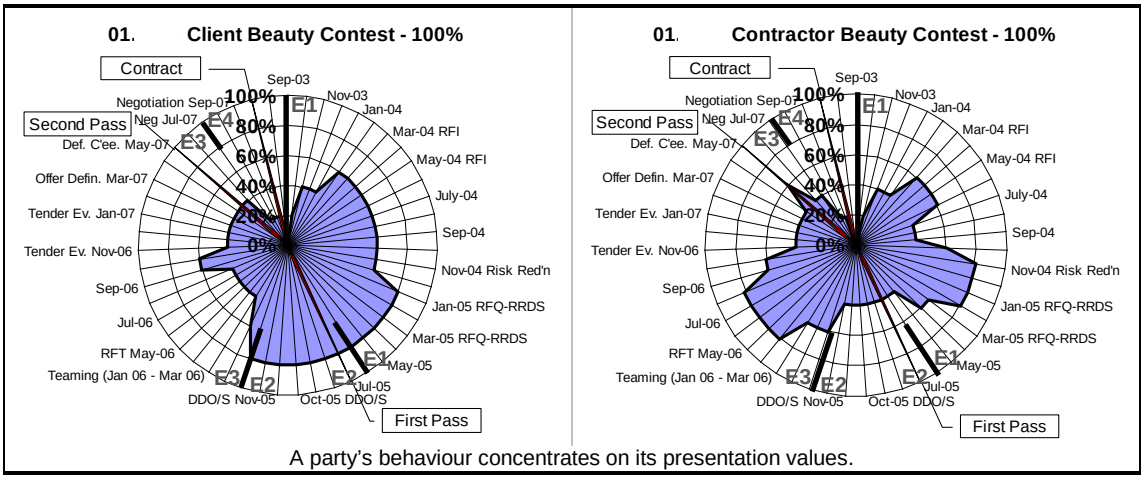

Figure 1: Client-contractor comparative observations of the same communication behaviour.

Annexure C

Contrast of situational awareness of leader and subordinates.

The percent of the Support Managers' awareness of an SMI, which is contemporaneous with their Program Manager's awareness.

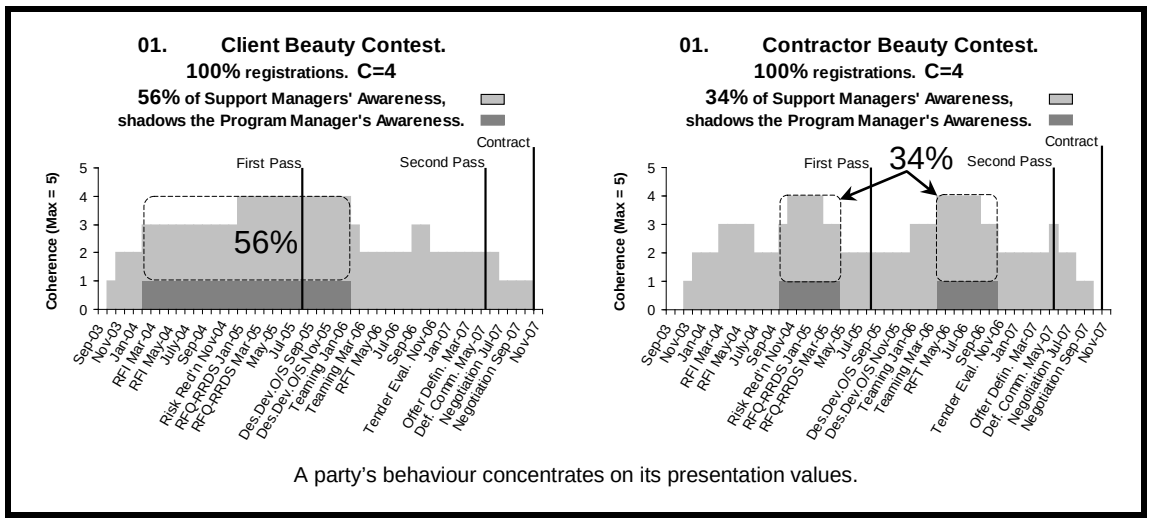

Figure 2: For the same SMI, the situational awareness of the contractor leader and staff, in contrast to the client leader and staff.

In Figure 2, the situational awareness of the client's project manager overlaps with 56% of subordinate staff, while the situational awareness of the contractor's project manager overlaps with 34% of staff.

In general, the data suggests that project managers have, as individuals, inferior situational awareness in comparison to their subordinate staff.

Annexure D

Situational awareness comparison of client and contractor with respect to each other and all other SMIs.

Annexure D translates the data in Annexure B. All epochs are considered in the one chart.

X-axis

The x-axis represents a compound calculation. The first part considers the absolute difference, at say epoch E2, of the client and contractor observations. (Refer to Figure 1, epoch E2, for a visual comparison. This difference value becomes the numerator for both client and contractor. The denominator value is the actual observations for the client and contractor respectively. The x-axis value for the client is approximately 50% and 100% for the contractor. The client has significantly more observations in epoch E2 (Figure 1). For the contractor, the difference between client and contractor is about the same as the actual contractor observations. Hence, the contractor has an x-axis value of 100%.

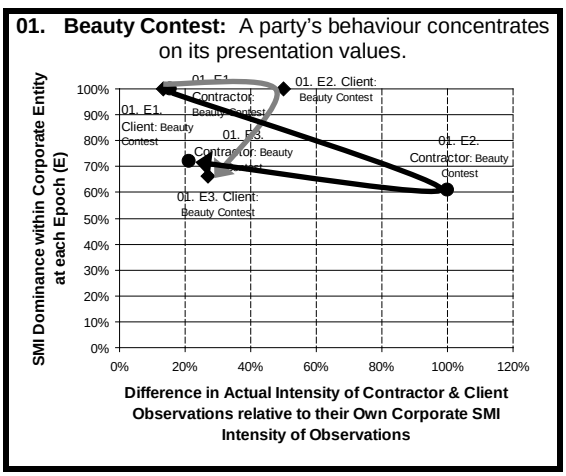

Figure 3: Relativity of client and contractor situational awareness

When one organisation has zero observations in an epoch, the organisation receives an x-axis value of 100%.

Overview 4

Y-axis

This is a ratio calculation. The denominator is the highest scoring SMI in the epoch (of all possible SMIs). The client and contractor are separately considered. The numerator value is the respective client or contractor observations in that epoch. The maximum value is no greater than 100%.

Interpretation

(Compare with Figure 1)

Client and contractor are reasonably similar for epoch E1.

In epoch E2, the contractor has inferior situational awareness. However, relative to the best of all other SMIs in the epoch, the contractor scores 60%

Relative to the highest of all SMIs in epoch E3, the client and the contractor are about the same.

Annexure E

Predictive accuracy of the Bayesian Belief Learning Networks

The procedure uses Bayesian Belief Learning Networks as an instrument to measure the conjoint discontinuity of persistence of all Tendering Purposes (TPs) in a nominated epoch. This is a de facto measure of the complexity of information seeding and information seeking SMIs within the epoch. Persistent awareness of communication behaviours produces high cross-validation values. Continuity and discontinuity of persistence might coexist. Where these are about the same value, the standard deviation of the data set becomes large.

Annexure F

Annexure F displays an expert system for translating a Sense-Making Item into sense-making organisational domains of ‘simple’, ‘complicated’, ‘complex’, or ‘chaotic’. The expert system uses facts and patterns of behaviour.

Each organisational domain represents an archetype (Snowden, 2006) for the expert system that allocates all SMIs to their respective organisational archetype.

The expert system was audited (Snowden, 2007).

Annexure G

Typology of Sense-Making Items and Tendering Purposes

This typology relates each Sense-Making Item to a unique Tendering Purpose.

Annexure H

Audit of results

The audit if results is conducted by the CEO DMO, the Deputy CEO DMO, and the respective Case S and Case L DMO project managers.

Annexure I

Supply oligopoly

All major sectors of arms supplies, be it warships, aircraft, tanks, trucks and trailers, and so forth, are conformed as international oligopolies that participate in mergers, acquisitions, demergers, partial sales and similar. This annexure lists the frequency of such activity in one sector.

As a broad generality, individuals tend to circulate within the oligopoly.

Annexure J

Communication Networks

These communication networks are produced by the respondents using freehand drawing. Of note is confirmation of the role of lobbyists and the active role of a major foreign subcontractor seeking potentially to replace the selected Australian prime contractor. The ‘omnipotent’ government is conducting parallel negotiations within a tripartite contractual arrangement.

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ANNEXURE A

THE POLITICAL ECOLOGY OF MAJOR DEFENCE EQUIPMENT PROCUREMENT:

VOICES FROM THE FIELD

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0
APPROACHING THE CONVERSATIONS

0.1 The primary purpose of this annexure is to provide an evidence base for the proposition that tendering for high-cost politically-sensitive defence equipment is a political process and axiomatically, a disordered process. A thematic index provides a line-numbered back reference to the text. All source materials derive from interviewee-approved transcripts and other publications. The secondary purpose is to indicate the scale of stakeholder involvement and their competing geo-political and/or parochial objectives. When all these issues are added to the technical complexity of major equipment such as ships and planes, the cognitive limits of any one individual becomes problematic and symbolism is available to bridge knowledge gaps.

0.2 FRAMING THE STORY

Military equipment procurement occurs in a strategic landscape in which there are five clearly identifiable players. The Australian Government, the Australian Department of Defence which uses its Capability Development Group (CDG) to define requirements and its Defence Materiel Organisation (DMO)[1] as the procurement agency, and the contractors (often partly owned by foreign governments), who deliver multi-billion dollar equipment and other materiel[2]. A further sixth 'player' is a coterie of countries with which Australia has diplomatic alliance and strategic interests. Additionally, there are at least two powerful yet non-accountable players who orbit and target the process; an amorphous mass of government-relations specialists including contractors' in-house staff, fee-for-service lobbyists, ruling and past foreign Heads of State, and political operatives in the Defence Minister's Political Office, whose accountabilities are outside bureaucratic control and relevant Acts of the Australian Parliament.

This assembly of conversations, anecdotes and extracts from publications, together with their endowments for history and heartfelt entreaties, offers a forum for each player seeking engagement with the reader.[3]

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[1] The Defence Materiel Organisation (DMO) is a 'prescribed' organisation that is financially accountable to the Minister for Defence, rather than the Department of Defence.

[2] **Materiel** (Fr. matériel) refers to equipment used in warfare. The terms 'materiel' and 'equipment' are interchangeable and both are currently used in the Australian Defence context.

[3] (Flyvbjerg, 2001, p. 86)

0.3 ENGAGING WITH THE PARTICIPANTS

Contributors include: the contractors, the DMO's CEO, the DMO's Special Counsel and senior procurement executives, Defence and government pundits, the then Treasurer (of the Australian Government), the various Ministers for Defence and their political advisers, defence industry representatives, strategic analysts, the Auditor-General, economists, journalists and their editorial contributors, authors, war-fighters, and the visiting US President. Each brings a different prism[4] to the landscape. The presentations are a condensation of over 150 hours of open-ended 'stream-of-consciousness' voice recordings and excerpts from publications and broadcasts.[5] In their own voice, they present personal opinions and visions as they wend their way through relationships, bureaucratic intrigues and political imperatives. And no doubt, different accounts might have been obtained had a different form of data collection been used.

0.4 REFLECTING ON A GRAND NARRATIVE

The unfolding drama could have its own 'Greek chorus' chanting Marcel's thoughts not to reason about these experiences, but to 'listen to their mystery as they collectively produce a grand symphony of being'[6], or Barritt's unaffected suggestion to just 'examine with a sense of wonder'[7]. Tom Stoppard, in his 1993 play *Arcadia*, cautions against possible hubris when his character Septimus remarks, "When we have found all the mysteries and lost all the meaning, we will be alone on an empty shore."

With this in mind, Wittgenstein's philosophical presence can be a guide to understanding the contextual spirit sought by these conversations and anecdotes.[8] He refers to the kind of understanding that consists of seeing 'connections', as distinct from just a catalogue of 'mysteries'. But his connections are not the science of connecting a collage of entities with arcs or edges (example, social networks); his is a *montage* of connections. A conceptual analogy could liken this montage to layered transparent sheets with each sheet offering a different image, but any one component on a single sheet might derive meaning from the presence of a particular component or components on other sheets.[9] These connections reflect a mutual relationship of a particular space, time, activities and behaviours. Such connections might not have occurred if the

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[4] Prism rather than lens; deconstruction rather than focus.
[5] A Hansard-like translation has been applied to all verbatim transcripts.
[6] (Marcel, 1963)
[7] (Barritt, Beekman, Bleeker, & Mulderij, 1985, p. 25)
[8] (Monk, 2005)
[9] The mechanics of this technique is applied in land-use planning.

'encounter' had not presented itself; a construct derived from the mutual presence of contributing artefacts. For any individual, this mutual presence might represent *the existing state of affairs and the possibilities* - a personal reality. For Martin Buber, the encounter (connection) is between *Ich und Du* (*I and* FAMILIAL *You*); the unstructured relationship that stresses the mutual, holistic existence of two entities agnostic of speech.[10]

0.5 COUPLING LIFE AND NARRATIVE

In life, these relationships can be shaped by conversations, discourses, stories and narratives. In this context, they give an Australian voice to place – and a place to voice, because place shapes the stories that are told or can be told. Narrative draws upon life for inspiration to create an imagined world that has substance and meaning. Meanwhile, life draws upon narrative for resources to imagine our identity and to interpret the behaviours of others, situations, and the 'real' world. Both inform and create each other. This is not a singular landscape. There is a landscape of action on which events unfold, and then there is a landscape of the collective consciousness.[11]

0.6 DECODING THE ENCODED VOICE WITHIN CONVERSATIONS

In the following pages, the reader can muse about the people they have 'met', the pretences observed, the unedited tone of voice with occasional tortured grammar, and the messy spirit of their collective biography. Each speaker offers a way of seeing other people, their textured lives and presence. These 'other' people provide a construction of their own identity and the speaker is offering a personal construction based on recalled observations. The outcome suggests a construction of a construction, a double mediation of meaning-making of the existing state of affairs, and a double mediation of the possibilities; an ontology of 'being' and an ontology of 'becoming' respectively.[12]

Their landscape of action can be drawn readily from the themes within the conversations - but what of the landscape of the collective consciousness? How should this be traversed? One approach is to interrogate the conversations.[13] For example, how does the positioning of the collective discourse change between its beginning and its end? Who seeks to shape the discourse? What resources are employed to shape the discourse? How do new entrants engage with the prevailing discourse? How is the way

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[10] (Buber, 1937) The encounter is not restricted to people. It can for example, be an encounter of a person with a painting.
[11] (Andrews, Squire, & Tamboukou, 2008)
[12] (Chia, 2003)
[13] (Malson, 2004)

cleared for a replacement discourse? Which activity appears to provide a tipping point[14] into the new discourse and who pushes back? Who is held in trust for the new discourse? The list continues but their collective product offers a landscape of the socio-political world order of complex tendering; the political games-at-play which seek to shape a future certainty out of prevailing ambiguity.

0.7 THE REPORTING CHALLENGE

Different personal frames of reference might produce different realities; the realm of 'own opinions'. A problem for the researcher, particularly in relation to some politicians, political appointees or bureaucrats, is the issue of 'spin' and a new constrained vocabulary for thinking – the discourse. As US Senator Daniel Moynihan said, "Everyone is entitled to his own opinion, but not to his own facts."[15] The pervasive impact of staffers, bureaucrats, and consultants, with a background or interest in economics, is considered by the eminent Australian scientist, Lord (Robert) May, (Chief Scientist in the UK and President of the Royal Society).

> ...[M]ore recently I've come to learn a little bit more about economics and I realise it is very largely (and I don't mean this in a sarcastic way, it's just a statement), it is largely faith-based. It doesn't have much in the way of testable hypotheses and things. It does have things in the way of simple models but they tend to be grounded on beliefs, and the discussions they have would have been a more familiar in Socrates' Athens than in today's scientific colloquium.[16]

This is not to deny the value of a socially relevant practical social science in contrast to a social science emulating the natural sciences[17], but rather, to suggest that much of what follows could be considered 'faith-based beliefs' where temporal faith is grounded and shaped by a changing political agenda; not necessarily by ideologies, although winning the next election might contribute to a politician's ideology.

If this is the case then the context in which Defence procurement occurs might be described as politicly and socially complex; evolving and in need of constant probing with conversations and trust-building initiatives; truly a wicked mess[18] of wicked policy issues[19].

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[14] (Hulme, 2009, p. 205)
[15] (Weisman, 2010)
[16] (Williams, 2011, December 24)
[17] (Flyvbjerg, Landman, & Schram, 2012)
[18] (Hancock, 2010)
[19] (Griggs & Howarth, 2012, p. 168)

1
THE CONTRACTORS[20]

1.1 MY EXPERIENCE WITH THE DMO

In the rest of our lives, we tend to buy our products based on what the record of performance is. We thought that was important but in Defence tendering, it's almost like you start with a totally clean sheet of paper and it's based on the case that you can present on paper as to why they should select you and you have to make that case against the criteria they specify in their Request For Tender (RFT).

When you're finally selected, that doesn't mean that you have truly won; all you are really selected for is as preferred bidder. It just means that then you have earned the right to go into negotiations with the Commonwealth. There's that 24 hour period of joy, and then when that subsides then you go, wait a minute, are we confident in 20-20 hindsight that we haven't somehow agreed to some things here that we shouldn't have?

I found you just had to have this inner confidence and comfort that these guys at DMO are not trying to play a game, they are not trying to trick you. I need to form a relationship so that it begins to build that level of comfort. If the DMO's program manager suddenly decided to leave DMO, and take a job on the other side of the world or something, the whole relationship is a little more at risk. Over time, that basis of relationship, counted far more than the dollars and cents.

But, you are obligating your company into a situation where later on, those relationships may not be there. And attorneys get involved and take some very liberal interpretations of the language. It happens. We never felt that somehow we had bid against an ill-defined or poorly understood requirement. What we really felt was that we understood the requirement and we had bid to match it but we were very concerned that the DMO historically, tends to later want more than it asked for.

[20] This collage of verbatim transcripts comes from companies comprising the five leading (by annual turnover) Defence contractors in Australia. It is biased towards the specific cases studied during the research. Their opinions are presented as a single voice.

1.2 My take on 'complexity'

I think that complexity is largely injected by the industry players. I also think that DMO wants to have clarity and simplicity. The tendering documents are so complex that you can get ten different experts in the room and they will tell you ten different solutions of here's what the government really wants.

The bureaucrats have to make decisions that are important to them on a political basis but I don't think that they would fully appreciate the impact that has on us. They may see it through a totally different lens and you'd guess they are trying to deliver in the political direction.

1.3 Teaming with another contractor

Before we ever talked about business, we had to figure out if we liked each other, OK, and if we can trust each other. When the commercial discussions were over, we would go out that night for dinner and the games went away and we really had a very close personal relationship with our teammates there. And that almost Jekyll and Hyde relationship between us I think had an incredible impact on our eventual success.

1.4 The politics of Value-for-Money

I was trying to read between the tea leaves and trying to understand what path the government was really going to pursue. And I kept trying to get some sort of guiding signal from DMO and it never came. They said it will be based on value-for-money. And I wanted to understand, well, how will they evaluate that? They would not reveal anything other than to say, you've got to go and work that out yourself. If I hadn't already had a bit of a relationship with them, it would have just pissed me off right there. And I just think that some of the rules that DMO uses of having to solicit off-the-shelf prices and stuff as an option[21]; it undermines certain issues of trust.

Value-for-money is an undefined. It's not just ill-defined, it's undefined. It's the expression that's used by the government to make its source selection on. It's left to the government to decide in any given situation, what provides value-for-money. So, the DMO makes recommendations on say two good bids but it's the government that decides and explains to the press that the decision was based on the best value-for-money.

[21] (Kinnaird, Early, & Schofield, 2003) A recommendation from the Kinnaird Review that there should be an off-the-shelf option for comparison.

It's a pretty contentious thing. In the Commonwealth Procurement Guidelines[22] there is a reasonable definition of it but it essentially means that there is great latitude to tilt the evaluations whichever way you want it. There are no published weighted selection criteria. So, industry is very wary of tender evaluations because of that. There's no protest structure in Australian the way there is in the [United] States[23]. There's not a [specific government contracting] judicial process for getting your complaints resolved. I don't want the American [appeals] system by the way. I think it's a terrible system.

Now I don't have a narrowly defined definition of value-for-money in my private life and I wouldn’t expect the government has, in the way that it procures systems. But it creates angst and issues within the game playing because billion dollar programs are going to be awarded based on ‘value-for-money’. Value-for-money can be whatever the evaluating team has in their mind that they really want and they can always legally defend that. There can’t be a mathematical formula because everybody would then deliver the same outcome.

So the government will have some criteria but through the tendering process, you can actually cause them to say, ah well, there’s a metric we hadn't considered; maybe we need to enter that one into our process. All the way through, you are weaving in themes and presenting information in a manner that lets you create a framework for how you want the bids to be evaluated. A classic game is to provide DMO with a set of [trade] studies that compare your product with the competition. Your goal is to educate the client but always deferentially.

The DMO charter is to go out and deliver maximum capability to the Defence Force at the best price they can get. In reality the term that you are trying to really get some substance around is ‘value’. What is it that they value and how are they valuing it? You have to be able to operate in a very fuzzy environment in which you have an instinct of what is the real value. The guys who wear a uniform have one set of values. The people, who are being measured by how well they procured the system, have a different set of values. Politicians have another set of set of values; there’s an election soon. If you go up to them and say, "What are your values?" They will give you an answer but it may not be one that is well thought out. So you have to actually spend a lot of time, listen to them, read their body language and sometimes you have to interpret what their values are because they may not even know for sure. My success or failure is simply based on my ability to form a judgement and to form a view of things.

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[22] (DOFA, December 2008)

[23] (DMO, 1 July 2009) This statement should be tested in the context of Defence Procurement Policy Manual.

To do this, I need to work in two parallel worlds. The technical RFT [Request For Tender] represents the real world and the invisible world is where the political decision-makers operate. I need to understand what the Ministers from the various States want as the outcome and which camps they belong to. If I didn't, I'd leave myself at risk because if I know what drives them emotionally then I can arrange our bid accordingly. Our Board members meet with Ministers quite legitimately and frequently in their normal business and we did retain a lobbyist but it was more of an advocacy role. I need to understand what they really want; which definitions of value-for-money will prevail?

1.5 MY LIFE

I think what happens in this process is, if you are an industry participant competing for a major government contract, it's a very high stakes game where your career, your livelihood, the future of your family's at stake. I've felt the heart-break of loss probably a lot more than the thrill of victory. The impact of not winning would have just totally changed every aspect of our business.

As program manager, much of my time was spent considering how we responded to both verbal and non-verbal communications and what we thought was happening inside the government. We sat around and tried to ascertain what all the different signals meant. It's a game, and furthermore, you know, we were flying by the seat of our pants 99% of the time.

I walked out of that whole thing with a real lesson: in big projects, establish the relationships first. When rumours abound and you have self-doubts, you have to have some form of strength because you go home every night tied up with knots and you have to get out of bed the next day and go right back in, and it's hard to hold the course for well over a year.

My role is to really ensure that the relationship is right. You want to go into a competition having the top people in DMO of a frame of mind that hey, if all other things are equal, we are their preferred choice. It's just based on relationships.

But politically, I could almost imagine that if you could spin the roulette wheel now then you might get a totally different answer than you did a year ago because the politics are different. (Emphasis added)

2
THE CLIENT: THE DMO[24]

2.1 RELATIONS WITH THE CONTRACTORS

At the end of the project, I signed a contract with the successful contractor and then we went out to dinner with our partners. The first question he asked me was, "What was your game?" I knew he'd never made sense of it and if I was back in industry, I couldn't have made sense of it either. He was unaware that the Minister had influenced the acquisition strategy and I couldn't tell him 'till now.

And my staff played games too. In the evenings, I would call both of the contractors' CEOs as I was driving home and we would discuss the games, have a chuckle, and then each of us would indicate how we intended to control, curb or stop a particular game playing between our subordinates. And by the morning; a miraculous change in behaviours! We even used 'red cards' to indicate that someone had broken the 'rules'. It was a bilateral process and it worked because we were on the same wavelength. I made sure of that.

You must listen to what your counterpart is telling you about the teams because we have to work together for at least 10 years. It all comes down to the relationship between the two leaders. If you don't trust each other, it's almost impossible for the rest of the team to trust each other. Relationship is absolutely critical to ensure that the project is successful.

In the last weeks of contract negotiations, the overall relationship became seriously strained. And people got hurt. So, the new project manager will have to rebuild the trust.

2.2 INFORMATION SEEKING

The detail of the [politically influenced] procurement strategy changed so many times that I needed a 'plan du jour' plus a well structured communications strategy. We were information-rich and the tenderers were relatively information-poor. During the period when they were preparing their bids, they were under intense pressure to reduce that

[24] This collage of officially sanitised verbatim transcripts comes from members of the client's leadership teams within the cases studied. The DMO client is the authority that signs a contract, however, the government is the decision-maker.

information gap. I can give them technical information but I can't give them strategic [political] direction. So, they spent large sums of money, perhaps as much as $20m on the whole bid. Some of this money was spent on consultants to facilitate access to the Minister and anyone else who they thought might enlighten them. My belief is that with these really high-level multi-billion dollar projects, information seeking probes [into government] don't work. They don't get the information because it's so tightly held by just a few people.

Just after tender evaluation, the preferred contractor[25] stopped giving us information because they were playing a game which goes something like this, "I've got a deal, I've won and the client wants more information. It's not in my financial interest to provide more information until *after* contract signature. Any scope changes after contract signature means more money to me." So, the confrontation builds to a crescendo and very occasionally, Ministerial backup is needed.

In general, complex projects have a 'battle rhythm'. You have a rhythm of information gathering which reaches a peak when you are able to see the whole picture. But not everyone can maintain the rhythm, and misinformation will fill the gaps. I've had ambassadors sitting here reflecting national indignation because of misinformation; and ambassadors from losing countries who thought they had actually won. You can see how this becomes messy and politicly complex.

Part of the problem stems from our past employees. When we negotiate, the people sitting on the other side of the negotiating table are often former officers of the Department or DMO. So they sit there, sometimes on chairs that we had deliberately lowered, knowing what we are doing because they used to do it and they have their responses prepared. Many have had 20 and 30 years of Defence culture embedded in them. They operate in their old frame and are not aware of how we have evolved and matured and embraced the realities of complexity.

Even though I was working to a script to ensure that the information I provided was exactly the same to each competitor, they could perceive it differently and then assume a different game at play. What happens then is that their behaviours change as a consequence of their translation of their perceived game at play. I would give them lots of hints and guidance, but they must listen to every word and not just the ones that make immediate sense to them.

[25] The preferred contractor has been advised of their superior status and all other contractors have been advised of their grading to the reserve list. Negotiations with the preferred contractor can fail.

The Commonwealth Procurement Guidelines[26] and the way Defence implements them[27] is quite strict. During the tender preparation and the tender evaluation, any communications with DMO must be shared with all competitors. There was almost a fear of going back and asking the tenderers for more information. But there was real apprehension about asking *different* questions to each tenderer. The reality is that we were evaluating different proposals with different value propositions. And you have to understand each one in detail. I had a number of people in this organisation saying to me that I couldn't ask different questions to the tenderers; but I did! Our pre-eminent jurist acting as our probity advisor, and our other probity advisor from the Australian Government Solicitor's Office, said obviously you can because with the differences on offer, you have to, but within certain boundaries. We broke with the prevailing culture in our organisation. We were told by our own contract people who had been here for ages, the holders of the holy grail of rules and regulations that we were not allowed to ask the tenderers different questions. And literally they thought we would go to gaol and then on to hell!

I think that the existing constrained interpretation of the Commonwealth Procurement Guidelines is very naïve. It can't give the Commonwealth a good result. In industry, if you find that you have two very different propositions on offer, you wouldn't go back to the original tender document to do your evaluation, because now you have information that you weren't originally aware of. You would end up with a fundamentally flawed decision because you didn't understand the value proposition on offer. National culture also impacts what is offered. Some cultures prize quality in their value propositions which means that the client has to pay a premium but if you get superior product life then this might represent good value-for-money.

2.3 ORGANISATION CULTURE

The government had given me a budget and I insisted that the tenderers keep within that budget. I knew it was unrealistically low but I was interested in how they would cope. At the same time, I had to deal with our culturally embedded 'Iron Colonel syndrome'[28]. These people try to block or hinder whatever you are trying to achieve. I had to deal with that all the time; right through to now. Why do they do it?

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[26] (DOFA, December 2008)

[27] (DMO, 1 July 2009)

[28] There are several anecdotal definitions of this term but a more complete title is 'Star-Gazing Iron Colonel'. Colonels seek promotion to the rank of Brigadier which is signified by star-shaped accoutrements on the epaulettes. Promotion arises from satisfactory performance reports delivered by the Colonel's superior officers. To cultivate unblemished opinions, 'problems' received from the Colonel's subordinates are blocked by the Colonel and problematic directions received from the Colonel's superiors are passed to a committee or similar diversion which should delay the matter until

In contrast, many bureaucrats compete for involvement. Up to the time when we released the tender, everyone wanted to be involved. You get nothing during the tendering period and then you get a peak of interest where everybody wants to engage with you just before the decision-making occurs.

I noticed early in the process that I had a couple of people on my own team who had had poor experiences with one or both of the short-listed contractors. "Why are we wasting our time with these tenderers because they always treat us like crap?" My view is that organisations change and their behaviours change with changing leadership. I wanted to see what the company is like *now*.

2.4 POLITICAL DECISION-MAKING

The Minister decided the acquisition strategy. So, the political context was set. My discussion with the Prime Minister was technical in content. I spent only a few minutes in the Cabinet meeting. At the end of the day, it's rightly the Minister and Government who make the major capital acquisition decisions.

My engineering evaluators were never privy to the price data. This is where the notion of 'value proposition' contrasts with the concept of 'value-for-money'. Sometimes, just like with a car, a super fast car has no added value for me if it just gets me to work and back. I'm not prepared to pay that premium. The very nature of complex procurement is that you will be offered different technical solutions to deliver a similar capability. One might be cheaper but the other might last longer.

So, how do you choose? I rely on the intellect of the people making the decisions based on the data presented. For instance, I was interested in how the respective contracting teams would work together. In one case, I could not envisage how that meta-team could work. They had a number of nationalities with very different Asian and European cultures who needed to cooperate. This is serious social complexity.

I am trying to get the best value-for-money for the government. Value-for-money is an amorphous term. It's a judgement. You get seven smart people in the room and look at all the stuff and then come up with what you think. No more science than that. You are offering a gut reaction to a lot of detailed analysis in front of you. The principle of value-for-money is just that, it's a principle. Values are not scientifically defined. If somebody wants to appeal against it, you have got to be able to sit there and justify it. And remember, it's our value system; not theirs.

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after the promotion reports have been submitted. Another interpretation reflects the steadfastness of Colonels seeking to provide their war-fighters with the best equipment regardless of cost and bureaucratic process.

I don't think you can consider value-for-money until such time as you have got the tenders in and you have evaluated them and understood their value propositions and how our value propositions have matured. And I don't believe that you can absolutely understand all of the value propositions on offer until you actually see the 'whites of their eyes'. Who can you really trust? Then, it comes down to our understanding of the differences between the bids and the value *we* attach to these differences that then give rise to an understanding of relative criteria weight. Therefore, you can't have the evaluation criteria weights in the RFT [Request for Tender]. You could, but would you then get the best value-for-money for the Commonwealth?

Aside from what we think, once the Minister makes a pronouncement about what he thinks is of value or the government thinks is of value, it then automatically goes into the selection criteria. In essence, we are buying a complex project delivering relationship that has to last many years.

But, in the short-term, I have to deal in the political world and that means that I need to be cognisant of what Cabinet, as the final decision-maker, needs [in order] *to make an informed decision.*[29] (Emphasis added)

[29] This outcome requires close liaison between the DMO and the members of Cabinet. Arguments for and against a purely political option might be offered by the DMO to the Minister. The original sentence was officially expurgated but it reflected a need to be sympathetic to government exigencies.

3
DR JOHN WHITE: CONTRACTING WITH A MONOPSONIST

Personal reflections of John White, Advisory Board Member of Defence SA, Executive Director Ignite Energy, and former Chief Executive of Transfield Defence Systems

3.1 THE REALPOLITIK OF POLITICAL ENGAGEMENT AND ALIGNMENT

I made a decision with one or two other people, such as Hans Ohff, that it would be a lot of fun and potentially profitable, to actually try to convince the government to build the new generation submarines, what became the Collins Class submarines, in Australia. And we started that campaign out of industry. We ran a campaign, and we found the sympathetic people strategically within Defence, within the submarine arm, who deeply believed that the Oberons [existing submarines] had been an absolute nightmare to maintain, repair, and keep seaworthy in Australia because they had been built overseas, and they couldn't get the IP [Intellectual Property], the parts, the support they needed, and it cost an arm and a leg and, from within the ranks, they wanted a different approach.

So we used that desire within the Navy's submarine arm, [and] the desire of the then Labor Government to do this work in Australia. So there was great alignment and we built on that, and we harnessed it, and we fed it. We created the project in Australia; against the will of all the overseas submarine builders and against the will of a lot of people in the civilian arm of Defence and a lot of the non submarine military arms. If you find the synergies and find the interactions, you can get a project that you want. But that requires communication and interaction and a sensitive proactive rigorous approach to successful project management. And in fact, you know, like all things, how do you turn this to your advantage?

Even though it was our creation, we lost the tender to build the Collins Class submarines, but we went on to privatise Williamstown dockyard through a competitive process; and we created the idea of doing that, again, with the government of the day. I think without seeking to appear to boast, I approached it with a national vision. You

should create a shared vision for the outcome and always put your relationship, your day-to-day interactions, into the context of that bigger vision of an outcome.

I think the politics is very powerful in the decision-making. It does bounce backwards and forwards very energetically but I think politics, or the desires of the political system can and does dictate an outcome. I simply say, "That's life". I think probably, 'ever has it been thus' and probably, 'ever will it be thus' in an [monopsonistic] environment like this. (Emphasis added) It's the fact in private enterprise too. Decisions get made by the owners and the boards of businesses. I just don't think that's remarkable. It may not be the common public perception, but you don't have to be in the system for very long to understand that that's reality.

To the question, 'Is winning the next election the primary political driver and secondary to issues of the national interest?' I think that's right. I would argue [that] we did lose the submarines on political interference. I was very cross about it at the time, but then we won ANZACs [warships] probably on political interference as well, and I was very happy about that. John Moore [former defence minister in the Howard Coalition Government] would say that the Minister, and I'm putting words in his mouth that I have no right to put in his mouth, but I think John Moore would say that the Minister of Defence has to get involved. The quality of outcomes of course, depends on the quality of the involvement and the intervention. But that's life. Someone's got to be prepared to be in-charge. And when it comes to Defence, it's the Minister.

3.2 SIGNS OF POLITICAL AMBIGUITY

You've got a Labor government that prides itself on acting to use market forces to deliver, [and] has walked away from the old idea of government owning and driving industry outcomes: nationalised industry. So, we've got a Labor government that is trying to solve the 'climate change' and the CO^2 problem by putting in place a market trading system for trading carbon dioxide, saying, 'The market will deliver; it's not for us to dictate how to do it'. In the very same time-frame, you've got them stepping in and neutering the telecoms national, previously government-owned company, Telstra, which has been privatised, and stepping in to build its [the government's] own new set of [nationalised] infrastructure for telecommunications.

So, there's an extraordinary inconsistency of the same government to issues of national strategic importance, that is, Communications and Defence, which are pretty comparable sorts of national strategic issues of importance. They are taking totally different approaches. That's not lost on industry. They quietly shake their head in wonder and bewilderment, but of course, you've got to get on and deal with a

monopsonist client and suss out and feel your way, because you have got to get your next dollar. But it sends very inconsistent messages.

Coming to Defence industry, which can't get away from the fact that it's a monopsonistic industry, there's always a tension between:

- Do we use local industry and have short lines of supply and build up skill and capability for strategic capacity outcomes as well as economic benefit/employment outcomes?
- Do we believe that Australian local industry can be competitive, can be of suitable quality? or
- Do we go overseas where nobody can blame us if something goes wrong because we have done an international tender and we've picked the best one; we haven't been parochial or biased or influenced by Australian strategic industry possibilities?

So, there's that natural tension which plays out at a political level, depending on the philosophy of the [political] party in power. But interestingly, in the last 20 years, whether it has been Labor or Liberal, there has been a propensity to look for the strategic Australian industry outcomes. That shouldn't surprise, because there's jobs, there's investment in regions: it's votes.

I think it's an area of solid alignment of interests because, I believe, Defence strategic capacity does depend to a large degree on industry capacity to respond in times of an emergency. If you don't believe there is going to be an emergency possibility then you shouldn't have such a big Defence expenditure anyhow. And that aligns with the desire of the politicians to be seen to be spending taxpayers' dollars in the regions of Australia: creating skilled jobs.

For example, I think that John Moore was underestimated as a Defence minister. He actually made a couple of very strategic decisions. One was, remarkably, to nationalise the Australian Submarine Corporation. He bought back the ownership of the Australian Submarine Corporation from private enterprise. A hell of a decision for a Liberal Defence minister! I think it was a very good decision, a very gutsy decision. I think the Collins Class [submarine] has been an improved project ever since he did that.

Because the Swedes [Kockums], who had been bought by the Germans [Howaldtswerke-Deutche Werft AG], were playing 'buggery' as majority owners of ASC; holding the Australian Defence Force and Government to ransom over ownership of IP. I personally pointed out to John Moore, when I saw that happening, as an independent person in industry, that there was a clause in the Collins [submarine]

project contract which allowed the government to force the acquisition [of the submarines] back off the company, after the ownership of Kockums changed, which it did as it was bought by the Germans. John Moore was very appreciative that I pointed that out to him. He went forth and bought it back and I think that was a great decision.

[On another matter of political ambiguity] as to any notion of the military's 'pretentions' to run the country, *I think there is always that very strong underlying tension, and 'ever has it been thus' in every nation-state that has raised a military. You don't have to look far, even today, to see the military propensity to take charge*. (Emphasis added) I don't find that surprising and that's why a [defence] Minister has to be strong and in charge - to echo the words that I think John Moore would give you. And I don't think it's a good thing when ministers change every 18 months. That is not a good idea.

3.3 MANAGING THE COMPETITION FOR 'GRACE AND FAVOUR' IN THE MONOPSONISTIC ECONOMY OF DEFENCE PROCUREMENT: THE DMO

Defence is a monopsonist. Defence industry is therefore not a real market-driven sector. It's driven by the purchase orders and the requirements of a single client, and so the requirements and the culture of the client dictate the nature and structure, and style and culture of the industry.

There's an old German saying, "The fish rots from the head". Depending on the 'head', it can be a sweet process, an efficient and harmonious process, a high quality process or it can be a rotten process. It permeates down very directly and very rapidly. The way in which Defence approaches its defence requirements at the highest level and translates that into industry requirements and specifications and orders, and the approach of the Ministers, that is, the politics of it, quickly permeates through the Defence military arm and the [Defence] bureaucracy. It's a direct line; it's a very powerful influence. That's not particularly unusual. There are plenty of other industry sectors that are dominated by very large clients. It occurs in the oil industry and the mining industry. It occurs in the telecommunication sector.

So you would think that [a] sweet alignment right at the top means that the head shouldn't be rotten; you should get a good flow down of harmony and aligned desires which would align with the Australian trade unions' desires, it would align with small business desires, it would align with big business and even international companies that base themselves in Australia [and] which now comprise probably 80% of the prime contracting large project capability. A buck made in Australia is as good to a Boeing as a buck made somewhere else. So, I don't understand why there should be tension in all of that. I think it is a sweet synergy. *The only conclusion you can come to is that there*

is a failure to capitalise on that potential harmony by the people who are implementing the monopsonistic award of procurement and project contracts. (Emphasis added)

Does that come from the military arm of Defence, does it come from the civilian arm of Defence, does it come from DMO, does it come from Department of Finance, or Treasury? Does it come from the Productivity Commission saying that you shouldn't spend a buck in Australia if you get better value overseas? I think that's a really interesting thing to explore. My view is that regardless of those diverse potential influences, and I'm sure they all have an influence, the military, or let's say Defence, let's just lump the civilian and military together, the Defence and the DMO have greatest influence over that: I'd put it at 80%:20%. And so, if they had a clear vision of that sweet possibility, they should be highly successful. And there is no reason why they couldn't be.

So, that leads me to focus on Defence and DMO for looking for the causes of disharmony or lack of performance or lack of delivery. I think industry is industry. Industry is very diverse and very competitive and very innovative, and to the extent that opportunities are described to them and presented to them for them to compete or to even sole source or go into alliance on, I think Australian industry, with all its international openness and participation, is probably better placed or at least as well placed as almost any industry infrastructure in the world, to deliver a very competitive, very efficient, very responsive result, for many projects: especially naval. I've seen how well Australian industry can address itself to new high-tech, major, complex, demanding projects for [the] delivery of infrastructure, whether it be infrastructure that's instigated by government for power, transport, water, or infrastructure for major oil companies, gas companies, [and] mining companies. I think Australian industry can deliver, and when I say Australian industry, I don't just mean Australian owned industry; I mean the whole international collection of capacity and companies that bring themselves to bear on any significant project in this country.

And interest comes out of Europe, it comes out of Japan, it comes out of China now, it comes out of the US. Everybody likes to come here for a well-competed or presented project. And I've seen some of the best projects done in the most difficult, isolated, unformed circumstances in Australia. And I've participated in half a dozen of them. So, it is ludicrous to say that you cannot deliver the most complex sophisticated project in Australia. You've got to get the right balance of international inputs. You don't want to be religious about what gets done how and where and by whom. You can achieve very high levels of Australian content though, in very complex projects, if you seek to do so in a very competitive fashion. So I come back to the 'head' that you've got to look to for the 'rot'; in this one, it has got to come to DMO. You've got to acknowledge

all sorts of influences, but you know the politicians have generally been consistently in alignment on the need for Defence: the need for Australian strategic Defence capacity.

Of course, they [the politicians] are going to step in occasionally and apply some politics about exactly where certain parts are going to be built for regional parochial political reasons. But frankly, if as DMO, you don't come forewarned and forearmed on that, then you are simply not understanding the most fundamental aspect of Defence procurement. And I don't believe any of that need be quoted as a reason for failure or difficulty. The same applies in any project, even in the private sector. *They [the politicians] could imply that they could influence the project in a major way if we [the contractor] didn't have an ear for some of the political regional aspects. That's the landscape in which you are doing a project. It's one of those things that you can't set yourself up in denial of; you have to embrace it as one of the elements of a multi-faceted, complex, many variable input project*. (Emphasis added)

So I simply don't accept that politics, in that respect, is unpredictable, not manageable, and a cause of the sorts of difficulties and failures that we're seeing. In fact, my experience is that if the project developers, and I say that broadly to mean the military, the DMO, and the potential or successful contractors, embrace that and to the extent that it does become a potentially significant problem for a major project, *[I say] that the political system is actually quite receptive to being informed of that and going away from messing it up*. (emphasis added)

DMO do not seem to have sufficiently embraced that possibility of alignment with the government and it would be either government, Labor or Liberal, they all want work in Australia and I think they [DMO] have made some fundamental mistakes in not recognising the opportunity of that alignment and not recognising how in detail to achieve it. So, there's just [a] lack of attention [by DMO] to the real desired outcome of the project by the masters, the politicians rightly, to deliver and maintain that sweet alignment potential. That's a particular perspective.

A national perspective is a good perspective that says, ‘We have Defence to protect the nation’. We need defence industry, because if you do have an emergency, which is the whole argument for defence, history tells us that you need to be able to support your defence force. You need to be able to mobilise it and expand it rapidly. You need to be able to build new products. You need to be able to repair and support existing products. You need to be able to integrate with your allies and bring in product from your allies and quickly get them into service. There's just an extraordinary alignment there, as I said, the nation-building possibilities of that; then [on] into your economy and into your skill base, levels of employment, investment in latest technology, and [its] sustainment. Because Defence is a monopsonist client, it can actually plan a continuous work load if

they had that desire. But Steve Gumley as head of DMO will probably say that's not his job. And I would say that it’s sad that he feels that it is not his job to consider some of these national industry strategic impacts and potential benefits.

To the question of the government needing to keep a critical mass of [Defence] capacity and capability, I think they haven't done such a good job and you can't expect politicians to plan that, and that's where I think the military machine and the DMO machine do have a real role to do a better job of planning the pipeline and presenting it to the politicians for the politicians to then have their influence and say [on] where is the work being done in Australia, [in] which country is the rest of the work being done, how does that fit to the [contracting] alliance possibilities? They are very political Defence strategic issues.

The ministerial advisory group will say that they have great influence over that and I'm sure they do, but I am sure the Minister will personally have great influence over it, taking all the advice that he may get, including the advice he'll get from the allies and the industry players. But I wouldn't underestimate the input that DMO and the military heads, and the Force Capability people have both on (a) the ministerial advisory [committee], even though they may suck it all in and call it their own, but certainly on (b) the Minister; [particularly] if there's a robust and sensible relationship between the military and the Minister, and one hopes that generally there is.

I've got an old hobby horse about this which only comes to my mind now because I haven't really engaged seriously in it for 10 or 15 years, but a model that they use in the US a lot starts from the point of view that at the end of the day, the government is going to make whatever decision it wants to make, but there's a clear benefit and probably even a legal requirement in large part, to have a competitive tender environment. And what the US does an awful lot is pay the tenderers to tender. In Australia, they usually don't pay them much. They will pay them for certain scopes of work and then you give up all your intellectual rights to it, and everything else. They [DMO] don't pay anything like the real cost of the tender in total. Quite often the Americans do.

DMO has had the opportunity to do some innovative things like that, with a long period of governments wanting Australian strategic capacity built [in Australia]; whether it's Howard's government, Rudd’s, or Gillard’s. But we don't do that sort of thing. It's an area where I think DMO have failed to sense the possibility of alignment with the political masters. What I’m really trying to get out of this story is that if, as a monopsonist client, you can create an environment, even though there always has to be a winner and a loser (or a winner and more than one loser) you can actually run your process in a fashion that creates a better environment of interaction and cooperation by softening the blow on the losers.

It costs $10m-$30m to bid one of these two-year processes: perhaps $50m. That can create terrible tensions where it need not, because the scale of these projects is so great that it would be easy for Defence and DMO to spend another percentage point of the project to create an easier-to-accept circumstance in the tendering process for the losers. You pay for it in the end, and if you don't do it [in] this upfront way which is fairer and equitable and more friendly, I argue that you pay a higher price the way they are currently doing it. And that's just poor structuring, planning, and strategy.

And that's nothing to do with politicians [making the decisions] or all of this stuff we are talking about, it's how DMO does its detailed job of thinking about how to better fit into what is the inevitability of the Defence environment, of the circumstance; and [they will] actually get better value-for-money. So, even if they lose, [the tenderers] come home with not a lot of money but they won't have wasted money. That's an elegant and fair way for a monopsonist client to run its business.

Always when you lose [in Australia], you have been used [as a stalking horse] to create [an artificial] competition. But, to the question of whether there is a 'round-robin' approach to the awarding of contracts, the answer is 'Yes', and sometimes your turn actually comes when you do put in a particularly good offer. (Emphasis added)

DMO is supposed to be a technical project management operation, and it should not be in Canberra. And it should not be filled with people that you can recruit in Canberra or into Canberra. It should be filled mainly with people from industry: commerce backgrounds. It should be decentralised out where the work is being done, which isn't in Canberra. So, it's just wrong in principle, and if you get something wrong from the highest level, it manifests its way in all sorts of unpredictable and strange ways: the fish rots from the head.

3.4 VALUE-FOR-MONEY

Value-for-money is a much used but very difficult concept because very rarely in these complex projects, are the offerings of two competitors easily comparable. You can take a formulistic view. To get an offer, DMO have to specify what they want in a design sense, but as a contractor you have to try to work out how to be selected for best value-for-money. They [DMO] do tell you what will lead to value-for-money. It's a question of whether you, in the end, believe that's what they will do.

You should be able to take all the specified items in tender documents and you should be able to say that so long as both tenderers have met the specification, which a tenderer seeks to do, then that should be a tick in the box. If the offer delivers more than is required, you should be able to make some assessment of what value does that deliver

as an extra, for example, more range, or more capacity to carry weight, or more speed, and so forth. And really, if both tenderers meet the specifications and comply with the contract, value-for-money should come down to what is the price difference in a dollar sense and what value do you put on the extras that they offer over and above [that] specified. I think you can come to a pretty good definition of value-for-money.

4
POLITICAL FAULT LINES AND FRACTURED TENDERS: THE AUSTRALIA NETWORK TENDER

4.1 LENORE TAYLOR: TENSIONS RISE OVER AUSTRALIA NETWORK BID[30]

SENIOR federal ministers are angry about a leak they believe was designed to pre-empt a cabinet decision on the long-running saga of the $233 million Australia Network television contract.[31]

The *Herald* [newspaper] has confirmed that a four-person high-level bureaucratic advisory panel recommended the tender be awarded to Sky News, over the [government-owned] ABC, which runs the service at present.

A decision on the tender was due in May but cabinet instead stripped responsibility from the department of the Foreign Minister, Kevin Rudd [whose department prepared the tender and funds the broadcasting service], and said a decision would be made by the Communications Minister, Senator Stephen Conroy, *on advice from the cabinet*. (Emphasis added)

The deferred decision was due last month, after a reconvened advisory panel looked at revised submissions from the two tenderers taking into account "international developments" including new broadcasting priorities due to the Arab Spring.

While cabinet is not obliged to follow the advice of the panel, the leak is seen by government sources as an attempt to make it more difficult for the tender to be awarded to the ABC. (Emphasis added)

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[30] (Extracts from: Taylor, 2011, October 18)

[31] All government departments, including Defence, subscribe to the same Commonwealth Procurement Guidelines. Politicly sensitive tenders outside of Defence are informative.

4.2 SYDNEY MORNING HERALD – OPINION - AUSTRALIA NETWORK IS THE LATEST VICTIM IN GILLARD-RUDD WAR[32]

There were reports that SkyNews had provided a superior bid and several cabinet ministers confirmed that they had been directly lobbied by ABC management, which was, at best, highly questionable in the circumstances.

The probity surrounding the tender process changed dramatically on June 24, 2011 with the release of extraordinary joint media statement from the Prime Minister [Gillard], Minister for Foreign Affairs [Rudd] and Minister for Communications [Conroy]. (Emphasis added)

Ignoring the significant cost and effort involved in the tender process, the government asked SkyNews and the ABC to resubmit tenders. (Emphasis added)

[The] excuse that leaks to the media undermined the tender process is laughable, given that the most likely source of the leaks is from within the cabinet itself. The Australian Federal Police have been brought in to investigate the alleged leaks.

Whatever the AFP is able to ascertain as to the source of various stories about the tender, the fact is *the entire tender process has been subject to an unacceptable and highly inappropriate level of political interference*. (Emphasis added)

The Australia Network tender has become the latest victim in the battle being waged between [Foreign Affairs Minister] Kevin Rudd and [Prime Minister] Julia Gillard.

However, the Prime Minister is said to be opposed to the bid on the basis that SkyNews is part owned by News Limited.

Whatever political machinations are going on within the government, it is clear that senior figures are using the Australia Network tender for personal political games. (Emphasis added)

Furthermore, it again puts on public display the dysfunctional relationship between Prime Minister Gillard and Foreign Minister Rudd.

…oOo…

4.3 ABC RADIO NEWS[33]

News Limited also accuses the Government of political tampering in the tender process, but *the Government says it deliberately gave [Communications Minister] Mr Conroy*

[32] (Extracts from: Sydney Morning Herald - Opinion, 2011, November 9)
[33] (Extracts from: ABC News, 2011, November 9)

the final word on the tender because it was too important a decision to be left to the normal bureaucratic process. (Emphasis added)

…oOo…

4.4 SABRA LANE: ABC RADIO AM: OPPOSITION: AUSTRALIA NETWORK TENDER A DISGRACE[34]

SABRA LANE:

[L]ast night Senator Conroy terminated the tender, saying significant leaks had compromised the process.

The Deputy Opposition Leader Julie Bishop:

JULIE BISHOP:

The Government, for spurious reasons, handed the tender to the Minister for Broadband and Communications Stephen Conroy. *He has a conflict of interest as the minister responsible for the ABC - one of the tenderers*. (Emphasis added)

…oOo…

4.5 THE HON. MALCOLM TURNBULL MP: INTERVIEW WITH FRAN KELLY – ABC RADIO NATIONAL - BREAKFAST[35]

FRAN KELLY:

The Shadow Communications Minister joins us now, Malcolm Turnbull is in our breakfast studio. Malcolm Turnbull welcome.

MALCOLM TURNBULL:

Good morning.

FRAN KELLY:

[34] (Extracts from: ABC Radio National - AM, 2011, November 8)
[35] (Extracts from: ABC Radio National, 2011, November 8)

The Government says it's acting on legal advice to abandon the tender, does the Government have any choice if that's the legal advice coming from the Solicitor-General?

MALCOLM TURNBULL:

I don't think it's got a lot of choice really, the tender has been hopelessly compromised by the political infighting, factional infighting between Conroy [communications minister], Rudd [foreign affairs minister] and Gillard [Prime Minister]. And there has clearly been strategic leaking from a number of offices, in order to undermine the favoured candidate of each of those players. This is a government that is just so hopelessly divided and dysfunctional it's barely able to operate. It can't even run a tender.

FRAN KELLY:

Well the Government says it's been compromised not by political infighting, but by the leaks, the media leaks. Do you accept that the media leaks have made it difficult for this to be a straightforward transparent process?

MALCOLM TURNBULL:

But hang on, the media leaks, they're not leaks by the media, I mean this is not the media's fault. *The leaks have been done by, and you know this as well as I do Fran, this has been done by politicians or people working for politicians in order to advance a particular point of view*. (Emphasis added) It's well known that there is enormous dissention in the Gillard cabinet about whether Sky News, which of course has got a, partly owned by News Ltd., should get the job, or whether the ABC the National Broadcaster where we are now, should continue with it.

FRAN KELLY:

The Government's referring this to the AFP [Australian Federal Police] so if these are political leaks as you're suggesting, if they've come from a political office, it's sticking the Federal Police on to itself?

MALCOLM TURNBULL:

Yeah, and the Federal Police won't find, those inquiries rarely come up with anything because the journalists will refuse to cooperate, so they won't get anywhere. Governments always do that, they rarely find anything out. What they really need to do

I think is to get the Auditor-General this is what we've called for, the Auditor-General to do a thorough investigation of this whole process because the process has been rotten.

FRAN KELLY:

Malcolm Turnbull, thank you very much for joining us on breakfast.

MALCOLM TURNBULL:

No worries.

ENDS

…oOo…

4.6 THE SENATE HANSARD 10 NOVEMBER 2011 - AUSTRALIA NETWORK[36]

Senator CONROY: The Australia Network is a core element of Australia's overseas broadcasting network and a major public diplomacy platform. It makes a significant contribution to the promotion and protection of Australia's national interests.

The tender process was terminated on legal advice that it was compromised by the leaking of information confidential to the process. I would like to emphasise that at all times the government has acted within the terms and conditions of the tender process.

The government announced that it will conduct an open tender process for the Australia Network in November last year, and, as is normal practice for these matters, placed an official public notification of the tender on AusTender on 4 February of this year. Tenderers were given until 25 March to respond. The tenders were considered by an independent panel of government officials in a process which, again—as is normal practice for such a large tender—took several months.

...I had no involvement; neither was I briefed on it. I was confident on principle that the ABC's bid was strong— *(Time expired)*

During the period between the government's initial decision to put the Australia Network to an open tender and the finalisation of the independent panel's deliberations, we saw a significant number of international changes take place, including significant political transformation across the Middle East and North Africa. A number of consular

[36] (Extracts from: The Senate, 10 November 2011)

crises also underlined the importance of ensuring that strengthened information services would be available from a range of sources.

Consistent with its view that the Australia Network was a matter of national importance, the government wanted to ensure that the tender took account of these rapidly changing international events.

The leaking of the information ... as I have previously advised, compromised the process. The government viewed the leak as serious, so serious ... as to justify calling in the AFP. This action was in line with the advice of all departments involved. Taking this into account, as well as the fact that the leaking of confidential information was a matter which required investigation by the Australian Federal Police, the government was forced to abandon the Australia Network tender process. *There was no way to assure ourselves that the final result in a negotiation as yet to take place was not open to challenge*. (Emphasis added)

Much of the commentary on the leaked report has failed to appreciate that *the next step in the tender process was to firm up bidder claims in contractual form*. (Emphasis added)

…oOo…

4.7 Bernard Keane: A tender Australia Network sore[37]

The Australia Network tender has now joined the storied ranks of disastrous federal government tender processes, a list that's headed by the notorious Hughes[38] case from the 1990s.

Hughes exposed serious problems in the way bureaucrats went about tender processes, and saw a lot more procedural rigour introduced into large tenders. In particular, a new class of consultant, the independent probity auditor, proliferated in Canberra. They were procedural specialists who, for a generous retainer, sat in on meetings, considered the paperwork, offered advice and provided a report at the end of the process on how fair it had been and whether all tenderers had been treated fairly.

But the fingerpointing about the leaks goes a little further up the food chain than DFAT [Department of Foreign Affairs and Trade]. *Whereas the Hughes case reflected poor bureaucratic practice, the Australia Network tender debacle reflects problems higher*

[37] (Extracts from: Keane, 2011, November 9)
[38] Hughes Aircraft Systems International v. Airservices Australia (1997) 146 ALR 1

up, in a divided Cabinet and [Labor] ministers eager to circumvent processes that even the Howard [coalition] government observed. (Emphasis added)

This story first appeared on www.crikey.com.au on November 8, 2011.

…oOo…

4.8 JOHN TEBBUTT, LA TROBE UNIVERSITY[39]

In 2001 the commercial television service [for the predecessor of the Australia Network] ended when [television company] Seven decided not to renew the contract. The service was actually closed down for a time. At this point the Coalition government decided to put the service up to public tender in line with its commitment to privatisation. The ABC did not apply but, given the recent failure, there was little commercial interest either.

Despite this history of failure in tendering when that contract was ended, the Department of Foreign Affairs [DFAT] again decided to opt for a tender process. The original tender documents drawn up by DFAT are reported to have included a service described as "promotional TV" that would be particularly directed to China. This specification had made the process of tendering difficult for the ABC as such a service would be outside their charter. Effectively a key component of the required service was beyond their capacity as a public service broadcaster. Tony Walker in the Australian Financial Review said ABC insiders had referred to this component as "Rudd TV" [named after foreign affairs minister Rudd]. It will be interesting to see its fate now.

While some political commentary over the recent failure argues tendering is a transparent process, *the government's ability to "manage success" through tender conditions provides for significant political influence* [such as the provision of a service that one bidder is barred legislatively from providing]. *Each iteration of a tender is open to ministerial interpretations*. (Emphasis added)

Political influence in public diplomacy broadcasts is inevitable. That means public broadcasting's relationship to powerful agencies such as the Department of Foreign Affairs needs to be carefully considered and clearly defined. The recent tendering debacle for Australia Network indicates how quickly politics sets in when there are no clear policy settings. Dumping tendering will help clear away the policy confusion.

[39] (Tebbutt, 2011, December 6)

…oOo…

4.9 TRANSCRIPT OF THE HON. MALCOLM TURNBULL MP, INTERVIEW WITH FRAN KELLY, ABC RADIO NATIONAL[40]

Topics: Australia Network Tender, Gay Marriage

FRAN KELLY:

Shadow Communications Minister Malcolm Turnbull calls the tender process a shambles. And he joins you from Adelaide this morning. Malcolm Turnbull welcome to Breakfast.

MALCOLM TURNBULL:

Good morning Fran.

FRAN KELLY:

Are you happy that the Australia Network is now in the hands of the national broadcaster forever?

MALCOLM TURNBULL:

Well I think there are two issues here. First of all, it is not uncommon for tenders to be scrapped and then for it to be restarted, which is what we all expected them to do. But you've got to bear this in mind: The Government took the view that there should be a tender and I think that was right. At least these two organisations were capable of doing the job and should be considered on their merits. They had the tender; Sky tendered in good faith, the ABC tendered in good faith. There's no criticism of either organisation. The tender was aborted because of leaks out of the Government which were a consequence – everybody knows this – of the deep personal antagonisms which are blowing up all over the place.

I am a Member of Parliament. You would think we would actually have an idea what's going on with this tender but we don't. Because it's been done in a very closed and non-transparent way. The only inklings we have of what's been going on have been because of leaks. Those leaks have been the result of political agendas in terms of the continuing civil war between [Foreign Minister] Kevin Rudd and [Prime Minister] Julia Gillard.

[40] (Turnbull, 2011, December 06)

FRAN KELLY:

Malcolm Turnbull on another matter, should the Coalition allow a conscience vote on gay marriage.

MALCOLM TURNBULL:

Well my view is that we should but it is a matter for the Shadow Cabinet and the Party Room as to whether we do. But yes, my view is we should have a conscience vote on it.

FRAN KELLY:

And have you suggested that to [Opposition Leader] Tony Abbott?

MALCOLM TURNBULL:

Well look, the answer is yes. *There's no point saying discussions are confidential, they are confidential but as it happens I have raised the matter privately with Tony [Abbott] some time ago and my view on this became public, not because of anything I did deliberately but because of some correspondence I had with a constituent [which was made public] and there was no point trying to be slippery and disingenuous about it*.[41] (Emphasis added) So my view is yes, there should be a conscience vote but again, it's not my decision, it's the decision of the Shadow Cabinet and the Party Room.

…oOo…

4.10 HERALD-SUN NEWSPAPER INTERVIEW WITH THE HON MALCOLM TURNBULL MP[42]

"If the ABC is, as the Government now claims, the obvious and only choice to operate the Australia Network - why was there a tender at all? How can so many months and *so many millions be wasted* on a tender process that now, so we are told, was quite unnecessary and inappropriate in the first place." (Emphasis added)

[41] This technique is available to politicians who wish to make public their personal opinions that might be different to the directions of their political party or leader.
[42] (Herald-Sun *newspaper*, 2011, December 06)

5
POLITICAL INDUCTION: A PROJECT MANAGER'S EXPERIENCE

5.1 RECOGNISING ANOTHER REALITY

I became aware of the significance of political influence and political intervention very early in the project's life. I was attending a senior management meeting when I received a phone call at 9.00am instructing me to be in Canberra at 12 noon to meet with the Minister. Apparently, the Minister had received three or four Minsubs [Ministerial submissions from the Department of Defence] that were conflicting. My job was to untangle and explain the situation. But once I was in his office, I soon realised that the Minister was driven by other political agendas.

Some two years earlier, he had told his Cabinet colleagues exactly how this project and its tender were going to be run. Regardless of current field [combat] realities, these past undertakings could not be changed. Some issues of ministerial credibility might have been at stake; he didn't say. *Despite the fact that I was recently appointed as the project manager, the Minister imposed the tendering strategy*. (Emphasis added)

So that was quite telling and an interesting insight because he was dictating the final date for tender submissions and the recommendation to Cabinet of the preferred contractor. It was an unrealistic schedule but I could never track down the person who had provided the Minister with this advice. And in the background, my CEO [of the DMO] nodded in agreement with the Minister who said, "I've made a commitment and we are bound by it regardless of the events that had [recently] unfolded [from combat realities]".

What became clear to me from the Politics side of the house, was that the politicians weren't really fussed about defence capability matters; be it a ship or a plane. The Generals can look after that. However, the politicians were conscious of the schedule aspects and they were sensitive to the cost; probably more so about cost and cost blowouts in my view. *The Ministers had very little confidence in our ability to estimate cost and to get it right*. (Emphasis added) And that was one of the things Kinnaird introduced; actually going out to tender prior to final government approval, so that you could take tender-quality data to government for their contractor selection decision.

But even then, companies resile from their commitments and the military change their requirements, and I can only manoeuvre within the approved budget. However, the

Minister had given the government a personal commitment to the delivery date and I am expected to perform accordingly.

5.2 INDUSTRY DYNAMICS

There was a local industry dynamic which was dealing with our capacity to support [not necessarily to build] the equipment in Australia and associated benefits of employment growth. Industry representatives had direct access to the Minister's office and the senior executives of the DMO; but they would rarely speak to me in the political sense of trying to shape the outcome. I can honestly say that I never felt that I was being manipulated. Industry played it straight down the line, as I did. And I think that a two-way ethical understanding was established right at the start.

But that didn't stop them from going to the Minister's office to lobby for jobs in the locations of their businesses or advocate on behalf of Australian industry. And that too was an aspect of our acquisition strategy. What would this project do for local industry? It had three billion dollars to spend which is a lot of taxpayers' money that might otherwise be spent overseas. Clearly the government had to consider the industry issue and while it was an issue for me, it wasn't the determining factor in terms of recommending the preferred bidder.

5.3 INEVITABLE CHANGE

Half way through the tendering process, the field operational environment changed significantly. The military and the government required a substantial enhancement to the specification, but there was no change to budget or the delivery schedule. This increased technical complexity led to an overseas [American] solution being approved initially by government. However, the Australian industry approached the Minister directly and advised that a superior design and higher manufacturing quality could be done in Australia. This sentiment had the support of the CEO of the DMO. So there was now a new dynamic for an Australian manufacture and long-term sustainment.

The Minister's attitude was along the lines of, "why not?" And that was sufficient for the CEO of the DMO to translate "why not" into "let's go". Now, we had the unusual situation of an initial government approval for an American solution being replaced with an Australian solution for both manufacture and through-life support. Industry was confused. Ironically, the American project appears to be stalling or stalled. But, if we are going to do it locally, it will come at a premium and this is something that only governments can choose to do.

5.4 INDUSTRY LOBBYING

Here we saw the ability of local industry to come in from the side and lobby the Minister. I don't think the Minister would indicate any particular procurement policy direction but from my experience, *the Minister says enough around an issue for the CEO of the DMO and the General to grasp the essence of the Minister's intent and to translate that into action. So, it's an interesting little game of how political strategies are implied*. (Emphasis added) It also shows how industry has direct access to the Minister and how some Ministers have welcomed these representations. Industry does pursue its own objectives and this can be through a local member of parliament; particularly if that local member is in a marginal seat. And one defence minister even managed to get a procurement project for his own electorate. So, industry has the opportunity to impress upon the Minister the relationship between winning contracts and employment opportunities.

From my experience, industry pressure has never biased a tender evaluation. *But when this evaluation [tender evaluation] and the subsequent recommendation go to government, the government might then choose [source selection] another bid, and that's their right. That's their choice and they need to be able to justify and defend it themselves*. (Emphasis added)

5.5 POLITICAL ADVOCACY

Also, local members of parliament play their part. I've seen the odd correspondence or two from a local member to the Minister expressing concerns and inviting the Minister to their electorate to make announcements and clearly, a couple of the Ministers went out of their way to be in a local marginal seat to make some big announcement about jobs and money and contracts having been won by a particular company.

While there are opportunities for foreign embassies to be involved, I personally didn't see this. This is possibly due to the fact that although my project was important for industry and the local economy, it was not seen politicly as a strategic or priority industry capability. On the other hand, State governments do embrace industry. They do establish quasi alliances with industry because they are well aware of the benefits for their State-based companies to win large defence contracts. I did receive a personal letter from a Premier once; espousing the opportunities within that particular State and the benefits that this particular company brought to the State, and to the nation as a whole. It was implied that they also do a great job for the Army and everyone else. But it was nothing more than that. It was just a State government providing every bit of support that they could. No doubt, State governments talk to Federal Ministers when

they can and if they are of the same political persuasion, then something may come of it; who knows? I was never actually privy to that. There was a lot at stake for the smaller States in particular, and winning a Defence contract was good for a State, and no doubt they would say, good for the nation.

5.6 AN INDIGENOUS AUSTRALIAN DEFENCE INDUSTRY

Now, should Australia be in the game of being a major defence industry manufacturer? Well, there's no doubt that because of our geographic position, unless we have an industry to support our defence capability, there’s a high cost to pay for sending things overseas to have them fixed, repaired, modified, and so forth. Therefore, you do need a local industry base, and you do need an industry that's not just there to do the minor stuff. If you do have a major repair problem, then overnight you can’t buy that heavy industry capability, the skills, the expertise, the facilities, and the support equipment. And therefore, companies have to win work here.

No doubt, State governments provide subsidies or support to industries in various ways, but primarily, companies have to win the work. So, we do have a number of strategic industry capabilities: shipbuilding is one. A lot of the Joint Strike Fighter work will have a number of local companies involved. A major focus of my project is to ensure that the capability delivered from the project is supportable in-country.

The industry producing the general product technology that my project had to procure is well established in Australia, but because of the bespoke specialisations that the military require in this instance, the companies that are likely to win the work are primarily based overseas, and not all of them have a large presence here. And that presence would be required for up to thirty years in order to sustain the equipment. But of course, technology moves on, and quite often the platform is out-of-date in two or three years time. But from the outset, I made sure that all contractors knew that sustainment was a fundamental strategic requirement. And I knew that a premium had to be paid for this, and that is the cost to achieve our strategic objective. You have to be able to identify what that premium is and then make a conscious decision to move in that direction.

So, are we in the game of maintaining a defence industry manufacturing base? The answer is “Yes”, but only for certain strategic industry capabilities that we need for long periods of time.

6
JOHN FAVALORO: OBSERVATIONS FROM THE BOARD ROOM

Some personal reflections of John Favaloro, former senior corporate executive with a major Australian defence contractor.[43]

6.1 MICROECONOMIC REALITIES

The notion of a 'thin' prime contractor[44] usually indicates that the prime contractor is a facade for the key subcontractor, who backs up the prime (to a greater or lesser extent). Generally, acting as a thin prime is both counterproductive to company business strategies and also is not acceptable to the DMO.

All major Australian defence contractors are currently [2010] private companies being wholly owned subsidiaries of overseas-based defence contractors. Normally, family ownership causes limitations on raising equity, which stifles growth but this is not always the case. I am aware of a political view that 'family ownership' and 'lack of transparency' are conjoined. My experience would suggest otherwise.

There are structural impediments to the public floating of privately owned defence contractors in Australia, including those contracting organisations owned by the government. To garner the interest of analysts and shareholders, there must be predictability in terms of cash flow and earnings per share. Defence contracting requires a skilled and experienced workforce (especially engineering capability), which is expensive to develop and maintain. There are above normal overheads arising from the necessary DMO-specific audit requirements. Contracts are "lumpy". That is, they are large and have long lead [pre-production] and delivery times. In excess of $12m can be spent on preparing a tender. This preparation cost does not include all the bidding costs of the subcontractors. We had some tenders where the tender preparation costs represented about 25% of the expected profits but it was necessary to win in order to maintain the specialist skills and teams required for business continuity. The tender

[43] (Favaloro, 2010)
[44] A 'thin' coordinating prime contractor has a capitalisation significantly lower than any of the project's dominant subcontractors.

costs are spent over say a two year tender preparation period and the profits will be earned during the approximate seven years of production.

To be viable, an Australian owned defence contractor needs to have a critical mass which in the limited Australian context means activities in all defence sectors. This has to include a capacity to participate in the ongoing repair, upgrade and maintenance of the product supplied.

6.2 THE REALPOLITIK OF AUSTRALIAN DEFENCE CONTRACTING

Most of Australia's major defence procurements require technology that is sourced from other countries. These suppliers are very reluctant to team with an Australian partner if that (Australian) partner has another non-Australian competitor as a shareholder. There is a real fear of the loss of Intellectual Property and 'feeding the competitor'. There are also issues relating to the way the USA administers foreign military sales. Consequently, to be best able to partner with most non-Australian technology suppliers, an Australian defence contractor must be 'neutral', that is, both Australian owned and controlled. The economic necessity for an Australian defence contractor to be able to sustain the supplied equipment through its life means that a foreign partner (supplier) must witness a high level of (Australian) process integrity in order to underwrite the necessary trust and confidence.

The Australian Government (DMO), unlike defence acquisition departments in most other countries, has an open approach to competition in which there is no obligation for Australian content. This becomes problematic for an Australian defence contractor who does not have indigenous technology (which could have been specified by the government in the tender), especially where the overseas technology supplier has objectives in support of their home base.

6.3 RELATIONS WITH THE DMO

The DMO is intolerant of non-compliance in submitted tenders. Defence contractors know that non-compliances are assessed and 'valued' by the DMO (usually after discussions about the nature and reasons for the non-compliance) and the DMO 'cost' to remedy the non-compliances is 'incorporated into' the tenderer's submitted price. In my experience generally, the DMO did not reveal to contractors (even unsuccessful contractors) the remedy allowance for the risks attributed by the DMO to the non-compliance.

The DMO enforces its contracts (and I must say, usually in a reasonable fashion) in such a way that there is a close interface between the DMO personnel and the

contractor's personnel. Moreover, defence contracting is a small community in Australia and an inevitable result is cultural similarities.

In my view, and in the interests of public accountability and good management, the DMO must have a structured approach to the evaluation of tenders. These [instrumental] evaluations and analyses occur in the lower working parts of the DMO. These people work with defined policies and processes. Based on this commonly understood and auditable foundation of information, the senior management of the DMO can make their decisions about what constitutes "value-for-money" and to select the tender they want.[45]

6.4 IMPRESSIONS OF GOVERNMENT

From my point of view, government has failed to explain to both Defence and industry what is needed for national security purposes, particularly with respect to indigenous capability to maintain and repair capital assets needed in time of conflict [and] in the sole interest and under the command of Australia, [particularly] when the support from allies is insufficient. On the other hand, government policy about competition, which is clearly spelled out in the FMA Act[46] and administered by the Department of Finance and Deregulation (DOF), uses open competition for individual procurements as the criteria for "value-for-money". Do they [DOF] have regard for the whole of life costs and benefits? *I wonder what and where in all of this large expenditure by Government, are the long-term Australian national interests – is it just buying defence equipment for the cheapest price at the time?* (Emphasis added)

[45] The government makes the decision but they are critically aware of the DMO recommendations.
[46] Financial Management and Accountability Act, 1997

7
THE DEFENCE (DMO) SPECIAL COUNSEL[47]

In terms of contractor disputes over source selection decisions, we are required by the Commonwealth Procurement Guidelines to have in place a tenderer complaints handling process. This is for compliance with the Australia-USA Free Trade Agreement.

Occasionally they will involve ministerial input and intervention. (Emphasis added)

[47] (Dunstall, 1 October 2009)

8

ALLAN BEHM: POLITICAL REALITY[48]

Former senior executive in the Department of Defence, Chief of Staff to Greg Combet MP, Minister for Defence Personnel, Materiel and Science in the Rudd Labor Government

8.1 CONFLICTING LOYALTIES

Loyalties are conflicting for serving Officers who are either seconded to the DMO or seconded to the civilian divisions within the Department of Defence. Their promotion is dependent on their Service Chief, not on the Division Head for whom they are working [during the tendering process].[49] I know and you know that [cost overruns] are actually coming from the Majors and the Lt Colonels who are looking over their shoulder to their Service Chief [who controls their promotion] who is telling them that instead of rubber wheels, he wants steel wheels. And then they will be told, I don't want steel wheels, I want titanium wheels. And for all you know, you are going to end up with diamond wheels!

If you've been a contractor to Defence, you would have loved that because you know that that's where you really make your money. You tender low because you'll have absolute confidence that they will be tweaking the capability from day one. While that's good for industry at some levels, it's very bad for Defence, and in my view it's bad for industry as well because then industry ends up wearing the blame for cost overruns.

8.2 DEFENCE CULTURE

Culture in Defence is not a culture built around anything which to you or me might look as though it's the slightest bit commercial. It's a culture which is built around process and driven around processes where no individual is ever going to have to exercise accountability.

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[48] (Behm, 10 February 2009)

[49] In Australia, a serving Officer is always a soldier first and a professional domain expert (procurement) second. This policy is applied uniformly to all professions. There are inherent conflicts.

Nothing ever goes wrong. All projects are going well. And yet, read the audit office's reports [ANAO[50]] and there are so many counterfactuals there. DMO do their performance reporting from the bottom up and of course, nobody ever underperforms. So you get to the top and everything is going fantastically well. Well there's a bit of cost overspend but that doesn't really matter because it's not too big and what's more, we'll pick it up in the wash at the end of the financial year. Or, the contractors are really happy with us so they're giving us good marks for our performance management. Why the Minister becomes unhappy of course is that the feedback actually comes partly through the ACTU[51] and partly through State Governments.

This is why when you look at the ANAO reports; you will see the cost overruns all the time, resulting essentially from interference with the design concept and therefore interference with the contract.

And that's compounded by churn. You have people roiling through positions in 18 month [cycles] as they go hell, west and crooked because of the high operational tempo or because there are greener pastures in other departments where you get promoted to, and you get some more money and all that sort of stuff.

8.3 COMMERCIAL RELATIONS

For a contractor, you have to be known in Canberra. It's not all about price; it has much more to do with trust when it works properly, but it's also about the confidence that I know that the person *is* going to do it. For the contractor, the project would be either creating value for the business so you could sell it, or creating value for your shareholders so your shareholders want to continue to invest. I don't think the creation of value has very much to do with any of the operating paradigms within Defence at all. But I accept that they might perceive issues of value creation. Kinnaird[52] was trying to introduce a paradigm I think, which was much more about partnership and sharing which is another way of describing a vector of trust anyway, but it would be, I think, fabulous if within any of the major project procurement or project management streams, you could truly get them genuinely to create value. That would be very unusual in the civil service; in government in general.

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[50] Australian National Audit Office.
[51] Australian Council of Trade Unions (Peak organisation for organised-labour).
[52] (Kinnaird, et al., 2003)

8.4 VALUE-FOR-MONEY

Equipments are not capabilities. Capability is how man and machine interface to deliver an outcome that the government mandates. The reason I want to pick up on 'value' is that someone in the press last week, had words to the effect that governments can't create value; it's for the private sector to create value. What governments do is simply redistribute value. I have been thinking about that and I've decided that I don't agree. If you define value only in terms of dollars, the statement may be true. But what I think does not come to book nearly often enough is the qualitative dynamics of 'value' which are around social capital, human capital, and systems reliability by which I'm intending that in the 30 years that you'll have a platform [major item of equipment] as part of your capability in operation, you're going to be confident that between day 1 and say day 10,000, your contractor will still be in business so that you will actually have systems reliability all the way through that. These are concepts of value that I think are going to become very important as we get suites of individuated capacities which are going to add up to capability. This must all be present [as a philosophy] underwriting the mechanism of procurement.

Value-for-money in the minds of most of the Defence punters means lowest possible price. They don't actually issue their tenders with value-for-money criteria.

For governments, better value-for-money is being re-elected. I've seen a procession of decisions over the time I've been in the public sector where the pork barrel, to put it in its crudest sense, is the best expression of value-for-money. (Emphasis added)

9
BRUCE FERGUSON: DEFENCE ORGANISATION CULTURES[53]

9.1 CLASHES OF CULTURES

There are issues of culture clash between the uniformed and non uniformed elements of the defence force. Defence uniformed staff are highly motivated, trained and carefully selected. They undergo rigorous selection and training processes to gain advancement. Most roles are maintained for around two years for officers. In addition the defence uniformed force is very tight, with high levels of relationship, commitment and trust in each other. The individuals are dedicated to the missions that the defence for is focused on, and they really see that their job is to give the best possible protection to Australia. This belief in the role of defence is deep and pervasive.

The Public Sector however has a different culture. This culture is more stewardship based. Public servants generally are focussed on control and accountability. That is, they see that their job is to ensure that the interests of the tax payer are maintained. Often this is focused on cost containment, due diligence on spending. This is some contrast to the outcome and time frame focus of the uniformed defence force.

This cultural clash can create serious tensions within defence as the uniformed staff try to manage the tensions between heavy ongoing operational demands and decaying equipment. (Part of the need for the increase in defence spending is actually a catch-up to the delays in the replacement pipeline created by the Kinnard report, which essentially placed a hold on main platform replacements for 3-4 years).

9.2 SYSTEMIC FAILURES AND CULTURAL ANTECEDENTS

There is a belief (not necessarily based on reality) that there is an overabundance of oversight, and that this oversight is focussed on process compliance, not necessarily on outcomes. Our (Helmsman Institute) review of the ANAO audit approaches is that there is a severe deficit in auditing capability with respect to complex projects. In most project reviews the focus is on process adherence failure, rather than project management failure. The issues that are picked up are not in most cases material to the project performance. Issues such as change management, cultural acceptance, proper

[53] (B. Ferguson, 31 March 2008)

project planning, project leadership, resourcing management, technological risk, commercial constraints etc are seldom mentioned, or understood.

In a similar vein, one concern we have is that the salaries paid to singularly most important person on the project (the project manager) are woeful compared to commercial rates in ALL other industries. In the other industries a project manager working on a similar value and complexity as the FFG, Tiger, EW&C etc projects would earn around $400,000, the similar role may get a Defence employee $140,000.

We find it surpassingly strange that billion dollar projects are run by people being paid peanuts, and people complain about hundred million dollar cost issues. Spend some money where it counts (in the thousands) for project managers, and save money where it counts (in the billions) in project performance. In the same vein, cut the audit groups, make the project managers more directly accountable, create better accounting systems and get out of the way. There is too much detailed control (a very expensive) option, and not enough performance management. Pay fewer good people more, and the Defence Department would work dramatically better.

9.3 RELATIONSHIPS WITH THE DEFENCE INDUSTRY

The relationship with the defence industry is generally a very good one between the uniformed staff and the defence players. This is because many of the defence industry people came out of uniformed roles.

10
DR NOEL SPROLES: VALUE-FOR-MONEY

Extracts from:

Value for Money and Defence Projects[54]

10.1 INTRODUCTION

The study was carried out in the Information Technology Division of the Defence Science and Technology Organisation (DSTO) at Salisbury as a result of a request to establish the Value for Money (VFM) of a new piece of defence equipment. DSTO was being, in effect, asked to establish if the item was or was not VFM. The premise that DSTO was able to establish VFM from outside an organisation was intuitively felt to be erroneous. This study was started in order to articulate the reasons for rejection. This is very much research in progress and it is not intended to develop a method for establishing VFM for projects. Rather, the intent of this paper is to contribute to the research being done on this subject and to provoke discussion.

10.2 THE VALUE OF DEFENCE

A final [purchase] decision often is made on values which the individual or group holds as a whole and which is incapable of being expressed in a language such as money. These types of values do not trade as such in any market, but society implicitly chooses a level and method for assuring such benefits and makes resource commitments to these ends. Like social costs and benefits, defence must also be considered to be a collective benefit. There is no market value that can be used to compare the monetary costs for defence. There is no monetary value able to be placed on a defence force that guarantees peace for a nation for a generation. Society judges the benefits to be gained from defence spending in terms of a range of values such as security, retention of sovereignty, maintaining a way of life or culture, or long term peace. For example, the British were prepared to bankrupt themselves in order to obtain military equipment during WWII.

[54] (Sproles, 1999)

10.3 Emergent, prospective qualities and Value for Money

A user or stakeholder is not concerned with how the entity does the job so much, as how well it does it. The users' interest in effectiveness means that they are interested in the emergent properties because effectiveness is an emergent property. There is thus the situation where capabilities are procured in advance, to be made into a system at some time in the future with an effectiveness, i.e. with emergent qualities, of a yet to be known dimension. Hopefully, these emergent qualities will be sufficient for the task faced! When calculating VFM prior to the event, the risk lies in trying to correctly assess the effectiveness of something that is yet to come into being. For more significant projects, such as naval vessels or bombers for the Air Force, it is suggested that their VFM should be based on their contribution to the overall capability of the force.

10.4 Holistic risk and Value for Money

This then also begs the question of who should decide VFM. Clearly it is the entity given responsibility for committing resources, but what is the appropriate level of that entity? For naval vessels etc., it may well be at that level able to judge the total impact of the project on overall capability, and this can only be at the highest levels of the Australian Defence Organisation. Even for the project whose Value For Money DSTO was initially asked to determine, the suitable level would be one able to judge the impact of the project on the entire combat force of the Army. The decision on whether to commit resources to a project should be made on the basis of the capability which the project promises along with considerations of the risks to the overall capability of the force if this project fails to deliver. To ask DSTO to establish the VFM of the defence project in question was asking the wrong question to the wrong people.

The perception of VFM can vary throughout the life of a project and may even exist well after the project itself is history. Hindsight may be a useful tool in making decisions on VFM but it is not perfect as the continued controversy over the value of the Combined Bomber Offensive in Europe from 1942-45 amply illustrates. The importance of VFM for defence will remain primarily as a means to assess if the risk of a project not exhibiting the desired emergent qualities at the appropriate time is worth the committal of present resources.

For defence projects, capability is the aim but there are no market forces to place a value on a capability. VFM, for defence projects at least, can be considered to be placing a value on the emergent property of systems with little or no meaning at the sub-system level. For significant defence projects, VFM can only be determined at one or

more levels above the project. To obtain an impression of VFM for the purpose of support [for] an acquisition, or discrimination, or even selecting between project candidate solutions, the analysis may even have to include the total set of defence systems and capabilities.

11
MUNGO MACCALLUM: THE POLITICAL ECOLOGY OF PARLIAMENT HOUSE

Digest of:

Amateur League: The Game of Politics[55]

11.1 POLITICS

What is meant by political professionalism? Well, these days, it has almost nothing to do with the substance of politics and everything to do with the technique. The Macquarie Concise Dictionary defines politics as "the science or art of political government". Politics settles disputes between competing interests [wicked problems] and sets standards of justice. On every level, politics determines the nature and quality of our society. But this is not what people who pay attention to contemporary Australian media understand by politics at all. Most voters are more likely to concur with the Macquarie's fourth meaning of the word: "political methods or manoeuvres", or worse still, its sixth: "the use of underhand or unscrupulous methods in obtaining power or advancement within an organisation". Politics in the modern sense is all about winners and losers, about control and spin.

11.2 POLITICIANS

These have always been part of the process: the best policy in the world is of no use without the power to implement it, and gaining power usually involves some compromise of principle. Winning the game becomes the only thing that matters; the means become the end. And, in the eyes of the media, the professional politician is the one who knows how to play the game to perfection, not the one with the ideas and vision that are supposed to drive the whole process.

[55] (MacCallum, 2010, April)

11.3 JOURNALISTS

A major [Defence] policy announcement will still usually make the front page, although if one print-media outlet has managed to secure the story in advance, rivals may bury it or even ignore it out of spite. It is hardly surprising that the government has become preoccupied with media management and spin. There is no real time for thought and analysis; what matters is delivery. [Those who deliver] are generally full-time journalists, not part-time columnists, almost all of whom see themselves not as commentators, but as players in the game, movers and shakers, one-eyed supporters of one side or another.

11.4 LOBBYISTS

Then there are the real lobbyists, the hardened professionals who hang around Parliament House, as prolific as bogong moths in season [a dense cloud of moths that are attracted to the lights of Parliament House], and far more pestilential. They can afford to be utterly single-minded in pressing their case: it's all about winning favours for their [defence industry] clients, so there are no competing interests to balance. In spite of some desultory attempts to bring the plague under control, they have become steadily more numerous and persistent over the years and many have real clout, or pretend to have; they claim some power to influence the flow of contributions to party funds and even blocs of votes.

True or not, [these lobbyists] have to be considered as part of the whole immensely complex and time-consuming process of government [for whom] the real and only purpose of politics [is] winning elections. (Emphasis added)

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CAMERON STEWART: A JOURNALIST'S OPINION

Associate Editor, 'The Australian' newspaper[56]

12.1 AN INDIGENOUS AUSTRALIAN DEFENCE MANUFACTURING CAPABILITY: A WICKED PROBLEM[57]

I think that Defence procurement in Australia is going through a period of great political and philosophical challenge. It has a great desire to continue to foster an indigenous Australian defence manufacturing capability; especially in the naval field. And yet it has a long-standing relatively poor record of delivering major projects on time and on budget. The Defence budget cannot be squandered on wasted billions of dollars on mismanaged projects. The government knows that that is an unsustainable situation for it into the future.

I think that the government is realising that it can save a lot of money by buying more military-off-the-shelf [MOTS] items which have been tried and tested by countries far larger than Australia. However, of course, they are very loath to take the political step of pushing that too far at the cost of local industry because it fears the political backlash in a pure voter sense; especially in South Australia, but [also] in some of the places where these products are made. There would be job losses. And I think more than that, it fears the unspoken statement that Australia is too small and not sophisticated enough to do these projects. And that's a very ugly political message for any government to give; it's one that the government is hugely reluctant to give.

It has a situation with the Collins Class submarines where Australian industry did its best and it produced submarines which on their day are very good submarines. However it produced them very late, very much over cost, and probably more importantly now, is really struggling to keep these submarines in the water. They can only keep at the moment about one to two submarines of the six-submarine fleet in the water. So, for all that investment which I think is about ten billion dollars over the last

[56] (Stewart, 17 June 2011)
[57] (Whelton & Ballard, 2002)

20 years, we don't really have a submarine fleet. It's a terribly embarrassing situation for the government.

The second issue is with the Air Warfare Destroyer project. While the government is now trying desperately to get the project back on track, you have a situation where in the space of, I think, fourteen months of construction as we speak, the project will be two years behind. The government has reallocated some work to try to reduce that to twelve months behind. It will mean it is now going to be well above the eight billion dollar price tag, which quite naturally, flows from such a delay. It just doesn't auger well for ship building in Australia to have these two issues, some of the big picture issues, go wrong in cost, in schedule, in maintenance.

It's a luxury [which] I think the government is wondering whether they can continue to afford it in the future. [With respect to the next fleet of submarines] the question is whether it really gets a very advanced off-the-shelf design from Europe probably, or even the United States, but I suspect Europe. And I think these issues are really swirling in the political mist at the moment. I think it's a fascinating debate and it's one that the government is, I believe, moving away slowly from its embrace of Australian industry which was much more unquestioned in the past.

I mean, look at the aircraft situation now. We source fighter jets and aircraft from overseas. The only time that Australia seems to have difficulty with those is when it invests in a developmental project overseas, such as the Joint Strike Fighter and the Wedgetail aircraft [airborne early warning and control program]. They are good examples of where they have invested in [developing] technologies. So therefore, obviously, the problems involved in those technologies come back to hit Australia. But where Australia has chosen off-the-shelf items which are really quite straight forward like the C17 transport planes, the Abrams tanks, they have come in on-time and they've come in on-budget.

The AWD project was very interesting at Senate Estimates recently [30 May 2011]. Warren King [DMO] said very openly, he said, ‘We cut the Air Warfare Destroyers into three shipyards. We made three shipyards do it because those shipyards need to get the work and become more proficient in shipbuilding’; words to that effect. In other words, very much a statement of not we just want the best sharpest ships at the cheapest possible price; this mob is best so we'll get them. It was very much as case of look, we need to sustain naval shipbuilding, and we need to promote it. It was very much a national interest perspective. Now the more cynical might say there's a bit of politics in that too: Williamstown and Adelaide.

But certainly that is the framework in which these debates are had and Warren King, in that same Senate Estimates, held up a piece of steel in front of the Senators and said,

‘This piece of steel came from Western Australia, it was milled in Port Kembla, it was Australian, there are twenty thousand of these that go into the ships’. He was basically saying that it was un-Australian not to support this steel going into ships. Aussie steel, aussie ships, aussie jobs. That was his mantra. And that is absolutely underpinning the whole defence procurement debate in this country. And it's a difficult one for the government to throw away. I don't think the government doesn't want to throw it away entirely. It's very difficult for them to do it politicly.

12.2 The DMO

And you've got all of these reforms which have taken place to try and make Defence procurement more efficient. Now DMO has done quite a lot to try to improve that process but from reading, I think it is still a fundamentally flawed process and I don't have a special answer to that. There are just too many mistakes in the decision-making taken with these projects and the Air Warfare Destroyer is a very good example of that. But then, does the government subsidise an industry which it doesn't give enough work to. Does it basically subsidise it to keep it healthy and keep it afloat?

I don't think the government is willing to go that far. It's a really difficult situation because the government is really caught between hell and high-water with its choices on this stuff. It's trying to make Defence more efficient in its processes. It obviously has done a lot to try and make DMO act more like a private corporation. But the problem with that is I think, that DMO in my opinion, is just not working. The competition at all costs angle that DMO goes for doesn't always produce the right outcomes and I think, right along the chain, from government to Defence, to their wish list, to DMO, to the way its run, and to the ability of industry; you have a bowl of spaghetti if you like which is causing real concern.

12.3 The critical mass of production required for the maintenance of corporate knowledge

I mean the government would like to give enough work to see these shipyards go through a constant situation where they are constantly building ships. But they don't do that; they haven't got enough to do that. So, they have to start all over again. What you have here is you get a loss of corporate knowledge which is a real. And the government's approach to this is again I think fairly conflicted.

This is the harsh reality which the government is trying to grapple with. It is the questions of:

1. Does Australia not have the economies of scale required in Defence to sustain a genuine future naval ship building industry?
2. Do we have to rely on the big players who have that investment capability, and is that something the government and Australia have to simply come to terms with?, or
3. Is it the fact that it's just not being done well enough and there's a possibility for success in the future if it's simply done right?

12.4 The politics of 'Australianisation'

The other problem I think in Defence procurement is that not all of the players are on the 'same page' in the sense that I think that Defence often gets ahead of itself when it wants various bells and whistles on certain products which it purchases from overseas. It's very quick to argue that Australia has a unique circumstance, a unique climate, a unique situation. And Australia does have these to a degree. I question whether that degree is to the extent that Defence often says.

The biggest problems we've had in Defence procurement in Australia, often relate to the translation [integration]; the extra things that get put on. The [failed] Seasprite helicopters is a very good example. I think in some ways that can be just as difficult as a purely home-grown project; when they order something overseas and then try and Australianise it to a large degree. And I think it is disappointing that Australian industry can't do that as well as it should be able to.

12.5 Diplomatic Alliances: The special case of the United States

The United States is the most interesting influence on Australian Defence procurement. The US clearly has an expectation that Australia will pull its weight in defence in this region. The Australian Defence Force is a very handy small/medium size force for the US in this part of the world. And I think the government is very aware that if it cut back on defence fairly strongly, or if it didn't at least invest a reasonable amount of GDP, that the Americans wouldn't be particularly pleased. However, it's all very well for the United States to say this, but the government does find a problem in trying to purchase some advanced off-the-shelf weaponry because the US are very tardy about handing over their intellectual property, their codes, their stealth; even to a country like Australia. They can't really have it both ways; but they do tend to.

A good example was when there was the debate, it wasn't a very advanced debate in Australia, but when there was debate about getting the F22 Raptor, rather than pursuing the Joint Strike Fighter. The Americans effectively said, 'No, it's not available'. And

that was a matter about a lot of stealth issues. And Australia has had to negotiate very heavily on the Joint Strike Fighter in relation to access to stealth. So I think the US would like Australia to do as much as it can in defence but it is not necessarily helping it greatly on the defence industry side.

12.6 Political Decision-making

I think most of the pressure is not really external. I think it is really internal. It's a case of the government deciding exactly what it wants to do. But governments also, and when I say governments I'm talking over the past decade about governments of both political persuasion in Australia, have been very quick, far too quick, to let politics influence their fundamental decisions on these things. I think politics was a fundamental reason for the Collins Class project. I think it is a fundamental for the Air Warfare Destroyer project. I mean, there would have been an argument to say to the Spanish, ‘Build them, as you know how to build them, and sail them here’. I think that would have been, in the light of what's already unfolding, a very wise decision. It's easy to say that in hindsight but personally, that's what I think.

And I think that there would be a fair argument to say that for the next fleet of submarines. It's considered very un-Australian to say that in some quarters. And no one wants to not have jobs and investment in technology in Australia. But that may well be the reality. I think that no single project illustrates the impact of politics on Australian Defence procurement than does the decision in 2002 to purchase the Joint Strike Fighter, or at least flag our future investment in it.

I wrote an article about that decision. I went to Texas and I went right into the whole background of it all. [It] was a classic case of Defence trying to set up a Due Process of consideration for all the contenders and literally the government just coming and saying, ‘We're buying American. We like this, we're not looking at anything else, that's it’. It was an astonishing political decision that was not based on anything like the due diligence with the research that was required.

Although the government has changed now and it may well still ultimately be the best fighter for Australia. I mean the F111 [purchased by ministerial decree in the 1960s] was good even though that was very late and very over budget, it doesn't mean that the Joint Strike Fighter won’t eventually be a good purchase. But the actual decision-making process at that time was extraordinary. And I think it is a concern that Australia seems to have this ability, and I'm not being partisan here, governments of both persuasions seem to have the ability to just let politics... They talk a lot about process, the importance of good process, good thorough decision-making in Defence, through DMO, through industry.

But in the end, it's around the Cabinet table where the government has been far too willing to just say, 'You know what, let's go American'. From what I here, the decision in the 2009 White Paper, to go for twelve submarines, to double the submarine fleet, when we can't even keep two submarines at the moment in the water, was Kevin Rudd's. A situation from what I've heard where Rudd literally pulled a number out of thin air. Now I can't confirm that but that's certainly what the word is around Canberra.

And if that's the case, there's another situation where a number has been pulled out of thin air, with very little regard to the enormous consequences that flow from it. And I think there is a rubbery commitment by governments in Australia to proper processes in Defence. And it's no surprise perhaps then that DMO and Defence do struggle at times with this sort of ad hoc political management.

12.7 COMPLEXITY PROVIDES ITS OWN POLITICAL SHIELD

We don't have people marching in the street every time the public [has become aware] that we have lost a hell of a lot of [Defence] money which could have been used for other civic purposes. It's an unusual debate in a political sphere, Defence procurement, because the figures are so large that it truly deserves to have a much greater focus on it than it does. I mean, we are talking massive amounts. If ASPI's [Australian Strategic Policy Institute] guess was correct, thirty-six billion dollars for twelve new submarines would dwarf the Snowy Mountains Scheme, would dwarf any investment since Federation. And you know what the second highest investment would be? It will be the Joint Strike Fighter. So, these are enormous figures and they go right to the heart of taxpayers. This is big budget Defence. So, I am surprised that it doesn't have greater traction in Australia. I think it is because it's such an obscure process, and it's such a specialised area. There are only a very few people who understand it; even less in the media. And I think that there is a lot of vested interests in it.

And that's even more reason why it's important for those who do know how to scrutinise it, test it, and try and improve it, or at the very least, [to] keep it honest. It's an incredibly big Byzantine system. The Senators are very good with their questions at Senate Estimates but to me, it rarely amounts to anything. In fact, there's often not a great deal of press that comes from those Senate Estimates as well. It's a concern. Perhaps they would be more interested if Australia was in a situation where it faced a major conflict. Perhaps that would change the debate slightly but of course, then it would be too late wouldn't it, because you can't just press a green button and have Defence procurement get in the fast lane. Well you can try obviously, during the World Wars they did. It's a very difficult issue and I just think that Australian politics is just something that doesn't feature as well as it should.

12.8 VALUE-FOR-MONEY

In theory, the answer should be the best military capability for Australia that we can get for a reasonable cost. I'm not sure it would be as pure as that. I think they would say, ‘A great military capability for Australia that also fosters Australia's ability to maintain that capability’. I think they would broaden it slightly into national interest terms which go beyond the pure defence of Australia. And that's really where a lot of this debate is being had of course. But equally, to embrace it entirely without massive improvements in the process is asking for disaster financially, delivery wise, and ultimately, I think you've got to be frank here and say you will end up with probably a less capable Australian Defence Force or a situation which certainly, a lot of military commentators have been saying recently, where you only get a handful, a very small handful of workable good platforms [ships, planes, etc.], which in the end are probably less use than a lot more [platforms].

A very good example is in the submarine debate. ASPI has been talking about the fact that you can buy eighteen submarines overseas off-the-shelf for the same cost of making six home-grown submarines; extensions of home-grown as there's nothing pure home-grown. There's no pure MOTS but within that debate, the fact is that if you did that, then you would have, technically, thirteen submarines available at any one time. Now, having available thirteen smaller short-range submarines may be a lot more strategically powerful than three bigger, more ‘muscley’, more mean submarines. You've got the interesting trade-off with quantity versus quality and I think that's a part of the debate.

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PROFESSOR PAUL DIBB AND GEOFFREY BARKER: THE STRATEGIC ANALYSTS

Excerpts from:

Iron colonels fight the invisible hand.[58]

by

Paul Dibb, Professor Emeritus at the Strategic and Defence Studies Centre at the Australian National University

and

Geoffrey Barker, Visiting Fellow at the Strategic and Defence Studies Centre at the Australian National University.

With tens of billions of dollars at stake, [defence minister] Greg Combet is caught between the demands of civilian bureaucrats for competition at any price, and military demands for US equipment regardless of cost or adequate alternatives.

Free-market competition for defence contracts has seemed the holy grail of defence industry policy as the federal government has moved to undertake a $100 billion plus rearmament program over the next 30 years. "Competition is the nature of it," the chief executive of the Defence Materiel Organisation, Stephen Gumley said at last year's [2009] Defence and Industry Conference. "The competitive environment is very important to everybody in the system."

But the [Rudd] Labour government which is working on yet another defence industry policy statement, no longer seems to accept fully Gumley's view that free-market competition delivers the best outcomes in terms of value-for-money, risk minimisation, on-time delivery and technological innovation. [Recently] defence minister Greg Combet publically rejected DMO's practice of opening to competition every naval ship repair and maintenance job. "In my opinion this was not a good policy solution ... by imposing competition at this level the commonwealth did not receive value-for-money and companies were not able to invest in their workforces, infrastructure and capital equipment," he said.

[58] (Dibb & Barker, 2010)

Combet went on to announce that the government now planned to establish long-term, performance-based contracts in lieu of the present arrangements.

Yet it would be misguided to attribute all defence procurement shortcomings to the rigidity of the DMO's pro-competition ideology. Some astute observers look instead towards the Defence Capability Development Group (CDG) as also contributing towards procurement problems. The CDG, which advises the DMO, is run by uniformed personnel. Where Gumley appears wedded to a competitive approach, the so-called 'iron colonels' within the CDG tend to default reflexively to a preference for foreign military sales (FMS) from the US, arguing that these ensure 'interoperability'.

Moreover, the loyalty of uniformed Officers in the CDG is to their Service [Army, Navy, Air Force] commanders [not to their Divisional Head in the CDG] who control their careers and promotions and who expect the Officers to deliver the equipment that they want; sometimes regardless of competition, cost and wider strategic and economic considerations [the purview of the DMO].

The CDG is resistant to allowing Australian producers to compete with US suppliers, even when there are lower Australian prices and entirely comparable local capabilities available. [T]he CDG has a powerful influence on decisions and tends to support its decisions by asserting that they are 'the military requirement', not to be questioned by the civilians in the DMO or even ministers.

Some observers, while not questioning Gumley's commitment to competitive processes, believe he sometimes raises the virtues of competition to help the DMO break through the anti-competitive prejudice of the CDG's iron colonels and to appeal to other government agencies, such as the Department of Finance [and Deregulation], which have input into procurement decisions. In an effort to check the iron colonels, the 2008 review of defence procurement and sustainment led by businessman David Mortimer[59] proposed measures to get the DMO involved in procurement decisions at earlier stages of the process. Now the Rudd [Labor] government is letting it be known that it believes the CDG should be headed by a suitably qualified civilian.

The trouble with DMO's competition-at-any-cost policy is that it is an ideological belief laden with theory imported from neo-classical economics. Reflecting its 18th century laissez-faire origins, the theory asserts that optimum defence industry outcomes can be achieved only through the invisible hand of competitive market activity. But is that always and inevitably true for defence procurement? The last Howard [Coalition] government defence minister, Brendan Nelson, did not think so.

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[59] (Mortimer, 2008)

In his 2007 defence industry policy statement, Nelson acknowledged that competition, where practical, "offers many benefits including strong incentives to innovate, improve performance, and reduce costs. For this reason, competition will remain the underpinning approach to achieve value-for-money in defence procurement". But Nelson added: "In some instances, however, a partnering or alliance approach may deliver benefits."

The US Rand Corporation, hardly a hotbed of socialist economics, is also sceptical. "Competition may not always yield better prices or results in a balanced allocation of work under conditions in which there are high resource demands," it said in a report produced for the British defence procurement agency in 2005. Now it seems that [defence minister] Combet has a very similar view, preferring long-term performance-based contracts to the awarding of separate contracts whenever repair or maintenance is required. We do not doubt (and neither did the former [Howard Coalition] government) the economic virtues of competition, but there are two important objections to Gumley's fundamentalist model of competitive defence procurement.

First, the model assumes (and requires) a multitude of suppliers and buyers. In Australia there is not a multitude of suppliers – the defence industry is small, and is becoming smaller globally as defence firms consolidate. Moreover there is only one buyer; the Department of Defence. In this monopsonistic situation there is no space for fair and open competition on a level playing field. Second, free-market competition is about short-term utility maximisation. Defence policy is about long-term survival maximisation. When national survival is at issue, nations do not count the cost in terms of blood and treasure. That is why there are few, if any, sovereign nations where the free market is given full sway over their defence industries. Why should Australia think different?

A sustainable defence industry base is vital to Australia because it has to maintain a technological edge over other regional powers to compensate for the relatively small size of its defence force. That technological edge is becoming more important as Australia's relative regional strategic weight continues to decline due to the growth of the economies and populations of neighbouring powers. So what to do?

The Rudd [Labor] government's defence policy white paper last year[60] proclaimed that the government is "committed to ensuring that certain strategic industry capabilities remain resident in Australia". It also stated that the government "is prepared to intervene in the market" to ensure that what it calls Priority Industry Capabilities [PICs] "remain healthy and available". Last July [2009] Defence Minister John Faulkner

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[60] (*Defence White Paper: Defending Australia in the Asia Pacific Century - Force 2030*, 2009)

overrode Defence's reflexive tendency to secrecy and identified 12 PICs ranging from electronic warfare and acoustic technologies to combat clothing and personal equipment. But is this approach to be reconciled with Gumley's policy of competition *red in tooth and claw*?[61] What is needed are clear guidelines from the government of its intensions of the way ahead, so industry can make appropriate investment decisions.

Defence industry policy has had a very chequered history in Australia with little in the way of imaginative or bold policy innovation, unlike in Britain... "[T]o ensure that we [Britain] can continue to operate our equipment in the way we choose to maintain appropriate sovereignty and thereby protect our national security". A major part of the Australian problem is that Defence industry policy division is located in the DMO, with its overbearing attitude to competition at any price. The fact is that Australia's strategic policy and force-structure priorities should have much more influence on the development of our long-term defence industry policy.

For this to happen the industry policy division must be relocated elsewhere in Defence to a key policy area – such as Capability Development Group, with it being led by a senior, tough-minded civilian – so that industry's contribution can be considered earlier in the acquisition strategy, not as at present as an afterthought. (Emphasis added) There needs to be a much tighter alignment in our defence policy between strategic guidance, capability priorities, and the role of defence industry as a critical component of the Australian Defence Force's operational effectiveness.

And we can expect no doubt yet another well-argued defence industry policy paper from Combet. The question is whether – like his predecessors – he is going to allow the DMO to let his recommendations be emasculated. Defence has a long history of biding its time when it considers policies of the government of the day to be unpalatable, and waiting for the next minister to come [there have been nine defence ministers in the past 16 years].

Despite sever budgetary pressures, the government should also reconsider its inclination to force DMO to buy more military equipment off-the-shelf rather than to develop riskier but potentially more effective local equipment optimised for the ADF's unique operating environment. While perhaps financially attractive, this policy reduces innovation and our technological edge, and transfer risk from the DMO to the battlefield, where the lives of our troops are lost.

Combet has now moved to reconcile this approach with Gumley's competition-at-any-price policy. This week he announced that the government had implemented most of the initiatives in Nelson's 2007 defence industry policy statement, including its essential

[61] (Murray, 2008)

pragmatic approach to competition [the establishment of long-term performance-based contracts].

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JOURNALISTS AND EDITORIAL CONTRIBUTORS

This problem is exacerbated by Defence's promotions structure. Individuals, who are looking to their next promotion, often only two or three years away, are actively discouraged from "rocking the boat". This breeds a culture of short-termism where problems are avoided instead of fixed.[62]

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"I think it's fair to say that at times the uniformed side of Defence finds it difficult to respond to directives that come from civilians in the form of the government and minister of the day," Dr Nelson [former Minister for Defence] told the *Herald*. A key problem, Dr Nelson said, had been extracting accurate information from the insular and secretive defence machine. "What is frequently a strength of Defence can at times be a weakness," Dr Nelson said. "One of the great values which is enmeshed in the defence force… is that of mateship, protecting and defending your mate, but… that culture can actually work against the best interests of not only Defence but indeed the country that it serves. "There is no doubt that you had to keep testing information to confirm its accuracy." Dr Nelson would irritate Defence chiefs by consulting directly with soldiers. However, one former senior Defence insider criticised this practice: "It puts the person on the ground in a virtually impossible position. "To whom am I actually responsible?"[63]

…oOo…

As he [Dr Nelson] points out … the department and the armed services have to persuade the public about the merits of committing huge amounts of its money to acquiring new capabilities…[64]

…oOo…

Defence Department secretary Nick Warner has dismissed as "pure fiction" claims his officials spied on [current] Defence Minister Joel Fitzgibbon. On March 26, *The Age*, *The Sydney Morning Herald* and the *Canberra Times* ran a story by journalists Philip Dorling, Nick McKenzie and Richard Baker alleging that an officer from Defence Signals Directorate [DSD] had accessed Mr Fitzgibbon's office IT system. The story

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[62] (Banham, 2009)
[63] (Banham & Snow, 2009)
[64] ("Need-not-to-know doctrine [Editorial]," 2009)

led to claims the relationship between the Defence Department and the minister had broken down. Mr Warner said that the review found there was no Defence investigation of the minister, including by DSD. A spokesman for the Defence Minister said last night the minister accepted the report's findings.[65]

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Defence is a difficult portfolio, seen by some as a poison chalice. In the last 26 years, of the nine men who held the portfolio, only 2 have gone on to hold another ministry.[66]

…oOo…

Allan Behm[67]: ...I think that the issues are much more systemic in the Defence portfolio. In the last 15 years we've had 7 Defence ministers. It is a very difficult portfolio and it's not just its size; there are other big portfolios in government. But it is the tremendous variation of responsibilities of work, of accountabilities in that organisation, and the fact that so many of the accountabilities don't actually focus on personal responsibility but people are answerable to boards and things like that.

So, it's a monster to try to drive and if there isn't really close alignment between the top leadership of the Defence organisation and the Minister then both sides are going to suffer heavily and we have certainly seen that with the dismissal effectively of two Secretaries [the highest level departmental executive officer appointed by the government] of the department and a procession of Ministers through there that simply can't give you leadership stability.

[The reforms in the Defence White Paper[68]] are definitely dependent on who is the Minister. I don't think reform can be conducted within Defence; it's just simply too big a job and there's too much devolution. Whoever is going to be the next Defence Minister has to be tough-minded; he can't take anything at face value, and certainly can't be seduced by pomp and circumstance which seems so often to happen.

[The new Minister must] drive the reform program through, externally, and boy-oh-boy, that's a very big task.[69]

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[65] (Maley, 2009, May 30-31)

[66] (ABC Radio News, 26 June 2009)

[67] Following this published commentary, Allan Behm became the Chief of Staff to the Hon. Greg Combet MP, Minister for Defence Personnel, Materiel and Science in the Rudd Labor Government. His function is central in the development of Defence equipment procurement policy and the overview of procurement performance.

[68] (*Defence White Paper: Defending Australia in the Asia Pacific Century - Force 2030*, 2009)

[69] (Behm, 5 June 2009)

"What Steve Gumley [CEO DMO] and his team have got to do is get down to the levels below - driving it and trying to run it as a business. I am comfortable with the way DMO is going." But he [Ron Fisher] warns the DMO should be careful in trying to squeeze the profit margins of Australia's defence industry players. "You have to make profits so you can reinvest in other things such as skilling and people. Publicly saying that industry makes too large margins in my view is the wrong thing to say. We make healthy margins because we have stakeholders and we have employees we need to look after. I have mentioned to Steve [Gumley] the fact to be careful in respect of industry profits."[70]

…oOo…

...the Government has clearly signalled a willingness to buy off-the-shelf equipment from overseas if industry fails to manage [the equipment] expansion effectively. There are strict limits on the ability of foreign companies to be involved with aspects of some defence projects...it remains to be seen how the balance will be struck between European [submarine] design...and the use of sensitive submarine related systems from the US.[71]

…oOo…

Rear-Admiral Rtd Peter Briggs: New technologies...will need to be adapted to suit Australia's particular requirements, many of which are driven by the demands of our geography. Access to the best US and European technologies will be critical. The cost of acquisition is the figure on which we tend to concentrate. However, the through-life operating costs will be twice as much. ...the acquisition strategy should therefore be to minimise the total cost of ownership. The traditional approach of competing [tendering] will not deliver value for money. Instead, we must look to the models of long-term relationship contracts...[72]

…oOo…

Earlier this year, the Defence Materiel Organisation's head Steve Gumley told an industry audience that defence now spends more on sustaining the equipment it operates - repairing, maintaining and upgrading it - than in buying new equipment. This financial year [2009], $5.1 billion of the DMO's $9.7 billion budget will be spent on sustainment, he said. This figure is growing in real terms at about 6 per cent a year. It's a rule of thumb that over a 20 or 30-year service life a customer can spend between two and four times as much on sustaining a piece of defence equipment as on purchasing it.

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[70] (Walters, 2009, May 23-23)
[71] (Cotterill, 2009)
[72] (Briggs (Rear-Admiral Retd), 2009)

As budgets shrink and customers buy fewer aircraft (or ships, or radars), sustainment has become a pivotal part of their [defence equipment suppliers] business growth.[73]

…oOo…

The biggest challenge for the project managers of Land121 Overlander [trucks and trailers] is acquiring vehicles today that are able to meet the future requirements of the Australian Defence Force. *This requires gazing into a crystal ball* that reveals the future of the international threat environment and the needs of the army.[74] (Emphasis added)

…oOo…

The nation's air combat force has withered to its smallest size in a generation, with less than half of the country's fighter jets available for operations. At times this year, as many as three out of four of the RAAF's [Royal Australian Air Force] 86 fighter jets have been grounded due to maintenance, upgrade or safety concerns. Of those warplanes that are available, only a handful can be sent into combat because they do not yet have sufficient electronic protection to survive against modern air defences.

Defence Minister John Faulkner refused to discuss the current availability of the RAAF's fighters, but maintained, "Air Force is at all times generating sufficient combat capability to meet government requirements".

It [the government] has recently come under pressure to explain why the navy has been unable to put more than one of its six submarines to sea on a regular basis.

The problems with the RAAF's fighter fleet are mirrored in many other areas of the defence force, where billions of dollars of powerful weaponry is awaiting upgrades or promised replacements and cannot be deployed.

The navy's eight Anzac frigates cannot be sent into a hotly contested war zone because of a lack of defensive weaponry, while the army cannot deploy its 33 Black Hawk helicopters to war zones because they are vulnerable to shoulder-launched missiles.[75]

…oOo…

NATO has a "standardised agreement" - called Stanag 4569 - that rates the blast protection of military vehicles.

In the draft specifications given to tenderers, the DMO wants "off the shelf" protected vehicles that meet Stanag 4569 level 2 - the second-lowest rating provided by NATO.

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[73] (G. Ferguson, 2009)
[74] (Johnstone, 2009)
[75] (Stewart, 2010)

In simple terms a level 2 vehicle can withstand a bullet fired from an infantry rifle, and a six-kilogram TNT explosion.

The US military is investing $US3 billion to replace the Stryker and develop a new mine-proof vehicle that meets the equivalent of Stanag level 5.

Australia now uses the Bushmaster [vehicle] in Afghanistan. Its precise blast protection level is classified, but military sources told The Saturday Age the Bushmaster is "well above level 2 in terms of front protection and floor protection" for IED [Improvised Explosive Device] blasts. The problem with the Bushmaster is its limited size and weight carrying ability.

Making heavy vehicles blast-proof is expensive. A standard military truck costs about $200,000. A level 3 blast-proof vehicle often needs extra axles, and costs closer to $800,000.

"German troops in Afghanistan are transported in trucks rated at level 3," the whistleblower told The Saturday Age. "All the companies being asked to tender are capable of building a heavy vehicle up to a level 4."

Australian Defence Association spokesman Neil James said there were "considerable concerns" with the trucks being bought under Overlander [the truck supply tender]. "It's a classic example of building down to a price, rather than up to the protection level that soldiers need," Mr James said.

Mr James said Australia was in danger of repeating past errors, and cited the budget cuts that forced the navy to buy HMAS Kanimbla and HMAS Manoora - two used and rusting ships - under the Keating government in 1993.

"That decision is haunting us 18 years later," Mr James said. "This truck decision is one that could haunt us for another 30 years. Level 2 is essentially small-arms protection and a bit more. The level of blast protection needed for trucks in this day and age, even if it's for logistics, needs to be better than level 2."

The DMO is under pressure for failing to deliver on projects, including 11 that have been placed on a list of "projects of concern" by the federal government. One is Overlander [LAND121], which has been scaled back to about 2500 vehicles, of which about 800 will be armoured.

Overlander is two years behind schedule after the initial tender, won by BAE, was botched [failed]. One of the reasons given for that failure was the low blast protection of the winning vehicle.[76]

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[76] (Hawthorne, 12 March 2011)

…oOo…

Defence and industry insiders have told The Saturday Age the government has tried to circumvent recommendations from the Defence Materiel Organisation, which favoured a cheaper armoured truck made by German company Rheinmetall MAN. It beat both Mercedes-Benz and the modified Bushmaster Ute [utility], which is made in Bendigo [a vehicle production facility in the Victorian regional city of Bendigo] by French company Thales, in the Defence tender.

Despite this, a source in the DMO told The Saturday Age [that] *a message came back from the government after the German company topped* [won] *the tender process: "Any option that doesn't include Thales is no option."* (emphasis added)

Another insider said: "The government wanted to keep Bendigo open and it [the production facility] would close if we didn't give them some work." *They said the government was trying to influence the final departmental decision*, worth as much as $1.7 billion. (emphasis added)

While the DMO recommended Rheinmetall MAN, the government has yet to make a decision on the tender. The department denied being asked to include Thales as a successful tenderer. It said the final decision would rest on "the needs of our soldiers and best value for money".

Privately, a number of parties have raised concerns about political interference in the tender.

In March, Mercedes-Benz Australian president Hans Tempel wrote to Defence Minister Stephen Smith to express concerns about "the overall process of selecting a final tenderer … and *whether undisclosed factors will play a role*". (emphasis added)

[A] letter, which has been obtained by The Saturday Age, was written after Labor's Bendigo MP Steve Gibbons stated publicly that the government could reverse the DMO's final decision [recommendation]. The MP told the ABC [national broadcaster] that while the DMO might "overlook Bushmaster, we may be able to overturn that … because *ultimately it will be a government decision*". (emphasis added)

A DMO source said: "This is [business] protectionism. We are trading off the safety of soldiers and we are trading off capability for an Australian-made option."

This week, Mr Smith [defence minister] said he would make no decision on the contract until after he received a recommendation from the department [DMO]. "We will await Defence advice and then we'll make a judgment." The department [DMO] makes a recommendation based on the technical merits of each manufacturer, but *before a formal submission* [by DMO] *is made* [to the Minister] *it must consider what is known*

as "Whole of Commonwealth requirements" for army vehicles [which includes advice from other non-Defence government agencies and considers, inter alia, political and economic issues]. (emphasis added)

Defence and contractor sources say this is "industry policy being run out of Defence".

Several communications have been leaked to The Age over the past month.

The motivation, it seems, is a desire to avoid future headlines about the Bushmaster Ute, ones that echo past reports of "rusty ships" and "dud subs" [faulty submarines].

"When it all blows up in the media about bungling the Bushmaster Ute, the government will stand back and let DMO take the fall [blame]," said one person involved with the tender. *"The amount of government interference in the project is enormous."*[77] (emphasis added)

…oOo…

LAND 121 Phase 4 is a $1.5 billion project that seeks to provide up to 1300 protected and unprotected light vehicles.

Thales Australia's Hawkei has been selected as the preferred vehicle for the development and testing under Stage 2 of the **M**anufactured and **S**upported in **A**ustralia (MSA) option under LAND 121 Phase 4.

Following exhaustive testing and assessment of the MSA participants, *Defence recommended the Hawkei vehicle as it was most likely to meet the future capability and value for money requirements* of the LAND 121 Ph4 MSA option. (Emphasis added)

The next stage of Phase 4 will include funding for further development and testing including the manufacture of prototype vehicles.

Subject to successful testing of the vehicles, final Government approval of the project is expected in 2015, and production work could potentially commence in Australia as early as 2016.

Thales Australia's currently manufacturing Bushmaster Protected Mobility Vehicles at its factory in Bendigo. *This manufacturing capability, and the skills of the workforce, is an important national security capability*. (Emphasis added)

On current plans, manufacture of Bushmasters at Bendigo is expected to be completed before the end of 2013.

[77] (Hawthorne & Epstein, 2011, July 23)

In order to retain critical skills in Bendigo while the design of the Hawkei is finalised and proven, the Government has agreed to *explore* the purchase of additional Bushmaster vehicles. (Emphasis added)

The approval to acquire additional Bushmaster vehicles will be dependant on Thales demonstrating an efficient, effective and innovative program to maintain core protected vehicle manufacturing skills at Bendigo and in successfully meeting technical performance, cost and schedule commitments in the development of the Hawkei vehicle.

Progress towards a suitable production-ready Hawkei will be measured through a series of milestones. Thales will need to successfully demonstrate the maturing design of the vehicle.[78]

…oOo…

Land 121 Phase 3B: This project was listed as a Project of Concern in 2008 due to increased technical, cost and schedule risks, and concern about the ability of the originally preferred tenderer's capacity to deliver against their tendered offer.

These issues, together with probity concerns arising from additional vehicle and module requirements, led to the Commonwealth withdrawing from negotiations. A *resubmission of tenders* was conducted in 2010. (Emphasis added)

Yesterday, the Government announced that subject to the negotiation of a suitable contract Rheinmetall MAN had been down-selected [chosen from a short list] as the preferred tenderer and will now enter into detailed negotiations to provide up to 2,700 protected and unprotected medium and heavy vehicles.[79]

…oOo…

Peter Leahy, served as [Australia's] Chief of Army from 2002 to 2008.

Professor Leahy, a soldier for 37 years who finished his military career as Lieutenant General, said Australia had followed the American foreign policy agenda, but that agenda was changing and Australia needed to adapt.

Australia was a strategic follower looking after its interests by supporting the US.[80]

…oOo…

Defence is a diabolical place to run. Ministers have been difficult, and, increasingly, publicly critical. The strain has been increased by major deployments - the one in

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[78] (Clare, 2011, December 12)
[79] (Clare, 2011, December 13)
[80] (Nicholson, 2011, July 19)

Afghanistan actually costing lives, generally pointlessly - and by rapidly changing strategic circumstances. The intellectual calibre of the department - and, in certain non-fighting respects, of the services - has declined, just when the capacity for defence surprises has increased.

Given the problems of bad budgeting, mismanagement of acquisition programs and a host of crises, [Department of Defence Secretary] Watt has had to micromanage - first just to get the number of scandals to manageable levels. The casual observer might think that he has failed - given the disasters of recent months - but this would be slightly unfair, because a significant proportion of the scandals the public knows about (such as sexual abuse) involve bad conduct by soldiers, sailors and airmen and women and mismanagement by service [Army, Navy, and Air Force] chiefs.

Yet the civilian side has big, if less noisy, problems. Problems with equipment and maintenance and pay and personnel. More are on the horizon, not least as government struggles - sometimes incoherently - to decide what it wants to do, with what, and where.

...[But] *those who see the main games of bureaucratic politics being the struggle for influence between PM&C [the Department of Prime Minister and Cabinet] and Treasury now have no doubt about who, currently at least, is on top*.[81] (Emphasis added)

…oOo…

Bitter infighting has again erupted inside the nation's largest defence project...

There has been bad blood between BAE and the Alliance (comprising the Defence Materiel Organisation, the Australian Submarine Corporation and Raytheon Australia) since BAE botched work on the keel block for the first AWD earlier this year, delaying the project by at least a year. BAE blames that partly on poor data from the Alliance.

In frustration, BAE contacted [Minister] Mr Clare directly, briefing him on the dispute and warning of job losses, in Williamstown, which is in Health Minister Nicola Roxon's seat of Gellibrand.

Mr Clare is understood to have then asked the Alliance to brief him further on the dispute, but on Friday the Alliance agreed to release the data packs to BAE this week, which it has done.[82]

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[81] (Waterford, 2011, August 6)
[82] (Stewart, 2011, September 17-18)

…oOo…

“However, [defence minister] Smith and predecessors for 15 years are entitled to a strong sense of grievance about being continually distracted from higher policy, strategy and logistics by sex and bullying scandals, pay and equipment stuff-ups and endemic problems of procurement, project management and multi-million-dollar weapon platforms that don’t work, don’t arrive, don’t coordinate with other equipment. And by politically mischievous leaks.”

Defence has about four times as many people with stars on their epaulets as Australia needed when we had a million men and women under arms in 1944. We have about 30 times as many senior bureaucratic managers as then. (Indeed, perhaps it is the obvious brass creep and oversupply that causes so many problems, and so often with so little accountability.)

The military has been described "as a 'tight' culture in which shared identity, clear norms and role requirements, strong sanctions for deviations, and social stratification are exercised in a predominantly male culture [which] tends to create various manifestations of 'insiders' and 'outsiders'.

" 'Insiders' are those who are socially dominant and conform to the cultural ideal, while 'outsiders' are those whose inclusion is perceived as posing cultural risks. 'Outsiders' are often cultural minorities, such as women [!], ethnic members or those with a non-mainstream sexual persuasion.

An active element does not like [defence minister] Smith, or the government, or even, the idea that higher policy and decisions about the defence of the nation is a matter for civilians. For them, any political action is "interference", unworthy, unprofessional; and possibly unconstitutional.

[Defence minister] Smith, like other recent Labor and Liberal ministers, has to live with a regular array of minor mutinies, insubordination, deliberate stuff-ups and leaks.

Some of those crying for [defence minister] Smith's blood want the case to be an object lesson which will warn off future ministers from having strong views about the need for the services to get their act in order, or ever interfering in service disciplinary matters again. With or without Smith it would be a management and political catastrophe if that occurred, or were seen to have occurred. Our generals, our admirals and our [air] vice marshals have yet to earn that trust, or even, at this stage of the nation's history, to prove that they are more on top of their job than the politicians are at theirs.[83]

…oOo…

[83] (Waterford, 2012, March 10)

15
THE HON PETER COSTELLO: A TREASURER'S REFLECTIONS[84]

Excerpt from:

***The Costello Memoirs*, by Peter** Costello and Peter Coleman[85]

When I became Treasurer [in the Australian Government], Defence would not even itemise its Budget submissions or state where the funds were being spent. It used to insist on a global budget which, if the Government agreed to it, would enable the department to allocate funds between projects as it saw fit.

All the services [Army, Navy, and Air Force] protect their own areas. There is a high turnover of people in the various Defence hierarchies. They had to rely on the oral traditions passed down the chain of command. I was able to remind the Defence chiefs of previous undertakings they had given about constraining costs.

Every step in achieving more efficiency involved a tussle over whether or not the central Government *was entitled* to a line-by-line disclosure of how Defence spent its budget. (Emphasis added)

[84] Treasurer in the Howard Coalition Government
[85] (Costello & Coleman, 2008)

16

PETER HARTCHER: CABINET GAMES AND THE BUREAUCRACY

Excerpt from:

To the Bitter End [86]

Howard [the Prime Minister] was so keen to accommodate the Defence Department's every desire that it enjoyed carte blanche. Costello describes a total collapse of rigour in the department's funding: "Certainly, if they ever wanted to increase their bid, they were given every encouragement to do so. I spent a lot of time wrestling with the Defence Department. In any decision by a government, the prime minister has the upper hand. To strengthen his own hand, Costello habitually delayed telling Howard the national revenue estimates, said a senior official. "Costello would make sure that Howard didn't get the numbers till the week before the budget," the official said. It was so late that, by the time Howard saw the final revenue numbers for the budget, he had no time to develop elaborate spending proposals. By then, Costello already had his tax proposals mapped out.

Howard, frustrated, worked to counter this tactic. He ordered his department, the Department of Prime Minister and Cabinet (PM&C), to instruct Treasury to provide the revenue estimates to PM&C as soon as they became available. But Costello devised a counter-tactic. He simply told his Treasury officials to ignore the PM&C direction. They obliged. A senior official said PM&C asked Treasury to provide it with the revenue estimates at the same time as they went to the treasurer in the run-up to the federal budgets. It was ignored each time.

The two most senior figures in Government were in perpetual conflict over how the nation's finances should be structured. And the fact that it remained concealed for four terms of Parliament testifies to the professionalism of their relationship.

Finally, it exposes how the fate of nations can turn on the personal preferences and differences of the individuals at the top. (Emphasis added)

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[86] (Hartcher, 2009)

17

MAJOR GENERAL (RETD) JIM MOLAN: THE WAR-FIGHTER

Excerpt from:

A radio interview with Major General (Retd) Jim Molan[87]

REPORTER: Major General (Retd) Jim Molan was Chief of Operations with the coalition forces in Iraq from 2004 to 2005 where he oversaw a force of 300,000 troops. He retired from the Australian Defence Force in 2008. Jim Molan describes himself as a user of Defence policy; a user who believes that Australia's defence forces are suffering from 30 years of neglect.

JIM MOLAN: Now I don't advocate that everything we've got has got to fight now. But, unless we have a standard whereby we address exactly what capability these things have got to deliver at the end of the day, we're kidding ourselves. What I do argue for is that whatever we buy actually works.[88]

$22b a year goes on defence in Australia and so much of what we buy just doesn't work.[89] (Emphasis added)

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[87] (ABC Radio National, 3 May 2009)
[88] (Oakes, 2010)
[89] For balance, the relationship between the interviewee and the DMO requires investigation.

18

AIR COMMODORE E.J.BUSHELL AM (RETD), GROUP CAPTAIN R.G.GREEN AFC, RAAF (RETD), AND AIR VICE MARSHAL B.J.GRAF AO, RAAF (RETD) : A GATHERING OF (MESSENGER) EAGLES

The structural failures seen currently within Australia's Defence bureaucracy … go back to … the unfettered power given the civilian Defence Department bureaucracy to 'reform' the Services [Army, Navy, and Air Force] and the higher defence machinery as it wished. Since then, Governments of both persuasions as well as Parliaments have stood aside and willingly ignored the continued abuse of bureaucratic power, seemingly uncertain as to how to respond, or afraid to make a move. Many of the attitudes and behaviours that have been allowed to develop within Defence are more characteristic of an oligarchy rather than a government department devoted to supporting the Services, Government, and the security of the Australian people. [There is] the inherent and irreconcilable conflict of interest that must inevitably exist between vague and changing political/bureaucratic decisions and pragmatic military management imperatives.[90]

[90] (Bushell, Green, & Graf, 2009)

19
THE HON. DR BRENDAN NELSON, MP: A DEFENCE MINISTER'S PERSPECTIVE

Minister for Defence in the Howard Coalition Government

19.1 RELATIONS WITH OTHER COUNTRIES

Naturally, the US Government and those who advocate on its behalf were quite anxious that we stick with an American product. So that becomes a part of the issue. So, when I go to Paris, the French Minister's talking to me about satellite systems and reminding me of the relationship between the two countries; you know, that sort of thing.

19.2 RELATIONS WITH CABINET

And I used to read everything that came to me. It was time consuming. I spent as much as 10 or 12 hours preparing for a single meeting of the Security Committee [of Cabinet] where I had 7 or 8 submissions and I used to read all the attachments. In the two years that I was there, we made a lot of decisions about things and occasionally, I can't think of any but I'm sure there were, occasionally you don't get what you want. But it's always very helpful when the Prime Minister [John Howard] is sympathetic to Defence, which he was.

19.3 RELATIONS WITH THE DEPARTMENT OF DEFENCE

As far as making decisions about the equipment is concerned, the system from the Minister's point of view has its own momentum and one of the things I think Defence has some difficulty with, is Ministers who probe deep down into the detail and go outside the chain of command. Now whether that's on the military side of operations or whether it's in the chain of command on the procurement side; I perhaps did both.

If you don't express a particular view and force that view upon them, then Defence as a big amorphous mass that it is, makes a decision that it wants to move in a particular direction to get a certain kind of capability.

On more than one occasion, I had to literally stand over them and say [that] there is going to be a tender on this [in contrast to the desire for sole-source]. Unfortunately [in

one instance] when I made the decision, the [Defence] Chiefs were not as enthusiastic as they could have been to go out and support the decision because they had their noses out of joint because someone had fiddled around with their plan.

But in my case, you've just got to stick your head down and make sure that you examine all of the facts. Test all the information you've got. That's one of the things that's very important in Defence. You can't believe everything you are told. You've got to test it, you've got to test it again, and you've got to test it again. Whether it's the capability of the equipment, or whether it's the cost of it, or whether it's the projections on delivery timetables. There is what I describe as this 'conspiracy of optimism' that operates there. So, unfortunately the Minister's job at times is to prick it. Well, I'm immediately thinking of one very big project where the Minister did not take their [Defence] advice and thank God, the taxpayer would be very grateful that that was the case.

There is also quite an effort [by Defence] to control information that gets to the Minister. It was frustrating at times to say, "I'd like to see that person". You start at the top and go down your tree and you say [that] I want to have a meeting with that person. And there would be people who would work hard to see that that person didn't get to see you. So I acquired the habit, fortunately in this day and age, almost everybody has a mobile phone; so I would find myself calling whoever it is on the mobile phone and just saying, "It's Brendan Nelson here, the Minister, just ringing to have a chat with you."

The other thing that I did too was I made it my practice to actually go to the person [at the bottom of the list of document authors]. On the briefs they'd send you over, or the Cabinet Submissions, whatever, they'd say, "Prepared by Brigadier so and so" and all that sort of business, and then I go down the line [and] I'd get the last name on the page, the person with the lowest rank, because I knew that that was the person who actually did the work. And they'd always have their contact numbers and I'd ring them up and talk to them. And frequently to thank them and congratulate them for the work they'd done but sometimes to ask them about things in 'Attachment C' or something that I had some queries about.

The whole organisation manages up. That's a big part of the problem. By the time the information gets to the Minister, it's like a whale carcass that's been dragged through a pool of sharks. You often have to go and do a post-mortem on the sharks to get the information you're after.

For the record, I've said it publically; this country should get down on its hands and knees every day and thank God that Steve Gumley [CEO DMO] is in that job. A fantastic guy.

19.4 Relations with the Defence Industry

The process generally I think works reasonably well. It's a food chain. The big fish eat the little fish. One of the reasons I drove the Defence Industry Review [was to enable us to] get visibility of the supply chains for the primes [prime or lead contractors], so we could actually see what [the] Australian content was, where the supply chain was in relation to bids, putting that in the decision-making grid in terms of who may or may not be successful.

The big project though, in the Kinnaird[91] system; once we made the decision that we were going to build Destroyers [warships], well we selected two products, one as close to off-the-shelf you can get and one that's perhaps modified according to circumstances. You put 10% of the total budget upfront and then go through a rigorous process of comparing one with the other.

At one stage I asked Navantia [a Spanish ship designer and builder], I asked to actually meet the leadership of Navantia, the president and key officials, because I wanted to impress upon them that the ultimate decision was going to be made by me and that I would be making the recommendation to the Cabinet and it didn't matter what the Navy wanted, I was the one that was going to make that decision on behalf of taxpayers. I [had] accurately sensed that they felt that they were a “stalking horse”[92] and that they were not seriously nor going to be seriously considered as a rival bid in the particular project that they were involved with, and I made absolutely clear to them that *that was the case*. (Emphasis added)

Depending on how many you are prepared to see, you can see defence companies, large and small, all day, all night, who come to see you about different things [and] to promote their particular products, express their concerns about what is or isn't happening in the Defence Materiel Organisation. All of that sort of stuff.

I actually think it's a bit like the pharmaceutical industry where they have their drug reps and all that sort of stuff. To some extent there are times when I look at these companies and they have their government relations people and they come and see the Minister and they go and see the Treasurer or the Finance people, whoever, the backbenchers and so on and so forth, and I can understand why people in Defence would say, “Oh, that's all a waste of money; we [Defence] make the decisions”. I'm not going to contest the fact they spend too much money or whatever and you see people of varying quality in these government relations units, some are actually quite effective, dare I say value-for-

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[91] (Kinnaird, et al., 2003)

[92] Being used to satisfy the Kinnaird requirement of having an off-the-shelf option for comparison. Both bidders thought that they were being used as a stalking horse.

money, and others less so. And some of the things they seek to do are good and others, not so good. But it's actually a very good system because if you're the Minister and you're seeing someone from General Dynamics or BAE Systems, they often give you the problems they are having with the DMO. And sometimes it's exaggeration, or it's nonsense or they are just pushing their own commercial barrow and the DMO is actually doing a very good job. But there are occasions where you actually find there's a problem in the DMO or you've got a problem with an individual. Then if you've got a second company [that] has got the same issue, you start to say to yourself, "Is there a problem there?"

The other thing that it does is that it contributes to the competitive tension. So, you'll get manufacturer or company 'A' with their government relations people giving you the spin or the spiel on their particular platform [a military system such as a warship] and they tell you what's wrong with the competitor and vice-versa. You pick stuff up and obviously you don't necessarily accept at face value everything that is said to you, but it gives you useful information which you can then discuss with the appropriate person in Capability Development [a strategic planning Division in the Department of Defence] or the appropriate Service Chief [of Army, Navy or Air Force] or the head of the DMO or whoever is involved. Yeah, I've got to say there are more than a few occasions where I had the government relations team tell me something about a particular project we were running where I discovered something I didn't know, that I hadn't been told.

Obviously all of the costs that the companies have, whether it's their government relations thing, whether it's their accountants, their lawyers, whoever it is, all of those things are going to be embedded in their overall costs. I don't know whether the Australian taxpayer would be particularly reassured to know that there are people who think that all of the decisions are made in the Department [of Defence]. I think we would get into trouble if we had a Minister, whoever that is, from whatever party, who just simply took the brief and ran it in to Cabinet and said this is the way it's going to be. That certainly wasn't me. I can only speak for myself.

19.5 Comment on the Media

In some cases the media impinges on it a bit. They try to talk up or indeed talk down particular platforms or manufacturers for some reason or another.

19.6 My Understanding of Value-for-Money

Anyone that can tell you with absolute confidence, that something is value-for-money is giving you a subjective piece of advice. You can't define what value-for-money is but

you know it when you see it. In some ways, it's easier to look at something and know that it's not value-for-money. Even if they were to sell them which they won't, ever, unless they were significantly degraded [in terms of] capability, we could buy 100 F-22s [highly sophisticated US warplane]. You could say with absolute confidence that that is not value-for-money. It's not value-for-money, not for Australia, no way.

In making the judgement, obviously it's about the cost, it's about the capability, it's about the extent to which it contributes to our strategic objectives, that it protects our personnel. There's all sorts of things you can put into a matrix and there are probably some quasi-academics there in Defence that have given you some description about something as being value-for-money. But I think anyone who tells you with confidence what it is, is just giving you a subjective assertion. But you know it [value-for-money] when you see it.

The protective armour that our soldiers wear, certainly in that spectrum, you could say, well, that's good value-for-money because I can assure you that there are soldiers who are alive today because they've had this stuff on. How do you make these judgements? There were some projects, by the way, where we actually went for the one that was more expensive and in fact, one very big one I can think of, we actually went for the dearer proposal which was better value-for-money. But there's no formula that says this is better value-for-money.

And so then it comes back to the national interest test. (Emphasis added)

20

THE HON. GREG COMBET MP: MINISTERIAL OVERSIGHT

Minister for Defence Personnel, Materiel and Science
in the
Rudd Labor Government

The mismanagement of the Seasprite Helicopter project had resulted in a loss of over $1 billion of taxpayer's money for no result.[93] This was money that has not contributed to the ADF's [Australian Defence Force] capability in any way. Not only have we lost this money our naval aviation capability, especially in the area of anti-submarine warfare, has suffered. This was plainly unacceptable and it made it clear to me the importance of active [ministerial] oversight of these projects. [94]

[93] (The Auditor-General, 2009b)
[94] (Combet, 2008)

21
A Coalition's Political Advisor on Defence

In the Political-Office of the Ministers for Defence in the Howard Coalition Government

21.1 Political-Office perspectives

My role as a political-office staffer is undefined. You are there to serve the Minister's interests. I served two previous Ministers for Defence.

I'm thinking of some recent major contracts. We told the contractors not to listen to all the vested interests in Defence and other government departments. They are going to make it more complicated and when they do make it more complicated, come and tell us and we will use our influence to keep them on track. We had very clear directions from government on what we were to return in terms of the project outcomes.

Personally for me, it was just a golden time in Defence procurement. But there were a few things that caused opaqueness for contractors. One of them was that we wouldn't give them our project budget, even though they tried to get it out of us in any possible way. There was a DCP [Defence Capability Plan] budget but that was dated. The opaqueness was intentional. And I don't think they got it because we didn't really know it ourselves although we had classified guides [restricted information]. The reason why we didn't give them the budget is that you would then have had the project built to *that* budget. The second point was that of local industry content. We wanted that to be as high as possible. The contractors were aware of this but they had to do it without running over an imaginary budget.

Our guidance to them was, if you can do something in Australia more productively than you can do elsewhere then you ought to do it here. The free market is to operate. And they said, "Well what's your content [local industry] number?" Our answer was that there is no content number and that you are to do what can in-country as best you can and then go elsewhere. We took the procurement system outside of its comfort zone on purpose because we wanted to operate in the market as much as we could. That was really unprecedented. So, I know what the contractor means when he says that he was "flying blind".

There were other issues in the same vein. “Is it acceptable to the government to build a module in Malaysia?” We had to say that we don't know. We played a dangerous game because the more you start offering little nuggets of advice and influencing the process, where does it end? It's not the job for the political office to do that, that's the job of the DMO project management office.

There were all these bullshit bureaucratic instruments about like Local Sector [Industry] Planning and that sort of thing that they were trying to get us to reference. Brendan [Nelson, the Minister] wanted to go and do a Local Industry Plan for all the Defence industries. That was very problematic and if you read the Local Industry Plan, it reads like a microeconomics [journal] paper and that was intentional. We had sessions with consulting economists that went like this; we have billions of dollars coming across the desk and we are trying to do it this way so that's the policy, now go away and justify it theoretically. In other words, write the microeconomic rationale to match the politics.

My private view is that the Kinnaird Review[95] was an excellent piece of microeconomic analysis into the Defence sector. I fear that the tribes in Defence are seeking to water down Kinnaird. Kinnaird sought to make the commercial arm of the Defence department, well, the procurement part, commercial and it sought to introduce a range of reforms there that essentially freed up industrial practices and human relations practices in the DMO. That means paying market rates to get the best people so you can run it like a commercial organisation. It also sought to institute a range of processes in government such that decisions were more carefully taken, more transparent and more likely to come to the right outcome.

But, in terms of the internal politics of Australia's national security architecture, the government of the day takes on more power by making the major Defence equipment decisions and it takes that decision-making power from the bureaucracy. So the natural threat to the Kinnaird Review is for the bureaucrats to take power back and we are seeing that now and my advice to the government would be to try and reverse the trend that very unfortunately we allowed to happen in the last year or so of the Howard Coalition government.

21.2 Acquisition Strategies

I was dealing with these two major projects and they had very different commercial issues; very different contracting structures. The government had pretty much accepted

[95] (Kinnaird, 2003)

in full, the advice that we adopt an 'alliance' contracting model for the larger program.[96] The advice made good sense. It seemed logical to everyone and we followed it, but I would be surprised if we do that again. It really was heavy going and one of the issues we found in the alliance contracting model was the issue of managing relationships. I think, comparing the two contracting structures, the alliance model versus the fixed-price model, the issue of managing relationships is much more intense in an alliance. The gamesmanship was more intense because, when you step away from all the process, there was a lot of money in the pot and a lot of ways of getting it. That's what it boiled down to.

With the alliance project, we went through a process to find each player in each sector and we had to find the most efficient, the most productive, the most able to deliver in this program, and then once we had the "A" team, so to speak, we had to bring them together to deliver the project. That is a complicated thing to do but the logic was sound. But the hard part was managing the central risk. The way of avoiding this central risk in the contract was to simply inflate the price of the project such that if the contractor fell behind or did not perform to their expected output during the execution of the contract, there was so much fat in the program, they would still look good, they would still make money. Soon after the Cabinet Room announced the winner, we found that with an alliance contract, issues of Intellectual Property are a major commercial problem.

21.3 Government Intervention

It's almost like there are two systems running. There's the black and white technical world of the equipment performance, cost and the analysis of tenders, and then there's the political outcome that I deal with. But DMO are sort of encouraged to get to the "right" outcome along the way. There was an arbitration role within the Minister's office to achieve this. Ultimately my boss, the Minister of the day, is accountable for what happens and the result down the track. So, your accountability is not so much a technical one to the Auditor-General or the like, that's always there of course, but our accountability was almost to history in a sense. This is because years down the track, people will recall that so and so Minister for Defence was a success or failure because… and so the politics lives on. You hear that right now about past Ministers for Defence.

Now, I shouldn't say on record whether or not the Government accepted the Department's recommendation but what is generally the case here is that in the hundreds

[96] A contracting model in which preselected contractors and the client form a project team where cost is shared on a risk/reward basis.

of decisions I saw before government, I have never seen the government overturn one. There is enough communication between the government and the department along the way in a cooperative spirit to make sure that the process works. And generally, we abide by the process.

Now I want to move away from generalities to actually tell you about a decision that the political office took that the department really only advised us on. I remember after the Cabinet meeting broke up and we had a recommendation, we had to write a press release and explain the decision to the public and the industry of course. It was around midnight and I was working through it with [Minister] Hill, just at a desk like this, and the officials had gone home, we talked about the Kinnaird Review and we put a lot of political capital into the Kinnaird Review and we were discussing how the principles of that review were going to help us in this project. And one of the principles of the review was always to benchmark the proposed system with something that already exists today so that you don't get carried away in development. And we realised that the way our procurement was structured [as agreed by Cabinet], we'd actually forgotten something pretty important and that was to keep the two options [a new design and an existing off-the-shelf design] in the game. So we made the change and that’s how it was announced.

I don't know whether “intervened” is too strong a word, but the government insisted that since both systems broadly met our strategic guidance, we should elect to keep commercial tension in the market place for as long as we can such that we can find the best price and the best way of building them. [It was previously accepted practice to choose a design and the competition would then be between builders bidding on the same design. In this instance, the builders could choose between the optional designs.] In the period of time before First Pass [the first project gateway review], the political office was meeting with all parties in the Defence department, the various tribes; the Capability Group, and the DMO. The various designers and builders were coming into the office to discuss their broad position in the market place. We were collecting advice and I was passing that on to [the then Minister] Hill. We drew apart from the department at this time.

Robert Hill [the Minister] and I, again in one of those late night sessions, wrote up on the whiteboard who was who in the zoo, what their interests were, and we did a big matrix. Our goal was to determine; (1) the best system, (2) the greatest level of local industry content at the (3) lowest price. We weren't going to sacrifice things like local industry content or price for a very marginal capability gain; that was our view. Again, taking that broad picture, we instructed the department to follow that path. I think or I would presume that the contractors knew about this. But you see Defence is very quick

to take ownership of a decision. They don't want to look like they have been pushed around politically. On one occasion, we had to tell DMO that the contractors were unhappy with the sheer detail they had to process in the tender documents and that it had to be halved. So DMO reduced the font, produced a stand-alone index, and the volume of paper was almost halved.

It's a complex relationship. This was just one of dozens and dozens of issues running with the department so you have got to manage relationships. The decision [to keep two optional designs in the competition] could only have been taken by the Minister. It wasn't really anything that could have come up [from DMO] because of the risks involved. There's no way that tribes in Defence will ever get together and say, we are going to hand over to industry what a particular system looks and smells like [the design]. They don't tick like that; it's not just how it works. That's just cultural and I think the reason we were able to push this through is because we were dealing with the DMO more than the other parts of the department and the DMO are by nature, commercially orientated.

21.4 Lobbying

The companies had their commercial interests of course. There would have been a lot of gamesmanship around influencing the Minister's office. We were seeing that from our side. The process was officially open and they had to establish a relationship with government to explain what their view was commercially. They were very transparent. But it was apparent that the actual decision was going to really come from government. I also think in the Defence department, there were a few tribes going in their various directions as usual.

21.5 Value-for-Money

Value-for-Money is what a politician says to the media to avoid speaking to the detail of a Cabinet consideration. Other forms of words to use instead of value-for-money might be: (a) the best bid, (b) the most likely to be achieved on cost and schedule, (c) suited the government's requirement best.

My sense is that the emotion around the use of that phrase is because people use it to avoid scrutiny or to avoid the discussion of an otherwise controversial or heated process. When people hear “value-for-money”, they think to themselves rather cynically, that's what you say in order to avoid questions. The accusation is that you know that the process is ill-defined and doesn't work properly but you don’t want to be questioned now because you want to move on to the next stage.

So, to take our discussion a further step, do people have a broad concern with tender evaluation? They do appear to. Tender evaluation is always open to perversion. The more process you put in place to make it run right, the worse it can get. It's one of these things that's going to be with us for a while. If you want my opinion on how to make tender evaluation run right, it's very much an organisational grass roots sort of thing. Tender evaluation is more likely to produce the right outcome when you have people in tender evaluation that understand the actual technical and commercial risks in a project. Basically my argument is this; the better the organisation, the better its institutions. That context is going to flow into better tender evaluation if you do it right. And that will ultimately translate into improved confidence in the decisions.

21.6 Relationships

It was a curious experience because ordinarily people come to you for Defence business, but now we were going to them. I recall meeting with Navantia executives in Australia and dining with them. The senior guys in the DMO were doing the same exercise. We were comparing notes beforehand to make sure our story was straight. I think the point to note is that the political office had a direct commercial role here because it is about the relationship. The political office shapes the relationships, especially with these guys coming in. We just had to let them know whether they were welcome in the country or not. So, there was a conversation with Navantia to give them the confidence, to let them know that they needed to come in. Nothing shapes a relationship better than to see their company's name in a Minister's press release. They were very effective tools commercially because there is an awful lot of bullshit behind the scenes, an awful lot of talking, and an awful lot of ill-informed speculation. People low down in the chain giving their uninformed opinions at chance meetings with senior people in foreign companies. There is constant chaos and constant “what is the truth” going on. And then you get little moments of clarity where something has cut through and that's a government press release.

It took a lot of effort. At first, Navantia were quite blunt and said, “Well look, it's pretty obvious that you guys have a process here and we look like a bolt-on so that you can have something to compare against.” And although they never said the word “stalking horse”, that's what they were trying to get at. Anyway, Navantia came over and that was a seminal point.

There was a big commercial risk in hoping that foreign designers and local builders could find a relationship and team together. The poor old French were wondering what's it all about. They are getting the uniform [military] bunch saying that they are interested on the one hand and yet the political and senior guys on the other hand are

saying yes, what you have will do just fine, thank you; now please, just join the process. So there was this big push on us to express no aversion to French industry. We had helicopter deals running with them as well. We had multi-role tanker deals for the Air Force; it was all sort of happening [with the French]. It was a bit like the old Navantia issue again. You had to seek their business as much as they were seeking yours. Seeking their business couldn't come from the department because that was too big a risk. There was every possibility that this tender process of keeping two [foreign] design options alive [as required by the Kinnaird Review] until the end, could fall into a great big steaming heap and become a huge mess. And if that had happened and the idea had come out of the DMO or the Defence department, heads would have rolled. For people preserving their positions over the long term, it's perfectly appropriate for them to show a bit of aversion to that sort of thing. Politically we thought we could handle it. When we asked the foreign companies, “Can you find an Australian company to form a team?” the answer came back, “Yes”.

In all of this, I had an important lesson. I remember briefing a Cabinet Secretary about a key decision point on one of these matters the day before it went up to Committee, and I will never forget him saying, on the back of me explaining why we should tick the box on one recommendation and not another, that's all very good and well, but *who do we pick up the phone to when it all goes wrong*? If this goes sour, the best thing we have is our ambassador to a country with whom we had a fairly weak relationship, versus almost a direct line into the administrations of foreign countries where the other companies were based or indeed, are sovereign owned.

22
A Labor Political Advisor on Defence

In the Political-Office of the Minister for Defence in the Rudd Labor Government

22.1 DMO Culture

The tendering process is obviously part of the Capability Development Process and what struck us at times, was the lack of rigour in that process. The spirit and underlying philosophy of the Kinnaird[97] reforms were often ignored. I certainly ascribe that partly to a lack of commercial experience by people who are designing, implementing and driving this process. That causes problems because you've got all these interfaces [with government and industry]. With a lack of commercial skill, two things can happen. Either the DMO people can be completely 'dudded' and overwhelmed by industry players who will take advantage of them or the opposite [in] that they are aware of their limitations and they are very cynical and suspicious about industry. So they will write a 500 page tender or a 500 page contract to protect themselves and their career prospects, and I understand that. But that leads to an unsatisfactory outcome as well because it constrains innovation. And it is very expensive and legalistic. Projects get into trouble because they have taken that approach of contracting the thing out of existence. That doesn't help probity because probity ultimately is about getting value-for-money and treating everyone fairly. In the past, with the previous Howard Coalition government, they had enjoyed the golden period of unconstrained budgets so they could just lob things up and get it approved.

Also I think some DMO people underestimate the power and influence of the central [government] agencies in this process. Treasury, Finance, and PM&C [Department of the Prime Minister and Cabinet] have enormous input into the acquisition strategy, the costs involved and so forth as they should and that's appropriate. You see with things like Seasprite [a failed project], the Defence reputation is damaged and that is why we have Mortimer[98], the Strategic Reform Program[99], and the Pappas[100] review; because

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[97] (Kinnaird, et al., 2003)
[98] (Mortimer, 2008)
[99] (*The Strategic Reform Program : Delivering Force 2030*, 2009)
[100] Independent budget audit for the Department of Defence by George Pappas with the support of McKinsey. 2009 (not available to the public)

it's all about the Defence leadership and the political leadership of this country working together to repair that reputation.

I think the most important thing is cultural change. We need an acquisition agency that is infused with commercial processes. Steve Gumley is a very good leader and he is one of the very few commercially-driven guys there and we need to flow that down to the rest of the organisation. I think in an ideal world, the DMO would have a lot stronger commercial background while losing none of their public service probity, accountability and transparency or the ADF [Australian Defence Force] end-user linkages. In almost every case I've seen of where a project has gone wrong, it's because the acquisition strategy was flawed. DMO would be a bit more aggressive in dealing with the Capability Development Process to make sure that the Acquisition Strategy is up there and is being accorded the same status as the actual Capability Development Process but at the same time slightly independent of some of those people driving that process.

By way of comparison, when I talk to colleagues in the UK which is where we have the strongest relationship, they are substantially on the same track as us. [On] some things they are behind us and on other things they are ahead of us [but generally we] are heading in the same direction.

22.2 Lobbying

We are subject to a fair amount of lobbying depending on how large the project is. This is good and bad. It's bad because, lobbyists are there purely to prosecute a case on behalf of their client. But it is also good because they can provide a point of view which, if backed by objective evidence, can lead to questions for Defence on, for example, evaluating the risk of two competing processes. And we find that sometimes, that alternate source of information is useful in understanding where the process is up to and understanding the flaws.

On cost, it can be useful to get an idea from them about where their products are and industry involvement. The opportunity for a local economy to benefit is probably the most effective form of lobbying that we have seen in terms of “my product will deliver twice as many jobs than the other one”. Having other points of view is important but we don't need lobbyists to do that. Some companies choose to use lobbyists. Other companies have extensive government relations departments that do that as well. Often they have ex political advisors or ex uniforms doing that and they are as effective, if not more effective than lobbyists because they are the same people you see and you do develop a relationship with them on a strictly business and probity basis. This relationship is important because they should be able to call up a [Minister’s political]

advisor and say, "Hey... this problem has occurred" or "We have an issue with a tender process because we think that the tender is constructed in such a way as to exclude us, would you mind asking a question of someone in DMO about that". Not to satisfy them but to satisfy yourself that the tender process is being adequately followed.

But in the end, we don't influence that process as it never gets as far as requiring political intervention. Government will make a choice and will defend its choice. But I've never seen a process where a Defence Minister or one of their staff will go and interfere in a process. It's not appropriate and Defence won't cop it and they shouldn't cop it because it undermines the whole acquisition strategy and value-for-money for the Commonwealth.

22.3 Political manipulation of the acquisition strategy

For political reasons, the last Howard Coalition government combined several acquisition phases in a particular major project without going through any of the Offer Definition or Requirements process phases. That has led us to re-open that tender and it has caused us huge problems.

22.4 Political-Office interests

What we see are problems that only become observable post Second Pass [the second gateway review] but they are caused at any stage along that process for a variety of reasons. The length of the process also causes huge problems in terms of people at the start of the process trying to predict what they will need six or seven years down the track [when the equipment might be operational]. Another problem, from our point of view, is the need to contrast probity with flexibility.

From a political point of view, often the level of information that gets to us is troubling. In the end, we are the opprobrium when things go wrong. And not understanding or not having a complete vision or visibility of where things have gone is very troubling at times.

One aspect of this process that's very important, which takes a while to get, is the importance of informal relationships with people within Defence [in order] to understand where a project is up to both pre-tender and post-tender. [The Ministerial] Briefs [and the] Ministerial Submissions that we receive can be formative but they are not the same as having a relationship with someone, [and] being able to have a conversation about a project. That's very important. The other aspect is having very good and close relationships with industry and to do that in a way that doesn't challenge

probity, is all above board, but still enabling you to test assertions that Defence make about why a project is where it is at.

The Commercial side of the process needs to be as important as the Capability side of the process. However, there needs [to be] a realism about what the industrial realities are out there and that should feed into the Acquisition Strategy.

The most important change since the change of government [post October, 2007] has been the implementation of the Projects of Concern Unit within government[101] which is mainly dealing with [problematic] projects which are post Second Pass. We need to understand what has gone wrong and work towards getting them back on track. So, when a project is added to that list, not only does the project manager and the project team know that they are under increased scrutiny, especially from a political point of view but it is also something that the Defence industry and the companies involved do not like. It's a very useful piece of leverage to use on Defence companies. Some of the Defence companies out there are very proud of the fact that they are not a prime contractor of any projects on the Projects of Concern list.

But I'd say from a political point of view, we are not too involved in the tender process. We don't advise on capability. We don't make decisions on capability. Ultimately, NSC [National Security Committee of Cabinet] does through the advice of CDF [Chief of the Defence Force] who is the government's sole Capability advisor.

But on large acquisitions, on acquisitions that involve significant political price or industry benefits or costs or just high risk, the political oversight is massive.

However, I find that with adequate political oversight, you can ask a lot of questions and get an understanding of where a process is up to and why problems have occurred.

22.5 Probity

A traditional tendering process can be followed when government has said, “Yes, we authorise Defence to take tenders of the supply of say 15 helicopters”. But if it's a package for example, [helicopters and] helicopter training, or something where you are looking at packaging a product and it can be very variable between what different companies are offering, then there is a probity-based tension between treating every company the same as you need to do [in a traditional tender], versus being able to provide some feedback to industry whether the path they are following in terms of a tender process is appropriate. Ultimately because most of these companies only have one customer, it's in no one's interest for a Defence company to spend $5M developing

[101] Located within the DMO (The Auditor-General, 2009a, p. 120)

a tender offer that is innovative but is completely impractical because in the end, we'll repay that $5M in overheads for another product further down the chain.

So, from my point of view, there is a tension between following proper probity to ensure that there is value-for-money for the Commonwealth and having sufficient flexibility so that we get the best outcome for the Commonwealth in terms of the options that are being pursued.

22.6 VALUE-FOR-MONEY

We don't see the issues of value-for-money too closely but we see echoes of it and it's an enormously hard thing to define and it's an enormously hard thing to measure because especially in this monopsony, there is a single customer and very few suppliers. Market power and leverage is very important, so you see Defence having to price risk in terms of changes to “terms and conditions” and the attitude of the contractor, into that process. You have to price in the cost of sustaining that platform for anything from 10 to 30 years. Do you go for a slightly more expensive product that you think is going to be easier to sustain over the longer term? You have got to look at the actual sectoral impact. If by choosing one option means that industry lost critical mass locally; you might not then be able to support a whole range of existing platforms [basic Defence equipment types]. How do you price that in? How do you price the wider economic benefits? It's enormously hard to see.

When we see a submission at Second Pass, with costed outcomes, there is an element of uncertainty about how they are derived at times. But in the end, I am satisfied that there is enough oversight through the CFOs [Chief Finance Officers] within Defence and the Department of Finance that those costs are accurate. It's more the element of how do you cost things like risk. We have seen in the past, risk underpriced in contracts and not understood properly and the value-for-money matrix being skewed because of that. It is an enormously difficult problem to confront and both Kinnaird[102] and Mortimer[103] tried to look at this and tried to look at how to properly schedule these things into the submissions. We are still working on how we do that properly.

If you reduce the risk and you retire that risk, then that will affect the value-for-money proposition offered by that product. Value-for-money can be subjective at times but in the end, Defence is going to have to ask for a certain amount of money and so from our point of view, it is driven by how much money are they asking to be appropriated for this product.

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[102] (Kinnaird, et al., 2003)
[103] (Mortimer, 2008)

One very significant criticism of the last government [pre October, 2007] was that they did not look at the NPOC (Net Personnel and Operating Costs) when they acquired a whole lot of their platforms[104]. They made a decision to acquire four C17s and Super Hornets etc., but they just gave very little thought to the cost impact of NPOC of those products and we are grappling with that. You need a solid understanding of the NPOC before you go forward with a project. You just can't think you are buying a shiny piece of kit. That's a lesson that we have learned over the last 15 years.

You can't compare us to the US but if you consider a triangle approach to things; in a triangle, there are three corners, one is Cost, one is Schedule, and the other is Capability. The Americans fix Capability and Schedule and let Cost float. Our approach is (it's never preferable that anything floats), to fix Cost and [then] Capability and Schedule will float a bit. That's a different approach. Schedule delays are never good because that is a delay in capability and it has a cost in itself. And we are working on that but Gumley [CEO DMO] is quite proud of the fact that over the last, I think, 100 projects, the amount expended on projects has been 98% of the funds allocated. So we haven't gone over budget and that's the benefit of fixed-price contracts. *That is important for taxpayers*. (Emphasis added)

[104] (Mortimer, 2008)

23

PROFESSOR GEOFF GALLOP: THE POLITICAL OFFICE[105]

Former Premier of Western Australia.

Professor of Politics and Director of the Graduate School of Government at Sydney University.

Ministers need ministerial officers; they need the support they get personally, they need the support they get in terms of advice, but if ministers believe and governments believe that all wisdom lies within ministerial officers, they are running on the basis of a serious mistake. All governments need a plurality of advice. They need advice coming through from their public service. They will need advice coming through from external sources.

[105] (ABC Radio National, 10 July 2009)

24

NATASHA STOTT DESPOJA: POLITICAL ADVISERS[106]

Democrats Senator (1995 to 2008).

Honorary Visiting Research Fellow at The University of Adelaide.

I think [there is] an increasing conservatism in Australian politics and by that I mean in terms of a shift towards being risk averse where leaders and many politicians campaign less on what they believe and more on what they think will get them elected. And it tends to be very short term poll-driven politics.

There is an increased and more powerful role for ministerial staff [who are working with] and sometimes directing departmental heads or agencies within the public service. And I think there's a real issue there in terms of accountability of ministerial staff.

[The public service] want to be responsive to the government of the day because the government of the day and the prime minister and the minister has a very strong influence on either that person's tenure of appointment or future career. Let's not forget [that] public servants, particularly at the Commonwealth level, are accountable under the Public Service Act. The difference is of course, the advisers are not subject to an Act of that kind; not even the Members of Parliament Staff Act.

I spent so much money on FOI [Freedom of Information] over the years and I used to think as a Senator, if that's what I had to do, how do average citizens feel about obtaining information that is relevant to them? So I think governments are finding clever ways to give us less information and as a voter, I find that unacceptable. There is an argument we are getting less advice in this day and age, partly because of the increasing use of 'commercial-in-confidence' and various other terminology and practices that all governments employ.

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[106] (ABC Radio National, 10 July 2009)

25

JACK WATERFORD: THE POLITICAL OFFICE[107]

Editor-at-Large: The Canberra Times

It has been the Prime Minister's Office rather than the Prime Minister's department that has tended to have charge of managing the message, of coordinating government activity around central goals, of vetting proposals to see how they weave into the broader themes of government.

The complaints are not about minders being too political. Or about their intrusion into actual executive responsibility. It is, as ever, about accountability and about responsibility, whether and when minders speak or act with the authority of the minister, and when, or whether, ministers accept responsibility for what minders do. Maybe [departmental] Secretaries who nag away about it, know something.

[107] (Waterford, 2011, August 6)

26

PROFESSOR PETER SHERGOLD: YES PRIME MINISTER[108]

Former Secretary of the Department of Prime Minister and Cabinet.[109]

Professor in the Australian School of Business at the University of New South Wales

and

Foundation Chair of the Centre for Social Impact.

In the UK, ministers sit with their departments. In Australia, ministers sit separate from their departments and the politically appointed policy advisers sit with the minister; and [the advisers] are appointed under different legislation. So I think we have much more transparent division of powers than probably exist in the UK.

My experience, and in fact the Westminster system I think, is based on a relationship of trust between the minister and the senior public servant who serves them. You have to have a relationship of trust so the minister or prime minister knows that they can rely upon you 100 percent.

I may argue that [a policy] is not a very sensible policy; that the unintended consequences haven't been thought through but at the end of the day, as I public servant, I will always say, “Yes Prime Minister”. But there are areas in which I would say “No”. [Such circumstances which may cause me to say] “No” could be that there is no [approved financial] Appropriation, or that it [the policy] breaches the law, or that it [the policy] breaches the parliamentary convention of what can happen during a caretaker period. “No”, because you have delegated the responsibility for this tender process to myself.

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[108] (ABC Radio National, 10 July 2009)

[109] The Secretary of the Department of Prime Minister and Cabinet was considered to be the most senior officer in the Australian Public Service.

27

DEREK WOOLNER: FUNDAMENTALS OF DEFENCE EQUIPMENT PROCUREMENT

Author and researcher at the Australian National University

27.1 VALUE-FOR-MONEY

The problem is that no-one will define what value is. In a military system, value is the extent to which a particular acquisition develops a capability that's central to some national security objective.

The big policy problem in Australia has been how to progress from the vague things that the government is prepared to say about its security objectives, through to a fairly firm idea that Project "X" will contribute significantly towards meeting those security objectives and therefore represents value-for-money.

That is why people get cynical because they know that games are being played. The military play word games as to whether or not the White Paper[110] said that there would or wouldn't be a particular procurement. They do this by taking a little phrase out of context and twisting it around.

27.2 POLITICAL INFLUENCE

People tend to decry the political influence in [Defence] equipment procurement and development. To my mind it is so pervasive that it's part of the system. The question is, "How do we recognise and identify the interests of the various stakeholders?"

27.3 EXCERPTS FROM: TAKING THE PAST TO THE FUTURE- THE COLLINS SUBMARINE PROJECT AND SEA 1000 [111]

The lesson is that the Commonwealth cannot leave it to suppliers to solve problems in major defence acquisition projects. The acquisition cycle of most major military systems is generally over ten years and is out of balance with the rapid growth

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[110] (*Defence White Paper: Defending Australia in the Asia Pacific Century - Force 2030*, 2009)
[111] (Yule & Woolner, 2008)

expectations formed within commercial markets over the last few decades. It is unlikely that all of the industrial participants initially contracted … will still exist when the boat is delivered in the 2030s. Neither can it be guaranteed that those that remain will possess at the end of the project the same comparative technical excellence that justified them being selected. In truth, it is only the Commonwealth that has an abiding interest in the objective of a project [Defence capability] over the whole period. For commercial entities the economy and commercial factors are dominant. One feature that stands throughout the Collins project [submarines], especially during the period where its problems were being overcome, is that *the Commonwealth must command its own access to the means to rectify problems if it intends to have projects achieve their objectives*. (Emphasis added)

An adequate contingency fund [15% - 20% of contract sum] with agreed procedures for its management will be a basic requirement. This seems obvious but the case for this tool must be made explicitly, for it has been too easily assumed in the past that ministers and the public would baulk as such an explicit indicator of risk.

28

PHIL RADFORD:
THE POLITICAL IMPERATIVES OF DEFENCE PROCUREMENT

Extracts from:

The Price of Loyalty: Defence Procurement and the Dilemma of Alliance Diplomacy[112]

The process of purchasing a product generally occurs within a commercial context. Decision-making in this commercial context is often related to a ratio of performance to price including ongoing costs and occasionally emotional factors are at play. A peculiarity of government procurement is the intervention of what can broadly be called 'political factors'. In the case of defence procurement, these political factors can be nominally characterised as (1) 'industrial-economic' and (2) 'technological-diplomatic'.

Industrial-economic interests represent those government activities seeking to leverage proposed defence purchases by incorporating in the tender, considerations of economic benefit such as potential employment growth and industrial capacity for commercial or security reasons. On the other hand, technological-diplomatic considerations take account of the current and future perceived needs of military interoperability both within and between states, plus the issue of state controlled access to the required technologies both now and into the future. This access to technology and cooperation reflects on formal and informal state-to-state alliances. The political economy is therefore influential on defence procurement.[113]

However, increased government interventions in the procurement specifications with respect to design and engineering, reduce the chances that commercial or military 'off-the-shelf' (COTS or MOTS) will be satisfactory. With the larger component of the total cost of defence equipment occurring after purchase, a dominant issue is the technological upgrades required over the say 30+ years of service. A prime contractor will be naturally reticent to commit to this obligation which involves other suppliers' technology. Governments are mindful of this issue and they attempt to contrive a tendering architecture designed to highlight and hopefully to ameliorate this issue.

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[112] (Radford, July 2004)

[113] Political economy is a social science dealing with the relation between political and economic policies and their influence on social institutions.

Additionally, states [State Governments] are usually prepared to pay a premium to ensure competition between indigenous industries or even between consortia of local and foreign suppliers in the hope that this front-of-mind issue for prime contractors will be addressed within their proposals. *But whatever the method, the factor that directly impinges upon defence procurement decision-making is the incentive to preserve the bargaining strength of the purchaser through the course of tendering, through the course of delivery, and through the service life.* (Emphasis added)

While the 'industrial-economic' factors tend to be a political compromise of wider economic, strategic and political interests, the issues of access to technology are resolved through a process of diplomatic bargaining. (It is far more costly to replicate technology than industry.) The distinction between the platform (example: ship's hull) and the weapons systems is critical because of the difference in procurement methods. The procurement of the platform will raise debates over cost and the desire or otherwise to have a local production capacity. Essentially, this is a state-corporate bargaining context. In contrast, the weapons systems technology engages with a diplomatic trade-off between the state's perceived defence capability needs and the supply constraints imposed by the technology-owning states. This is the realm of state-to-state negotiations which are ongoing and at its extreme can result in delays or bans on exports.

Rather than just a simple commercial procurement, defence procurement corrals; (a) assembly production, and (b) technology acquisition, plus (c) interoperability (between navies or between navy and army), (d) strategic cooperation (state-to-state training and exercises), and (e) alliance diplomacy. Strategic cooperation is not restricted to existing and trusted alliances but is used to foster new alliances designed to improve trust and understanding. To achieve this operationally requires common technology and communications. Platforms tend to incorporate a dominant core technology such as an air warfare system. The supplier of this dominant system (and the state of origin) will have a prevailing influence on the choice of subordinate but interconnected systems from other suppliers. Consequently, reaching out to new and emerging strategic alliances can be problematic. This is the realm of alliance diplomacy.

Alliance diplomacy can be purely diplomatic but the outcomes from joint military exercises can be profound. This can result in a rebalancing of state-to-state cooperation. A common consequence (and it might be there from the outset) is that state-to-state supplied technology is degraded for the recipient. *Ultimately, all procurement preferences have to be translated into political choices at the highest level. Diplomatic influences may override all other issues*. (Emphasis added)

The non-commercial factors in defence procurement can vary between purely industrial to purely diplomatic. Security of supply is vital for any state and this influences the architecture of the procurement process. All the factors (economy, industry, technology, and diplomacy) enjoy varying degrees of legitimacy. What is the impact of unwise or unnecessary sacrifice? Further, vague treaties of cooperation make it difficult for the Department of Defence to explain where the balance of advantage or liability might be at any point in time. Diplomatic agreements may shield the procurement process from the level of audit and scrutiny constitutionally required of the Australian Government.

29

GEOFFREY BARKER: POLITICAL INTERVENTION[114]

Extracts from:

***The politics of defence acquisition*.**

It seems clear that political considerations prompted this decision, which was made well before the capability and cost of the JSF [Joint Strike Fighter] were in clear focus. [Minister] Hill acknowledged that the Prime Minister John Howard, who has a deep personal interest in defence issues, was briefed on the project during a visit to Washington. Howard had committed Australia to a closer strategic relationship with Washington and wanted to reinforce Australia's credentials as a solid alliance partner. He also wanted to improve the long-term ability of Australian Forces to operate with the US military. Given the proven superiority of US military equipment, there was no way the Howard government would consider purchasing one of the European alternatives already on the market.

But right or wrong, the JSF decision process does not even remotely resemble the process put in place subsequently after the Kinnaird Review[115]. It is rather the triumph of alliance politics over competitive process.

These decisions contrast with the decision to acquire new armed reconnaissance and troop lift helicopters from European rather than US manufacturers. Here careful competitive processes appear to have been observed. Reportedly, high-level US pressure failed to change decisions. Among the decisive reasons were the excellence of the European equipment and the willingness of European firms to set up production lines in Australia and to give Australia access to sensitive computer source code. But ultimately, the helicopters were not judged to have the strategic importance of strike fighters or naval combat systems.

Politicians will, as always, want to have defence projects to announce, to emphasise their commitment to national security. *Giving voters what they think voters want is, for politicians, the key to retaining their seats [in parliament] and to retaining (or gaining) power*. (Emphasis added)

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[114] (Barker, August 2006)
[115] (Kinnaird, et al., 2003)

30

HENRY ERGAS AND PROFESSOR FLAVIO MENEZES: THE POLITICAL ECONOMY OF DEFENCE PROCUREMENT[116]

Extracts from:

The Economics of Buying Complex Weapons
by Henry Ergas and Flavio Menezes[117]

and

Some Economic Aspects of the Weapons Systems Acquisition Process
by Henry Ergas.[118]

The complex weapons acquisition process is afflicted by all of the pathologies that prevent efficient outcomes: (a) information asymmetry, (b) conflicting goals, (c) non-commensurable objectives, (d) lack of credible commitments, and (e) within-government incentive problems; all superimposed with a high degree of technical complexity and uncertainty.

The concept of acquiring complex weapons systems encompasses their conception, development and production [in contrast to say, the procurement of a domestic motor vehicle]. In our view, the acquisition of complex weapons systems is in a category of its own, in terms of the challenges it imposes given the nature and extent of uncertainties. The fact that the buyer is the government, that there are several within-government incentive issues [positive and negative], the characteristics of the seller including the market structure in the industry, and the special characteristics of the contractual relationship between the buyer and the seller [all combine to create a socially complex context].

Through conception, development and production, technical difficulties arise from (1) the large number of [interdependent] subsystems, (2) solving any one problem in the context of the interdependent subsystems, and (3) the need for reliable operation under highly challenging conditions. This complexity of technical issues gives rise to 'internal uncertainty'. 'External uncertainty' arises from the very long lead times and changes in demand resulting from geopolitical scenarios. Most weapons systems are

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[116] Both economists were interviewed but these paper extracts mirror and enlarge their narratives.
[117] (Ergas & Menezes, 2004)
[118] (Ergas, 2003)

'experience' rather than 'search' goods; their attributes only become fully known in use. Over the [say 30+] years of service, upgrades and replacements will be required to match superior capabilities of other states.

In democratic systems such as Australia, governments face constraints on the degree to which they can bind future governments. Governments are not unitary actors. Rather, the governmental process involves a range of players, from the armed services through to finance and treasury departments and legislature, whose views and interests will differ, and whose [relative] power may vary substantially over time. The civilian-military relationship, in which the weapons acquisition process is embedded, involves all the complexities of principal-agent[119] interaction, with extensive game playing whose outcomes, as circumstances change, are often difficult to predict. Unlike a private firm, there is no straightforward objective measure of the bureaucracy's performance in weapons acquisition. Sellers are constantly exposed to monopsony[120] power [of the government buyer] and the buyer acting opportunistically.

In the jargon of principal-agent models, the scope for moral hazard[121] in the weapons acquisition process arises from asymmetric information about costs and quality [information known to the seller but not to the buyer about opportunities to reduce cost or improve quality] and limited cost and quality verifiability. Additionally, there is a reluctance to terminate poorly performing contractors because of the high costs of shifting to new sources of supply. As a result, the seller is usually in a position both to exercise some degree of market power [reflecting the constraints on competition] and having secured a contract, to act in ways inconsistent with joint value maximisation under that contract.

Because the buyer is essentially a monopsonist, and the seller [at least once the program is underway] has a degree of monopoly power, the governance of the relation between buyer and seller centres on the contract between them. Finding alternate partners would be unrealistic. The sheer length of time for which the parties are effectively 'locked in' to each other and hence for which the relationship must last, only makes the contract between the parties all the more important. Given the uncertainty inherent in the nature

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[119] In political science and economics, the problem of motivating a party to act on behalf of another is known as 'the principal-agent problem'. The principal-agent problem arises when a principal compensates an agent for performing certain acts that are useful to the principal and costly to the agent, and where there are elements of the performance that are costly to observe. This is the case to some extent for all contracts that are written in a world of information asymmetry, uncertainty and risk. Here, principals do not know enough about whether (or to what extent) a contract has been satisfied. (Downloaded on 9 October 2009 from: http://en.wikipedia.org/wiki/Principal-agent_problem)

[120] **Monopsonist**: A sole purchaser in the market.

[121] **Moral hazard**: Suppliers act in ways which generate a benefit to the supplier which is less than the costs they impose on the buyer. An example is the use of (undetectable) low quality components now which will add to the purchaser's future costs. It usually arises from asymmetric information.

of the product, the contract between the buyer and the seller is necessarily highly incomplete. In practice, incompleteness is accentuated by the inability of the buyer to enter into fully credible commitments with respect to its future conduct and by difficulties involved in verifying contract performance. Changing circumstances reflected in contractual modifications [scope changes] can enable contractors to increase their share of any surplus from the contract. An example of behaviour aimed at reducing the risk posed by contract incompleteness, involves military buyers who recognise [in the accounting sense] sunk [and overhead] costs[122] too quickly in order to lock governments into programs they might otherwise be tempted to terminate. In short, we can describe the relation between buyer and seller as a bilateral monopoly. Thus, the governance of their interaction hinges on the contract that binds them, rather than any scope to turn to alternative exchange [other contractors] opportunities. Parties anticipate that risk, and seek to protect themselves from it with behaviours which exacerbate the underlying problem.

The first [of these behaviours] is a tendency (by the buyer) to systematically underestimate costs, most notably so as to advance the prospects of the program, in its competition with other [military and non-military] claims for limited resources. The second [of these behaviours] is a tendency [by the seller], faced with costs that were underestimated in the tender, to be disinclined to invest in cost reduction efforts [which would further erode income]. Supplier reputation is generally based on the final performance of the weapons system and this will attract supplier resources. The presence of soft budget constraints has imparted a systematic direction of the error, inducing recurring cost overruns.

The conventional kind of competition ‘in the market’ cannot occur, at least on any substantial scale for complex weapons systems, because of the risk of ‘hold up’. It would be highly risky for potential suppliers to engage in substantial product development, testing and engineering prior to having obtained some degree of buyer support.[123] The buyer needs to address how many sellers they want to bring into the market for any particular system, and whether to retain the parallel presence of those sellers throughout the acquisition process or only for certain phases in that process[124]. A parallel presence will duplicate costs. The fact that the winning tenderer might be the

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[122] This accounting process is called ‘front-loading’. In principle, the contractor prices every item of work in the bid. Each item contains a mark-up component for project and head-office overheads, sunk costs, and profit. Items of work programmed for later phases in the contract are selected and their mark-up costs removed and reallocated to programmed work for the first project phase. The total bid price remains the same but the contractor enjoys an accelerated cash flow during the first project phase.

[123] (Besser, 2010)

[124] An example option is to engage with two designs, select a winner and use the selected design in a competition for the construction phase.

one that is most optimistic [about costs, timeliness and quality] adds a dimension of 'winners curse'[125] to the outcomes of the competition.

Increased attention has been paid to *shaping* the context in which acquisition occurs. *Trust*, or what might be more broadly referred to as the social context of the procurement relationship, [in the context of contractual incompleteness] might be least distorting when agents share a broad understanding of goals and of the norms that are acceptable in achieving those goals.

One of the most important lessons arising from the economics of designing auctions and tender processes is that the details matter. This suggests that 'one-size-fits-all' approaches to procuring complex weapons systems are designed to fail and, instead, the 'right' hybrid contract has to be designed on a case-by-case basis. (Emphasis added)

[125] **Winner's Curse**: This can occur when bidding on an ill-defined or poorly understood specification. All bids are likely to be unsatisfactory and the selected bid enjoys 'winner's curse'. That is, a near guarantee of financial loss.

31
THE AUDITOR-GENERAL

31.1 DEFENCE EQUIPMENT ACQUISITIONS REVIEW – (MAJOR PROJECTS REPORT)

In 2007-08 the Defence Materiel Organisation (DMO), which is responsible for acquiring and supporting Defence's weapon systems, platforms and other materiel, expended some $3.036 billion on both major and minor capital equipment acquisition projects. These projects are often expensive, technologically advanced and managerially challenging, and require DMO to manage contracts that are inherently complex and require sophisticated management processes.

Our examination... highlighted that DMO relies on a variety of different approaches to compile project information. The project office management information systems, databases, spreadsheets and progress records are, to varying degrees, not integrated. The ANAO [Australian National Audit Office] was unable to rely on the Defence's corporate financial management information system to provide the prime contract expenditure amounts at the base date price. Instead, DMO project personnel were required to use various spreadsheet-based systems to provide support for the PDSS [Project Data Summary Sheet] information relating to prime contractor expenditure. However, the accuracy of the spreadsheet information was not able to be substantiated during this review... Accordingly, the review report on the PDSSs has been qualified due to uncertainty with respect to the accuracy of this information in the PDSSs. [126]

In 2009-10 the DMO will spend more than $11.2 billion (about 43% of the Defence annual budget) [some 1% of the nation's Gross Domestic Product] acquiring and sustaining military equipment and services, and will employ over 7,500 military and civilian staff. The DMO currently manages about 200 major projects (each valued at greater than $20 million) and more than 150 minor projects (each valued at under $20 million).

The ANAO analysis underlines the importance of the focus applied to schedule performance by DMO as an effective means of managing schedule and budget performance within the control of DMO... The assessment of the systems and processes in place to provide sufficient documentary evidence over prospective information within

[126] (The Auditor-General, 2008)

the PDSSs has again resulted in this area of the PDSSs not being included within the scope of the review. This follows the ANAO's review conclusion in the 2007-2008 MPR [Major Projects Report] , which was qualified. As DMO has continued to encounter difficulties in this area, the review conclusion has been qualified due to this departure from the Guidelines, with respect to project financial information for prime contract price and prime contract progress payments in the 2008-09 MPR. [127]

The statement by the CEO DMO indicates that certain base date figures for expenditure and contract price have not been disclosed in Tables..., and consequently DMO has not reported Project Expenditure History and Contract Details (Prices at Signature and at 30 June 2010) in base date dollars, as required by the Guidelines... This matter was subject to similar qualifications in 2008-09. [128]

31.2 NON-DEFENCE TENDERING

A verbal financial approval was given by a DCCEE [Department of Climate Change and Energy Efficiency] delegate for a spending proposal valued at $1.7 million... However, a different person was recorded in DCCEE's systems as having given the approval, resulting in a breach of the financial management regulations. Six other DCCEE spending proposals only received the necessary financial approvals after the relevant funding agreement was entered into, resulting in further breaches of the financial management regulations to be recorded in the department's annual Certificate of Compliance to the minister.

DCCEE's select tender for procuring ... was conducted within a severely compressed timeframe of approximately 1.5 days, which had the effect of limiting the number of suppliers and reducing the potential of the process to maximise value for money. A last-minute variation to the scope of the tender – which gave firms approximately 90 minutes to quote on ... had the effect of further limiting the number of suppliers likely to submit satisfactory quotes, and further eroded the capacity of the tender process to maximise value for money.[129]

THE Federal Government insists it has no case to answer over a critical audit of its carbon tax advertising campaign. The campaign contained facts that were not properly sourced and seven breaches of financial management regulations, an investigation by the auditor-general has found. The Clean Energy Future advertising campaign ran last year in the wake of an agreement between the government, independents and Greens to

[127] (The Auditor-General, 2009a)
[128] (The Auditor-General, 2010)
[129] (The Auditor-General, 2012)

a carbon pricing scheme to start on July 1, 2012. Assistant Treasurer Mark Arbib says Labor established tighter guidelines for taxpayer-funded advertising after coming to power in 2007. "From my understanding of the ANAO (Australian National Audit Office) report, there is no case to answer," he said in Canberra today.[130]

[130] (The Australian, 2012, February 09)

32

DR IAN WATT: SECRETARY OF THE DEPARTMENT OF DEFENCE

Weekend Australian journalist Cameron Stewart[131], reporting on an interview with the Secretary of the Department of Defence Dr Ian Watt having said that the recent success stories such as the trouble-free purchase of C-17 heavy airlifter aircraft and the Abrams tanks [both] from the US had convinced Defence that so-called off-the-shelf military purchases from overseas were a viable, cost effective way of funding future Defence capability. He suggests that the question becomes, 'Why wouldn't you buy off-the-shelf?'

[131] (Stewart, 2009)

33
COMMAND PERFORMANCE: SENATE HEARINGS

Hearings of the Senate Foreign Affairs, Defence and Trade Legislation Committee

33.1 BACKGROUND

> A purpose of these estimates hearings, held in the Australian Parliament, is to improve accountability and probity of government. The hearings allow apparent problems in government operations to be explored and exposed, and give rise to a large amount of information which would not otherwise be disclosed. They have come to be recognised as a major parliamentary institution of accountability.[132]

33.2 PRELUDE

The preceding narratives and anecdotes generally dealt with personal opinions or perspectives. This section differs in that it presents verbatim extracts of interrogations where judgements are not handed down, nor are directions made. It is a parliamentary forum replete with political point scoring, canards and discrediting innuendo. Unlike other political debates in this people's house, these Senate Estimates hearings pit an assembly of Senators from across the political spectrum against public (civil) servants who are commanded to present themselves for interrogation; hence the title, 'Command Performance'. This is an unequal contest. The parliament (not the government) purports to 'explore and expose' undisclosed information.

In this context, the focus is on the lineaments of political decision-making and how the bureaucrat enacts such decisions. What might have been a short-term political expediency can turn into a long-term problem when major items of defence equipment are concerned: a wicked problem[133]. In this uneven contest, the politician remains blameless, at least in the short-term up to the next Cabinet reshuffle or election which,

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[132] (Evans, 11 April 2006)
[133] (Rittel & Webber, 1984)

ipso facto, means that the bureaucrat should be accountable for all problems: politician induced or otherwise.

The following extracts from Senate Estimates hearings illustrate how the bureaucrats push back, how the more astute operators manipulate their interrogators with incontestable propositions about ‘national interests’ and then deftly interlace their realpolitik. The bureaucrat’s challenge is to find the politicly decreed precursors to what now presents as a technical problem; for example, a previously decreed purchase from a foreign government and that equipment is prematurely beyond repair.

For the bureaucrat, individual responsibility is an anathema. On one side there is the ‘blameless’ politician effusing ‘public outrage’ at delays and cost blowouts, and on the other side, there is a culture of shared bureaucratic decision-making by committee, and hence shared accountability, at all levels. This *is* the game. Each side understands the game. This zero-sum result ensures little press interest and essentially no public interest.

Each of the following thematic vignettes has a latent political history of little current interest. However, the political imperative of winning the next election is where value-for-money might be found. Non-government Senators might seek to over expose a Defence procurement problem while government Senators are more likely to take a supportive stance or just not comment. If the procurement problem appears to have the potential for embarrassing the government, or the defence minister, then changes in the bureaucratic management structure can and do occur. The tumultuous events presented later in the last section (Dénouement), where the defence minister lost confidence in the CEO of the Defence Materiel Organisation, are a testament to this process. Prime Ministers have also lost confidence in their defence ministers.

Consequently, senior Defence bureaucrats can find themselves in the political position of a rising star, a fading star, or a satellite in a stable orbit, at least for now. Additionally, the measured distance between the military and the parliament is observable, and euphemistically, both have each other in their ‘gun sights’. These temporal political perceptions can be inferred from the vignettes as a whole. The challenge for a Defence equipment tenderer (contractor) is to understand the temporal political ‘adoration’ towards each senior Defence bureaucrat, to understand the power differential between the military and the government, to understand the potential influence of non-government Senators on the procurement process, and to establish a facility to frequently monitor the game’s status. Additionally, a contractor might ponder the possibility of his or her board of management being the subject of an equivalent public and televised interrogation by institutional and individual shareholders.

The rest of this section is devoted to the thematic vignettes without interpretation or commentary, but clarifications, focus, and emphasis are inserted as deemed necessary.

33.3 Perception and realities

Senator JOHNSTON[134]— [with respect to the unavailability of supply ships during a natural disaster] When the minister was told that the ship was available on 48 hours notice, that was not true—and everybody in the DMO and anybody who had anything to do with the maintenance of that vessel knew that it was not true. It had a great big patch put on the side because the rust had come through the hull and the propeller shaft bearings were completely shot and had been so since August; and the DMO were mucking around, trying to decide where they would spend the money.

Air Chief Marshal Houston[135]—That is your characterisation—

Senator JOHNSTON—Well, you tell me that is not true.[136]

33.4 Who's responsible for history?

Dr Watt[137]—Sorry, Senator. Landing [H]elicopter [D]ocks [LHD amphibious ships] are being constructed in Spain now, one of which will be out here at the end of 2014. When that was agreed by Defence, there was provided a full transition plan, which was exactly the same as the transition plan late last year [the transition from the old LPA amphibious ships to the new LHD amphibious ships]. So nothing has changed. That transition plan has been in place for a very long period of time. That is a very important point to make. It is not new.

Senator JOHNSTON—Clearly it is flawed.

Dr Watt—If it is flawed, it always has been flawed.

Senator JOHNSTON—That is true. Do you think the minister actually drew it up? Do you think the government drew it up? Who would draw up a transition plan from LPAs to LHDs? The department?

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[134] A non government Senator.
[135] Chief of the Australian Defence Force (CDF)
[136] (The Senate, 23 February 2011, pp. 22-26)
[137] Secretary of the Australian Department of Defence

Dr Watt—The Department of Defence drew the transition plan up, but the Department of Defence quite properly, as part of that LHD decision, took that to the government of the day and it was considered by the National Security Committee. And that is a fact.

Senator JOHNSTON—So they bear the responsibility, I suppose you are going to tell me, for the misdrawing of the specifications on the watercraft [another failed project] too?

Dr Watt—That is not what I am telling you, and you know that.

Senator JOHNSTON—They take advice, just as the current minister takes advice.

Dr Watt—What I am saying to you is that the Department of Defence, as part of a major capital acquisition program, quite properly put its transition plan to government, full stop.

Senator JOHNSTON—And the government relied upon the certification expertise of a SPO [System Project Office responsible for the sustainment of the ship in service] that clearly has significant cultural and systemic problems.

Dr Watt—And the government of the day was also aware that these were fragile platforms [amphibious ships]. After all, they are 40 years old.

Senator JOHNSTON—The government listens to what you, Secretary, tell it. And let me tell you: the decision to link these vessels across to 2014 is utterly flawed [the changeover from LPAs to LHDs].

Dr Watt—That is wrong in two respects. The government gets advice from all sorts of quarters, as you and I both know; and, secondly, *the government certainly gets advice from me but not in this particular case, because I was not here*. (Emphasis added)

Senator JOHNSTON—No.[138]

33.5 On a wing, a prayer, and taxpayers' money

Mr King[139]—A tender was placed around the early 2000s and, because a new design that had not been tested or proven offered potentially more capability than existed in existing designs, the decision at the time was made to go with this new design.

CHAIR[140]—It was developmental, was it?

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[138] (The Senate, 23 February 2011, p. 35)
[139] Deputy CEO of the Defence Materiel Organisation within the Department of Defence
[140] Senator Mark Bishop

Mr King—It was definitely developmental. In fact, it was a paper design. I am doing a lot of this just by looking back through history, obviously. There are lessons learned in this, of course. If you look at the fundamentals, it had never been built. When you try to develop a watercraft, you are basically trying to push a shoebox through water carrying a lot of weight, in addition to which you want to marry it to a major ship to do the unloading; and then, secondly, you want to put it ashore in a surf condition and unload those stores safely. I suppose at that time, if you look at the tender evaluation, the new design potentially offered these capabilities. But to achieve those, the design was based on an aluminium hull. It was beamier and it offered higher speed. So, theoretically, it offered the capability that the ADF sought. *The problem was that the tender was actually based on a very early concept design to be produced by a company that had never built a landing craft using aluminium, which had never been used in such a manner*. (Emphasis added)

Senator JOHNSTON—All right. But we have told the minister that the reason this project is not going forward is because of dimensions and weight. Who drew the dimensions?

Mr King—The dimensions were drawn inside the department very early on.[141]

33.6 Picking the short straw

Dr Gumley[142]—[on another project] No, the inability to do a particular mission. It might be better to talk about that in another place. It was always optional whether the Americans were going to do that project. It required them getting funding from congress to do so. That did not happen. We proceeded then with what we said we would do with the initial approval, but we did not inform the government at that stage that this extra capability would not be achieved.

Senator JOHNSTON—Why not?

Dr Gumley—*It became an issue within the department about who would do the* [ministerial] *informing*. (Emphasis added)

Senator JOHNSTON—What is the minister so concerned about? He has placed this project and has signalled, in line with what Mr King has just told me, that it is potentially for cancellation?

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[141] (The Senate, 23 February 2011, pp. 36-40)

[142] CEO of the Defence Materiel Organisation within the Department of Defence

Dr Gumley—I think he is justifiably concerned that he should have been informed much earlier.[143]

33.7 The US and us

Senator LUDLAM—Mr Nikolic, I would like you to give us a brief overview of the bilateral Force Posture Review Working Group. Can you tell us when and where that working group has met what the membership of it is?

Mr Nikolic—I think it is fair to say that it is early days in relation to the US force posture review. It seeks to ensure that the US global posture, I guess, has the flexibility and versatility to address a broad spectrum of military requirements. We fully expect the force posture review to reinforce existing US relationships and identify opportunities to enhance regional cooperation, including cooperation with Australia.[144]

33.8 Between a rock and a hard place: maintaining business relations with a monopsonist

Senator JOHNSTON—So we had McKinsey in Europe giving a very adverse commentary on the Australian defence bureaucracy—

Dr Watt—A commentary that I think, as Dr Gumley will explain to you, was completely incorrect.[145]

Senator JOHNSTON—That is right, and we have been down this path. But the McKinseys in Sydney responded that that was not their opinion. *So we had the two organisations under the same label contradicting each other as to their opinion of the efficiency and competence of Australian defence bureaucracy, DMO and the department*.[146] (Emphasis added)

33.9 Banter from the bench

Senator JOHNSTON—Air Vice Marshal, lovely to see you at the table talking about submarines.

Air Vice Marshal Deeble—Thank you very much.

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[143] (The Senate, 23 February 2011, pp. 36-40)
[144] (The Senate, 23 February 2011, p. 45)
[145] (The Senate, 23 February 2011, pp. 65-67)
[146] (The Senate, 23 February 2011, pp. 65-67)

Senator JOHNSTON—I am hoping your success in Air Force does transfer across to Navy. I live in hope.[147]

33.10 FAMILY FEUDS

Senator JOHNSTON—Are you telling me that the Department of Defence is having a commercial-type stoush with the Department of Finance over the sustainment contract of Collins [submarines]?

Dr Watt—I am telling you the Department of Defence is having a serious discussion with the Department of Finance and the Australian Submarine Corporation [ASC].

Senator JOHNSTON—The Submarine Corporation is owned by the Department of Finance—is it not?[148]

Dr Watt—The Australian Submarine Corporation is a government business enterprise with its own commercial objectives, its own board and its own CEO. It is not simply a matter of 'it is owned by the Department of Finance'.

Senator JOHNSTON—Who owns it?

Dr Watt—It is a commercial government business enterprise.

Senator JOHNSTON—Who owns it?

Dr Watt—The Australian government owns it.

Senator JOHNSTON—Yes, and who owns Defence of Australia?

Dr Watt—I think we both know that.

Senator JOHNSTON—The Australian government.

Dr Watt—Let me finish. These discussions are about quite serious and complex issues. In the meantime, we have an existing arrangement in place.

Senator JOHNSTON—In the meantime, we are spending $688 million a year on [sustaining] two submarines.[149]

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[147] (The Senate, 23 February 2011, p. 95)
[148] (The Senate, 23 February 2011, p. 96)
[149] (The Senate, 23 February 2011, p. 97)

33.11 VALUE-FOR-MONEY

Senator JOHNSTON— ...[A]t what point do you go to government and advise that the cost of sustaining Collins [submarines] no longer represents value for money or good value for the taxpayer? Have we got to that point?

Mr King—I can really only observe what I have done in the period here, but what I would reflect is that there was an intervening period where the potential sale of ASC diverted some of its energy from its core business into readying the company for market. I can say that, since a decision was taken not to sell ASC, we have seen a concerted concentration by ASC management and board to get on top of the sustainment issues and to offer a value for money solution. We hope that is the offer we get from the company. We have not got that yet. We do not know the numbers.

Senator JOHNSTON—But you are saying the fact that this platform [submarine] is on the list, the famous list of concern [the defence minister's Projects of Concern list], does not mean there is any possibility of its being scrapped?[150]

Senator JOHNSTON— I asked you at what point will the government will Defence advise the government that the cost of sustaining this particular FEG [Force Element Group such as a submarine class] no longer represents value for money and you took the question on notice. In answer to it, you said: 'Defence will continue to work to deliver submarine based capability options to government until government directs that there is no longer a requirement to deliver this strategic outcome.' *You seriously expect the minister to evaluate this force element group and come down from on high to tell you that it is unsustainable*. (Emphasis added)

Dr Gumley: Value for money has two parts to it: one is what you get and the second is what you pay. The 'what you get' bit is very much a military capability that the country as a whole and the CDF and the Chief of Navy [CN] and others will determine if what we are getting is what they need to do the operational missions. That, of course, depends on what the strategic circumstances are externally. What you pay is very much what we have to try to do to achieve the availability that the CN wants.[151]

33.12 MINISTERIAL DECISION-MAKING (SOURCE-SELECTION)

Dr Watt: ...[F]or a long time, there has been a graduated series of thresholds for projects. I think, if the cost is $100 million and above, you go to NSC [National

[150] (The Senate, 23 February 2011, pp. 106-107)
[151] (The Senate, 31 May 2011, p. 9)

Security Committee of Cabinet], unless the project is, for example, regarded as very high risk. If it is between $20 million and $80 million, it is a two-minister process, which involves the Minister for Defence writing to the Minister for Finance and Deregulation and seeking agreement.

CHAIR: Just to clarify, between $20 million and $100 million involves the two ministers.

Dr Gumley: Yes, sorry—between $20 million and $100 million. If it is between $8 million and $20 million, the Minister for Defence is the decision-making delegate; below $8 million, the delegate is in the department.[152]

33.13 IT'S ONLY BLOODY TRUCKS!

Senator HUMPHRIES—LAND 121 Phase 3 someone unkindly described as a sort of glorified truck purchase program. What is the situation with it?

Mr King—Whoever coined the phrase 'just trucks' should be shot!

Senator HUMPHRIES—Trucks and trailers.

Mr King—Even just for 'trucks and trailers' they should still be shot. This was the one where we tendered and got made an offer but, when we tested the vehicle offer, it did not live up to the capability that the supplier had said it would, so we have retendered the market. [153]

33.14 A BRIGHT FUTURE BUT DON'T MENTION SOCIAL COMPLEXITY

Dr Watt: As I noted earlier, we have struggled to match our capability aspirations with our capacity to deliver. There are numerous reasons for this, but broadly they fall into three categories.

First: we need to identify problems in the development and acquisition of major capabilities earlier. As the minister recently announced, we are instigating a series of tiered measures focused on improving project management, minimising risk at project start and identifying problems early. These include the early indicators and warning system we are implementing, the expansion of the existing Gate review processes and the introduction of a quarterly accountability report to ministers, the secretary and the CDF.

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[152] (The Senate, 30 May 2011, p. 62)
[153] (The Senate, 23 February 2011, pp. 120-121)

Second: Defence has expressed difficulty in attracting and retaining an appropriate number of skilled staff to progress our projects. Partly for this reason, we have taken recent efforts to increase resources and improve skilling in the capability development group, which is also exempt from the additional reductions to the forecast APS [Australian Public Service] workforce.

Third: major Defence projects are technically complex, and some have taken more time than was originally anticipated in order to mitigate technical risks ahead of government consideration. This is a plus as well as a minus, because a rushed project often becomes a failing project.[154]

33.15 A GLITTERING PRIZE

Senator JOHNSTON: Secretary ...[y]our background is one of finance, and one of the things we discussed when you were appointed as Secretary was that there would be a fabulous new focus on financial management in Defence. For Dr Thomson [Australian Strategic Policy Institute] to say Defence's financial management and capability development planning has serious problems, how have we come to this? Do you accept that or not?

Dr Watt: No, I do not accept that. I do accept that we have some issues we have to address on both the financial management and accountability management arrangements.[155]

33.16 MANAGEMENT FAILURE: THE DEFENCE MINISTER'S 'PROJECTS OF CONCERN' LIST

Dr Gumley: It has been our experience that sometimes very well-meaning projects get mixed up with the forest and the trees type argument; they are so busy working their day-to-day issues—and working very hard—that they lose track of the overall health of the project.

Mr King: So far we have mediated about $4 billion worth of projects by going through that project of concern process...[156]

Dr Gumley: The project of concern triggers are: first, *cost* and if it is going to go over budget. [Emphasis added] The answer to that is, from what we know now, it [a

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[154] (The Senate, 30 May 2011, pp. 8-9)
[155] (The Senate, 30 May 2011, p. 15)
[156] (The Senate, 30 May 2011, p. 64)

particular project being discussed] is not. The second is schedule. This is an Australianised military off-the-shelf product. You need a 20 per cent schedule slip to get on the projects of concern list. That leaves the fourth qualitative factor of contractor commitment. [157]

Mr King— The sorts of things we look for in nominating, or indeed a minister nominating a project of concern, are that the capability is not going to be what we expected it to be; it is late; cost, *although cost is rarely an issue* with our projects overall; or sometimes just industry relationships or sometimes they are of national significance and there is a need to be very focused on them.[158] (Emphasis added)

Dr Gumley: Can I just make a point there. The whole purpose of the projects of concern list is not just to have a list where you just put names; it is actually to reform and do things. *Part of it is to get a closer interaction between DMO and the respective private companies who are doing the work.*[159] (Emphasis added)

33.17 WHOSE NATIONAL INTEREST?

Mr King: I do worry about our capacity as a nation to take on these challenging projects. While we have an issue at the moment which is substantial and one we must address, this neglects all the achievements since 2007. I mentioned those in passing a little while ago. We have built a shipyard in Adelaide; the South Australian government undertook that. ASC has also built additional capacity. We have a syncrolift there which is the largest in the Southern Hemisphere and can be extended. We have assembled a workforce of about 1,200 white-collar engineering management logistics people and about 800 production workers. We have an apprentice training system.

I will just use this piece of steel I am holding as an example—not intended to be in the first ship, fortunately! This iron ore came from Western Australia, was turned into steel and milled at Port Kembla, and cut and shaped by Australian industry. There are about 20,000 of these units to go in each ship. If I was to convert these into the weight of the ship, there would be 30 million of them. Of course, we need a few other shapes relative to that to make a ship, but that is the sort of thing we have undertaken.

I liken this sort of thing to a four-legged stool. I do not know if you have ever done any home renovations; but, if you have ever tried to adjust a four-legged stool to get the right balance and height, you know it is very challenging. Our four-legged stool here is

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[157] (The Senate, 30 May 2011, pp. 85-86)
[158] (The Senate, 23 February 2011, p. 114)
[159] (The Senate, 31 May 2011, pp. 43-44)

cost, capability, schedule and, of course, safety. I have been to this forum now for seven years, where we always want to promote Australian industry, particularly Australian industry in pursuit of our defence capability, and I am personally an advocate for that, but with that comes a national challenge: our industry is not always ready to take on every project immediately.[160]

Mr King: There were a number of issues with the NQEA [a Cairns-based shipbuilder] bid that we really gave the company an enormous amount of latitude to improve upon from their initial offer. For example, they had very uncertain tenure over some of their facilities they had on offer and they had very uncertain access to the routes they needed to launch blocks [sections of a ship]. We gave them a lot of time and a lot of latitude to correct all that. But, at that point in time, they were the preferred solution, after looking at capacity issues and everything else, that I took to the then minister and recommended that the preferred block suppliers be both NQEA in Queensland and Forgacs in Newcastle.[161]

Mr King: I spent a lot of my time in either the military or industry. Industry claim a lot of things but one thing some companies do to us—and I think it is time we take this up with industry—is re-engineer their bids after they have been offered. I sat on the board of the AWD [Air Warfare Destroyer] project when we down-selected [chose] the module candidates. The offer from NQEA involved certain capital security from the company.[162]

Senator IAN MACDONALD: A guarantee of $20 million from the Queensland government, I understand.

Mr King: No, there was their own capital basis. I was very conscious of the scale of this project—not just me, but other board members—and the enormity of the undertaking that would be taken on by a relatively small company building very key blocks to this ship. They changed elements of their corporate structure between being awarded the contract and the announcement that was to take place [ministerial announcement of source selection] to the extent that in my opinion it invalidated the offer unless certain other guarantees could be in place. Of course, as you point out, the Queensland government on that very short notice were not in a position to offer those guarantees. This was not a matter that was brought on by the government or by Defence; it was brought on by a company restructuring.

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[160] (The Senate, 30 May 2011, pp. 77-78)
[161] (The Senate, 30 May 2011, p. 88)
[162] (The Senate, 30 May 2011, pp. 85-86)

Senator IAN MACDONALD: My point is this: if that is even closely in point then the decision not to give it to the Cairns shipyard but to give it to someone else, in this case BAE in Williamstown, must have been made fairly quickly. On my understanding of the events, that happened almost overnight.

Mr King: No, that is not correct. The NQEA was selected as the preferred builder for those modules, that were eventually awarded to BAE [British], over BAE [who had initially lost the entire tender]. So there was a range of competitors for those modules. If my memory serves me correctly, at that point there were two valid suppliers in the tender, and NQEA was the preferred supplier. NQEA then, between their selection as preferred and the scheduling of the then ministerial announcement of that down-select, chose to change their corporate structures to the point where it invalidated, in our opinion, their offer without some other support arrangements which needed to be put in place within days. So the announcement that next day was not who was now the preferred supplier for those modules; in fact it took several months to go through the process of eventually selecting BAE to undertake those modules. There was no overnight change. The point I would make, though, is this: BAE had already been selected as competent and everything else; it just had not been selected as the preferred supplier.

Senator IAN MACDONALD: So it was not even in the preferred supplier status for a smaller number?

Mr King: No.

Senator IAN MACDONALD: Then this added to it [BAE go from losing the tender to now winning the tender based on their original bid].

Mr King: That is correct. I have to remember the exact time, but certainly within a few days of the minister announcing that the alliance [the alliance of contractors and government managing the project] had had this preferred selection of NQEA, NQEA chose to restructure its enterprise and could not get in place in time the various guarantees, because it was within days. At that point there was no announcement that BAE had won those blocks instead. In fact, what happened was the tender was then re-evaluated against these changed circumstances, and that took a period of time.

Senator IAN MACDONALD: On that scenario you are saying to me that NQEA voluntarily withdrew.

Mr King: No. They changed their corporate structures which made them—

Senator IAN MACDONALD: Ineligible you are saying.

Mr King: Yes, it invalidated their offer. Senator ...[c]an I say that we were embarrassed, and I was very embarrassed to have to advise the minister of the change. My view, ...is that the change in circumstances was brought about solely by the company's own self-initiated action and by nobody else. I was embarrassed to be in that position. [163]

Dr Gumley: I think it is just that BAE took a little bit too much work for the number of skilled people that they had and [now] they have done the right thing by everybody, in being prepared to [re] distribute it.[164]

Senator IAN MACDONALD: Now, I might just add as an aside, the Queensland government is spending $100 million to try to correct the unemployment problem in Cairns, but that, again, is an aside.

Senator IAN MACDONALD: Has any thought been given to restarting negotiations with the Cairns shipbuilders? I ask this in the context—perhaps not a context that is particularly front of mind for Defence but it certainly is for the government—of the fact that Cairns has, regrettably, the highest unemployment profile of any region in Australia at the present time. In view of BAE's problems [unsatisfactory delivery performance] one wonders whether Adelaide [ASC] and Forgacs [Newcastle] might be able to cope. I am sure they have said they can, but there are obviously difficulties.

Mr King: At this point there is no restriction on who we might engage with for this third ship, so the answer is that it could well be.

Mr King: The difficulty we run into is that work done probably by the RAND Corporation in America about 10 years ago showed that if you distribute the work beyond about three companies, and those companies do not have experience in the modules, you will actually reintroduce risk to cost and schedules.

Senator IAN MACDONALD: I have just been over the Navantia site [Spanish shipbuilder] and they are certainly very experienced. I would be interested in your financial arrangements, actually, because I am conscious that Navantia are very, very anxious about where their next job is coming from.

Mr King: Absolutely.

Senator IAN MACDONALD: *As I understand it, there is not a lot on the horizon so they* [Navantia] *would* [be] *very grateful for your decision. Perhaps on notice* [a requirement to produce additional information to the Senate] *you might indicate what*

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[163] (The Senate, 30 May 2011, p. 87)
[164] (The Senate, 30 May 2011, p. 83)

the contracted price to BAE in Williamstown was versus what it might be for Navantia in Ferrol [Spain].[165] (Emphasis added)

33.18 IP 101 – POWER POLITICS

Senator JOHNSTON: We discussed the DMO's benchmarking review [with respect to the operating performance of the Collins Class submarines] at the February estimates[166] that there was a benchmarking, as was conceded, against US Los Angeles 688 and Swedish Gotland class submarines. Have we got that review and is it available to the committee? Where is Air Vice Marshall Deeble by the way?

Mr King: We are sorry but Air Vice Marshal Deeble has had to go into hospital for an operation.

Dr Gumley: I have just been informed we do not have official approval to release it from other foreign entities.[167]

Senator JOHNSTON: If we were to do a son of Collins or a Collins derivative, we are bound by intellectual property issues going back to Sweden and Germany?

Senator JOHNSTON: We only have one design authority in Australia and that is the Australian Submarine Corporation?

Dr Gumley: Yes.

Senator JOHNSTON: We have nowhere else to go?

Dr Gumley: No.[168]

Senator JOHNSTON: [with respect to another project] The rules for the A[CP] [Armaments Cooperation Program] program mean that all of the intellectual property of Australian participants has to be put on the table.

Mr King: If they get to a certain stage, that is correct.

Senator JOHNSTON: And none of the American providers have to put any intellectual property on the table.

Mr King: I am not sure that is entirely true.

Senator JOHNSTON: If you read the rules of it—and I can pull them out if you want to see them—you will see that that is the case. These codes are all secret.

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[165] (The Senate, 30 May 2011, p. 81)
[166] (The Senate, 23 February 2011)
[167] (The Senate, 31 May 2011, p. 10)
[168] (The Senate, 31 May 2011, p. 12)

Mr King: They are certainly very restricted access, yes.

Senator JOHNSTON: *What Australian software manufacturer is ever going to participate in a program where they give up their intellectual property?* (Emphasis added)

Mr King: It can be done with protection for that intellectual property. Let me just put this in context. We are participating in a program where seven USN [US Navy] submarine types also participate. That is the scale of this. We are actually benefitting by being a co-participant in the central US combat system submarine programs of which, of course, the best of breed solutions are looked for, as you would imagine, for the whole US Navy to be dependent on. If in this Armaments Cooperation Program an Australian solution is selected, it will be indeed critical that the US Navy gets access to that IP for which its whole submarine fleet has become dependent. That does not mean that that IP is given away or given to others; it means that the IP would need to be...

SMEs can have that attitude if they like, but they are playing in the real world and the real world is: if you want to put IP into the heartland of America's strategic submarine fleet, you will have to deal with that IP issue. That is a fact.[169]

Senator JOHNSTON: [with respect to another project] We are a second-class partner in this program.

Senator JOHNSTON: But the problem is they are not happy with the system and we are paying one hell of a lot of money to be part of it.

Mr King: No, we are not a second-class partner. It is just not reasonable to say we are a second-class partner. The US Navy has been a totally supportive partner of Australia in assisting us in improving the Collins class submarine and its capability. Given that we represent six submarines...

Senator JOHNSTON: Do we have the full classified version of that report?

Mr King: No, we do not because there are certain capability aspects of that full evaluation that we are not party to.

Senator JOHNSTON: *You see, this is the problem I have with this. We are paying a lot of money and I say we are a second-class partner in this.*[170] (Emphasis added)

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[169] (The Senate, 31 May 2011, p. 17)
[170] (The Senate, 31 May 2011, p. 18)

33.19 BLIND FREDDY AND THE EMPEROR'S CLOTHES

Senator JOHNSTON: We have just been through them all. Blind Freddy knows what is going on here. I do not think there is any issue of national security. I am sitting up here and I know all about it. Everybody knows about it. We are even writing fiction about it. Have you read the Navy News lately?

Senator JOHNSTON: I am concerned that there is no capability to speak of. What do I do? Do I just sit on my hands and pretend that there is?

Senator Feeney[171]: A private briefing has been offered.

Senator JOHNSTON: I know what the private briefing is going to say. The public need to understand that we have a massive capability gap as of today. There is a lot of silence coming from that table.

Senator Feeney: I do not think that was a question. This is Senate estimates—

Senator JOHNSTON: Haggle with me. Tell me I am wrong. Please; I am begging you.

Senator Feeney: I am happy to debate with you our submarine capability in the appropriate forum, but mercifully this is not the one.

Senator JOHNSTON: No-one has taken issue with the fact that I have just said we have a capability gap with respect to our submarine force element group.

33.20 TURNING TRICKS

Senator JOHNSTON: ...let us turn to what happened with [the submarine] Dechaineux. I have read the Navy News. Could I quote the article by Michael Brooke: Like a scene from the film The Hunt for Red October, HMA [Her Majesty's Australian] Ships Ballarat and Parramatta have been gliding through the waters of[f] the South China Sea in search of an 'enemy' submarine. Ballarat and Parramatta are the ears and eyes of a coalition maritime task group that has been stalked by HMAS Dechaineux and frequently 'attacked' by Australian F/A-18F Super Hornets, Russian- made MiG-29s and US-manufactured F-16 fighters during Exercise Bersama Shield.

We also did a couple of press releases, I think—correct me if I am wrong—indicating that Dechaineux [an Australian Collins Class submarine] *had participated successfully in this exercise when the fact is that it had mechanical problems and never left the wharf. How does this all occur?* (Emphasis added)

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[171] Parliamentary Secretary for Defence

Vice Adm. Crane: I understand that the press releases would have been referring to the intent for Dechaineux to participate.

Senator JOHNSTON: How many more articles of this nature does Navy News write that are not factually correct or, indeed, may I say, are concocted? That is the question, I think, that it is on everybody's lips.

Senator JOHNSTON: I put it in the context of Sirius, a couple of minehunters that are laid up, I think, and a couple of Anzacs that are not going so well, and the amphibious ships are a problem. Whilst they are all relatively domestic issues, this is one issue which is underlined by the article: a fictitious, Walt Disney story of us participating in an exercise when we are tied up unable to do so and our neighbours have all turned out expecting to spend their valuable time, effort and money exercising with us. We have had to apologise to them. The message I am getting with respect to this ... is we are in such a lot of trouble with it.[172]

33.21 A LITTLE RAY OF SUNSHINE - JUST

Mr King: The next one is SEA1448 phase 2B Anzac ship ASMD. I am personally really delighted to be able to report on this project. This was a project that we had put in the category that it might more likely fail than succeed.

Earlier this month, the trial, contrary to my extreme pessimism, executed flawlessly and on schedule, and in the earlier part of this month we did a successful ESM firing from an Anzac ship, the Perth.

This will be a world-beating technology the likes of which this country has not put together for 20 or 30 years. It is a small Australian company. I think they are to be commended for the work they have done. We have an issue now to go back to government and outline the cost and schedule to install on all the ships.

I have no doubt that many countries of the world will be coming to look at this company and acquire this technology. The basic technology has uses in Australia beyond just shipborne use. The company was able to demonstrate for example, tracking mortar rounds accurately and predicting where they came from so that you could launch a counterattack—that sort of level.

Senator IAN MACDONALD: I think Senator HUMPHRIES commented, sotto voce, this is a Canberra company.

Mr King: It is a Canberra company.

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[172] (The Senate, 31 May 2011, p. 25)

Senator IAN MACDONALD: I am not quite sure what that has to do with anything, Senator Humphries.

Senator HUMPHRIES: I am not sure either but I am glad you got it on record, thank you. [Possibly because this company is in the Senator's electorate.]

Mr King: You have got to make it clear to your friends that you are visiting this company and not other businesses in Fyshwick [legal brothels and similar] when you go there!

Senator IAN MACDONALD: I always go to Harvey Norman! [a retailer of household and entertainment goods].

Mr King: ...[T]here are benefits here for this country for 20, 30, 40, 50 years from this technology. [173]

33.22 A MINORITY REPORT BY COMMITTEE MEMBER, MR ROBERT OAKESHOTT MP[174]

The Defence sub-committee of the Joint Committee on Foreign Affairs, Defence and Trade does not divide on partisan lines. Members have accepted that their participation on the Committee requires them to form judgments only after careful assessment of both public and confidential materials—and that this is a special responsibility. However, in this rare instance, although not disagreeing with the Committee's report, I feel that it is important that I add to some sections of it.

During the Defence sub-committee public hearing[175] into the Review of the Defence Annual Report 2008-2009 (the Report) I asked several questions in relation to the action being taken by Ms Jane Wolfe, General Manager Commercial, SES band, against CEO of Defence Materiel Organisation (DMO) Dr Stephen Gumley as first respondent, Public Service Commissioner Lynelle Briggs as second respondent (now CEO of Medicare Australia), and the Commonwealth of Australia as the third respondent in the Federal Court of Australia (FCA). The questions asked were in regard the termination of Ms Wolfe's employment, the processes involved, and the specific reference in the annual report which stated: 'In March 2009, Ms Jane Wolfe's employment with the DMO ended'.

[The Federal Court of Australia ruling] leaves open many management-related questions regarding performance management processes within DMO. It also opens the

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[173] (The Senate, 31 May 2011, pp. 46-47)
[174] (Oakeshott, 2010, July 02)
[175] (The Senate, 30 March 2010, pp. 59-65)

question of a lack of understanding of administrative law processes from the CEO of DMO who is supposed to be one of Australia's most senior public servants, if not its most senior (on pay/salary equivalence). And it clearly demonstrates, through the ruling, that the DMO CEO exposed himself, and therefore the Commonwealth and Minister, by not following due process, nor seemingly has a due process to adhere to.

At a broader level, this FCA ruling is therefore of *grave concern regarding the existing culture within DMO and the Commonwealth SES Band public service*, as well as having serious implications for the future of the DMO and the Commonwealth public service if left unaddressed. (Emphasis added)

Under Part 7 of the *Financial Management and Accountability Act 1997 (Cth)* (FMA), there is an obligation that the CEO spend taxpayers money in an 'efficient, effective and ethical' way. These legal proceedings came at a cost of approximately $2 million to the taxpayer in legal fees, and currently without clear evidence to suggest otherwise, there is a chronological argument that Dr Gumley and others continued spending money on a legal case they knew had no prospect of success.

The AGS [Australian Government Solicitor], who represented Dr Gumley, have indicated in court documents they were providing advice as early as March 2008 in relation to Ms Wolfe's employment. This is as early as 4 months after Ms Wolfe's SES employment began. Without evidence to the contrary, this raises questions of why Dr Gumley was seeking legal advice so soon after her employment commenced, and whether any non-legal avenues were pursued prior to seeking legal advice, and why such a litigious approach to management was taken by Dr Gumley so quickly.

Given the early commencement of the AGS's advice, and based on court documents, this also raises the question of what advice AGS were providing to Dr Gumley, including *the widely known cultural practice in the Australian public service of "performance managing" someone out of a position*. (Emphasis added) This would be inappropriate legal advice from AGS to Dr Gumley, and would be inappropriate for Dr Gumley to have acted upon if provided, but based on the evidence both in the court and before the committee, no other conclusion can be drawn as to the events that saw Ms Wolfe's employment deemed 'ended'.

On 8th April 2009 the *Canberra Times* quoted a spokeswoman for the then Defence Personnel Minister Warren Snowden saying "The Government is confident that the Public Service Commissioner [Lynelle Briggs], together with the CEO of DMO, have complied fully with their legislative responsibilities and acted with due regard to fairness, natural justice and privacy."

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DR STEPHEN GUMLEY: CEO OF THE DEFENCE MATERIEL ORGANISATION

34.1 REJOINDER

"As a generality, I note that several of the interviews reflect the way things used to happen (and attitudes) pre-Kinnaird [pre 2003].[176, 177] Because we are all the sum of our experiences I would expect bias towards the past without folk fully recognising the change underway.[178, 179] Behaviours are slow to change especially when based on perception and legend.

I can confirm there was no political influence on source selection and have publically said that in speeches.[180] Indeed, in the five years I have been in DMO, I have not received a single instruction to choose a particular vendor from any politician. I think the 'political environment' is overstated but this is part of the psychology you are picking up through your research.

Lobbying can have a positive effect if it involves provision of information to Ministers, and in particular inform the market of competitive options (i.e. avoiding sole-source). Lobbying is negative when overdone or when [it] attempts to over-ride the procurement processes.

My observation is that dollars spent by companies on lobbying is often wasted, and that's bad for Defence because one way or another we pay for it through overhead in contracts.

On value-for-money, I have observed that whatever the various bid managers profess, there actually is no ambiguity expressed by CEOs of Defence Industry with whom I deal. They know exactly what it means. They think strategically rather than

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[176] (Kinnaird, et al., 2003)

[177] This research data collection commenced September, 2007.

[178] (Mortimer, 2008)

[179] (Fitzgibbon, 2009)

[180] See page 50 for a contrasting perception. Rather than be seen to influence or direct a decision, politicians or their agents (senior bureaucrats and political advisers) might suggest unacceptable options. Proponents then present potential solutions, in a Bayesian-like trial-and-error sequence, until the advocates have correctly read the political mind.

tactically as they make similar ‘Value-for-Money’ executive investment decisions for their own companies.”[181]

“I have often said that the aspect of the DMO's procurement business that keeps me awake at night is not cost or capability issues, but rather project schedule and especially schedule slippages or over-runs. This issue is one that is highlighted in the MPR [Major Projects Report 2007-08] and clearly indicates one area where we can and need to do better.”[182]

I encourage companies to read the tea-leaves to understand where government, as a purchaser, is going and what we need to do for national capability … We live in a political democracy where people are entitled to talk to their representatives. We are business-like. It’s our job to present government with the data.[183]

[181] (Gumley, 3 June 2009)
[182] (The Auditor-General, 2008)
[183] (Barker, August 2006)

35

DÉNOUEMENT: A CHANGING OF THE GUARD

MINISTER FOR DEFENCE

STEPHEN SMITH, MP

TRANSCRIPT: INTERVIEW WITH PAUL KENNEDY & VIRGINIA TRIOLI, ABC NEWS BREAKFAST, ABC 24[184]

TRANSCRIPTION: PROOF COPY E & OE

DATE: 8 JULY 2011

TOPICS: *DMO - Dr Stephen Gumley.*

PAUL KENNEDY: Now, the sudden resignation of a top public servant has cast a shadow over the organisation in charge of arms and equipment for the Defence Force. The Defence Materiel Organisation has been in the firing line recently over delayed Defence projects and acquisitions, in particular the poor maintenance record of Australia's Navy supply ships.

[184] (Kennedy & Trioli, 8 July 2011)

VIRGINIA TRIOLI: Dr Stephen Gumley was the head of the DMO until the Defence Minister announced his resignation yesterday. To tell us more, Defence Minister Stephen Smith joins us now. Minister, good morning.

STEPHEN SMITH: Good morning.

VIRGINIA TRIOLI: It surely must have been time for him to go given all the stuff-ups, the lack of Navy ships available to you to be deployed in the aftermath of [cyclone] Yasi and the like.

STEPHEN SMITH: I think it's a bit unfair to place all of that at the feet of either Dr Gumley or the DMO. Dr Gumley-

VIRGINIA TRIOLI: Buck has to stop somewhere.

STEPHEN SMITH: And this is one of the points I've made about Defence and this will be a feature of the Government's response to the so-called Black Review which is all about accountability.

But in my time as Defence Minister, my analysis is that very many of the problems we have are things falling between cup and lip and so, for example, in the near future I'll release the Rizzo Report into the failure of our amphibious vessels.

That'll show a long term structural deficiency but it'll also show lack of coordination between DMO and Navy, between DMO and Defence but it's unfair on Dr Gumley. He's been in one of the toughest jobs in Canberra for seven and a half years and he said to me, on the basis of my conversations with him, what was the reason, seven and a half years is a very long time. He's done a very good job in difficult circumstances.

VIRGINIA TRIOLI: So it's not his fault.

STEPHEN SMITH: You can't sheet it - sheet blame to him individually or personally for the difficulties we've had in procurement. That would be unfair.

VIRGINIA TRIOLI: Let me-

STEPHEN SMITH: It's also important to make this point. He has been responsible for making the DMO a better organisation now than when he started, for putting the Defence Organisation in a better position now than when he started. He's also presided over the successful acquisition of a range of important equipment, whether it's Bushmasters, whether it's C-17s, whether it's Abrams tanks, so he has done, in my view, a very good job in difficult circumstances but we've got significant procurement and capability issues and we need to effect structural reform which does sheet home personal accountability[185] but it's unfair on Dr Gumley to suggest that it's anything other than the fact he's been there for a very long time doing a very tough job.

VIRGINIA TRIOLI: Just one more point of clarity then. Would you have wanted him to stay? Could that structural reform have been achieved under him?

STEPHEN SMITH: Well, I said to him that if he wanted to he could play a role in our reform program. He came to the conclusion that after seven and a half years it was time to move on and he effectively said, having made a decision to retire, a clean cut was best and that's why it occurred in the course of this week.

PAUL KENNEDY: What are those major deficiencies? Are they communications, is it a cultural problem?

STEPHEN SMITH: I think it is structural. As I say, in the next period I'll release the Rizzo Report which dealt with the failure of our amphibious vessels. That'll show a long term structural deficiency, it'll show a failure to invest in some Navy engineering resources, but it'll also show, as I put it, falling between cup and lip, lack of proper coordination between Navy and DMO. So we've got to get that structure right.

The Black Review into accountability and governance will also deal with these matters. If you said to me what's the single most important thing we can do for Defence, it is to improve personal and institutional accountability and that's what the Government's response to the Black Review will do.

PAUL KENNEDY: Does the DMO historically not listen and act alone, too often?

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[185] See page 93 to consider a structural reform on light of a cultural reality responding to a political imperative.

STEPHEN SMITH: Look, I think it's a bit unfair to sheet it all home to DMO or home to one particular individual or one particular institution. There's a lack of coordination, there's a lack of integration, there's a lack of symmetry and that's what we need to fix. There's also a lack of institutional and personal accountability.

In the old days, if a Defence procurement program went wrong, it was almost as if there was a shrug of the shoulders. We can't do that now. We've got to give the taxpayer value for money, value for effort, and if things go wrong institutions and people have to be held accountable.

That doesn't mean that you want their head on a spike but it does mean you've got to learn from your mistakes and change processes and change systems.

VIRGINIA TRIOLI: The Opposition Defence spokesman, Senator David Johnston, has said that he's heard rumours that the DMO is actually going to back away from those important reforms that you're talking about and wonders whether the strict commercial disciplines that should be in place actually will be at the end of that process.

STEPHEN SMITH: Oppositions often, you know, rush to judgment. That's - that's their role-

VIRGINIA TRIOLI: Well, it's their job to scrutinise.

STEPHEN SMITH: It's their role in some respects and I've said before, people should wait until they see me release the Rizzo Report into our amphibious difficulties and the Government's response. They should also wait until they see the release of the Black Review into accountability and governance and the Government's response, rather than trying to second guess.

But there will be implications for Defence Materiel Organisation, for Defence Department itself both in terms of governance, accountability, and structure. It's the only way we can improve our outcomes here, is through a reform program and that's what I'm absolutely committed to and that's what we'll do.

VIRGINIA TRIOLI: Stephen Smith, always good to see you. Thank you.

STEPHEN SMITH: Thank you. Thanks very much.

87 35.1 LETTER OF RESIGNATION BY DR STEPHEN GUMLEY (OFFICIALLY REDACTED)

Australian Government
Department of Defence
Defence Materiel Organisation

Chief Executive Officer
R2-5-C074
Russell Offices
CANBERRA ACT 2600
Ph: (02) 6265-3742
Fx: (02) 6266-7641

CEO DMO/OUT/2011/180

Dr Ian Watt AO
Secretary
Department of Defence
RUSSELL ACT 2600

Dear Dr Watt

RETIREMENT OF DR STEPHEN J GUMLEY AS CHIEF EXECUTIVE OFFICER, DEFENCE MATERIEL ORGANISATION

[redacted]

I have been proud to lead the Defence Materiel Organisation through a period of significant and unprecedented systematic change over the last seven and a half years. The DMO of today is a far cry from the DMO of 2003. It is recognised as being more professionalised and businesslike and it is much closer to a best practice example of a high performing Defence Capability Acquisition and Sustainment Organisation than when I took up this role. Notably, and notwithstanding the criticisms of some, the vast majority of projects and products the DMO is responsible for are delivered within their budgets and to required capability, and the timeframes are not worse than those of like countries.

The role of CEO of the DMO is quite likely unparalleled in the public sector in terms of the difficulty and challenges it faces, especially the commerciality required. After seven and a half years, [redacted]

I will retire on 07 July 2011.

I wish you, CDF and all staff the very best for the future.

Yours sincerely,

DR STEPHEN J GUMLEY AO
06 JULY 2011

Defence Materiel: equipping and sustaining Australia's Defence Force

Source: http://www.defence.gov.au/foi/docs/disclosures/019_1112_Documents.pdf (downloaded 5 November 2011) [186]

[186] (Gumley, 2011)

35.2 Freedom of Information request to access Dr Gumley's letter of resignation (officially redacted).

Australian Government

Department of Defence

Office of the Secretary and
Chief of the Defence Force Group

Freedom of Information and
Information Management Branch
CP1-6-001
Campbell Park Offices
PO Box 7910
Canberra ACT 2610
Tel: (02) 626 62200
Fax: (02) 626 62112
FOI.Inquiries@defence.gov.au

Our reference: FOI 019/11/12

[redacted]

By email: [redacted]

Dear [redacted]

1. I refer to your email of 20 July 2011, in which you requested access, under the *Freedom of Information Act 1982* (FOI Act), to:

> "*The resignation letter sent by Defence Materiel Organisation chief Dr Stephen Gumley to Defence Minister Stephen Smith; and* **[Item 1]**
>
> *Any correspondance between Dr Stephen Gumley to Defence Minister Stephen Smith (between January 1, 2011 and July 9, 2011) relating to restructure, Dr Gumley's future position, and inefficient procurement practices of the DMO* **[Item 2]**."

2. By email dated 22 July 2011, Mrs Debbie Rath, Acting Director Freedom of Information, informed you that your request was considered invalid under section 15(2)(b) of the FOI Act.

3. During a telephone conversation with Mrs Rath, on 26 July 2011, you agreed to refine the scope of your request to:

> *"A copy of Dr Stephen Gumley's resignation letter to the Secretary; and* **[Item 1]**
>
> *Any correspondence between Dr Gumley to Defence Minister Stephen Smith (between January 1, 2011 and July 9, 2011) relating to restructure and Dr Gumley's future position* **[Item 2]**."

Reasons for [redacting] decision Item 1

Section 47F

10. *On review of the retirement letter, Mr Corcoran found that it contained personal information, namely financial and employment details of a former member of the Australian Public Service.* (Emphasis added)

Source: http://www.defence.gov.au/foi/docs/disclosures/019_1112_Decision_Letter.pdf (downloaded 5 November 2011) [187]

[187] (Davidson, 2011)

35.3 THE NEW GUARD: A PROSPECTIVE ERA OF 'INDIVIDUAL RESPONSIBILITY'

MINISTER FOR DEFENCE

STEPHEN SMITH, MP

TRANSCRIPT [extracts]: PRESS CONFERENCE – BLACK REVIEW[188]

TRANSCRIPTION: PROOF COPY E & OE

DATE: 9 AUGUST 2011

TOPICS: *Black Review*

STEPHEN SMITH: All right. Well thanks very much for attending. I'm joined by the Minister for Defence Science and Personnel, Warren Snowdon and by the Minister for Defence Materiel, Jason Clare. I'm also joined by the Chief of the Defence Force General Hurley, the [current] Secretary of the Department of Defence [who is also] the Secretary Designate of the Department of Prime Minister and Cabinet Ian Watt, the [current] National Security Advisor and [forthcoming] Secretary of the Department of Defence Designate, Duncan Lewis and also Warren King, the Acting CEO of the Defence Materiel Organisation.

And can I congratulate Ian and Duncan on their appointments and I'll have a few words to say about that later.

Today, Minister Clare and Minister Snowdon and I are announcing some deeply significant reforms to Defence, particularly in the area of personal and institutional accountability.

[188] (Black, 2011)

This is the first time in the modern era that Defence and Defence's accountability has been considered across the board for the organisation as a whole. And also today releasing the Black Review on which these reforms are based, and the decisions made by the government fully implement the Black Review and its various recommendations.

The theme of the report, or the review, and the theme of the government's adoption of the report, are to effect better outcomes in Defence through better personal and institutional accountability. We want to see better outcomes so that taxpayers get better value for money and our service personnel in the field get capability delivered on time and on budget.

There will be better integration, better contestability of ideas, both internal and external and greater rigour. And accountability will bring with it greater individual responsibility for decisions made.

...[T]he *central agencies*, [being the department of] the Prime Minister and Cabinet, [and the departments of] Finance and Treasury will be in a position to put a view about those projects proposed for inclusion in the Defence Capability Plan – so greater internal and external contestability of ideas. (emphasis added)

There's a very heavy emphasis on improving project management skills and we will embark upon a program to ensure that those members of the ADF who are posted or appointed to the capability section will, in general terms, have three year terms of office.

There will be a substantial reduction in the number of Defence committees. As Dr Black's report makes clear, we have far too many committees in Defence, with very diffuse lines of accountability and responsibility. The reform program will see all of those committees subject to a sunset clause over the next 12 month period.

We're also making it clear that committees are advisory in nature and individual decision-makers will be responsible and accountable for the decisions that they make on advice of committee members.[189]

The Defence Materiel Organisation will continue as it is, as a proscribed agency[190]. Both the Kinnaird and Mortimer reports recommended to the government of the day that the DMO, the Defence Materiel Organisation become an executive agency. Governments of both political persuasions have not accepted that recommendation. The Defence Materiel Organisation will continue as it is, as a proscribed agency. This allows

[189] See page 93 for a cultural perspective.
[190] Directly advising the defence minister and not via the Department of Defence.

for the continuation of independent advice by the Defence Materiel Organisation, to government, in key points of the acquisition and capability chain, particularly as it relates to cost, schedule and risk.

WARREN SNOWDON: Thanks mate. Can I endorse the remarks already made by the Minister about the outgoing **S**ecretary and our incoming **S**ecretary.

STEPHEN SMITH: All right. I think some of us are keen to be out of here by about quarter past two, so if we get to that stage I might bring it to a conclusion, but we're happy to respond to your questions.

What we need to do is to ensure that whatever cultural change is required is effected through the system, and that's one of the reasons why I came to the conclusion, and Defence leadership came to the conclusion that the appointment of two Associate Secretaries would assist the Secretary and the CDF in that task.

JOURNALIST: Minister, I was going to ask, will these changes allow you to better identify individuals when a project goes off the rails and to discipline them and sack them?

STEPHEN SMITH: Well to answer, yes, but a couple of points.

Firstly, one of the challenges that I've found has been when I've been presented with advice where things have gone wrong, and I've asked for how did this occur? Where was the senior officer oversight? Where does responsibility rest? And what lessons can we learn? It's been very difficult to provide answers to those questions, largely because very many of the decisions have been made at committee level where the responsibilities to date have been diffuse and hard to identify.

Committees will be advisory, and there will be individual decision makers.

A junior officer can make a mistake as a result of lack of experience, or not following a well trodden system or path. More often than not, the lesson learnt is you made a mistake on that occasion for the following reason, make sure you don't do it again. And so often, the remedy for a mistake in a personal sense is counselling, the performance management analysis and the like.

At the more serious end of the scale obviously, other consequences take or play their part both on the civilian side, which is consistent with the Commonwealth public service generally, but also on the military side. But the fundamental starting point, I think, of Black is personal and institutional accountability and responsibility in Defence needs to be sharpened, and that is what we've done with our announcements today.

STEPHEN SMITH: ...The Secretary [of the Department of Defence] is not the Government's military advisor, the Government's military advisor is the Chief of the Defence Force [CDF], and when a minister and a government works closely with the diarchy [the two heads of the Department of Defence: Secretary and CDF] you get civilian advice and you've seen today the substantial challenge we have on a whole range of capability and other issues which are primarily seized by the Secretary and his offices, but at the same time you can't get better outcomes out of Defence, you can't get better outcomes out of a Defence organisation unless the military side and civilian side are working hand in glove. And that's why I've made an emphasis on better integration, better integration on the capability side, better integration on the strategic reform process side.

JOURNALIST: Minister, a lot of Australians will be scratching their heads and saying given that you've now got set up and people being responsible for actual things and responsibilities in Defence, people are wondering why on earth hasn't this happened before?

STEPHEN SMITH: ...Defence is a big logistical complex organisation. In some respects the job will never be done. In other words you've got to keep yourself at it all the time, but what is our ambition here? Our public policy ambition here is to get better outcomes. We want to get better value for money for the Australian taxpayer; we want to get equipment capability to our servicemen and service women in the field on budget and on schedule. That's our objective.

In Defence, because you're dealing with a huge logistical organisation and in capability because you're often dealing, as you are with the Joint Strike Fighter, cutting edge new technology, there are always risks to be managed. What this is about is trying to manage the risks better, and by shooting home individual and personal accountability and responsible we can think we can manage that risk better and get better outcomes.

You'd have to ask the Defence historians why it hasn't occurred before, but I've made a point since I became Defence Minister of very clearly saying there are a range of areas where Defence needs to be the subject of reform.

Defence is inherently a good organisation. I am often gob-smacked on a daily basis by the number of fantastically professional Australians that I come in contact with.[191]

Thanks very much.

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[191] In addition to receiving advice from the military and civilian leaders of the Australian Defence Organisation, a hermeneutic analysis of this statement might suggest that the minister actively seeks advice from within the body politic of the organisation. Former defence ministers behaved similarly (see Brendan Nelson in Chapter 14).

36
KEVIN O'CALLAGHAN: REFLECTIONS FROM WITHIN

36.1 CAVEAT

I am Kevin O'Callaghan and these are my personal views. They have nothing to do with official Defence doctrine or policies. My views are based on what I have seen over 40 years. [192]

36.2 A CONCEPTUAL MODEL OF THE PROCUREMENT LANDSCAPE

My first observation is that a lot of people talk about things like political interference by the Minister or his Political Office, or stakeholders, or lobby groups. These perceptions are a product of observations of tactical activities. But in reality, the entire process is systemic and very few observers appear to recognise this.

To understand this systemic reality, imagine two concentric circles. In the middle is the DMO with its own lowercase *p* politics. Now, segment radially the [doughnut] outer circle beyond the inner circle. I am going to populate these segments and then I will focus on the individual (inner) arcs that represent the boundaries between the DMO in the centre circle and each of the outer segments. Each of these boundaries represents an interface between different world views, different cultures, different languages, and different ways of meaning-making. In the first outer segment I shall place the capital *P* politics of government. Next to it, I shall place industry in general. Then major world political issues such as terrorism, global financial crises, China as a global power, and so forth. One of the segments will be an omnibus container for society in general. In each segment, I will also have an enduring question, “What if?”

Now, we are no longer talking about interferences but rather, interfaces; about the way the DMO can relate with each segment. This approach provides a foundation for understanding how another party is thinking, and fundamental to this thinking is the recognition that we are dealing with a ‘world defence industry’ with its attendant political interests. No Australian company can produce indigenously an entire weapons

[192] Deputy Director General, Land Vehicle Systems Branch, Defence Materiel Organisation.

system. We can do certain things which might appear to be Australian but we are dealing with world companies with a small corporate interest registered in Australia.

36.3 The politics of an indigenous Australian Defence industry

These world companies might subcontract bits and pieces to Australian-owned companies and thereby have an impact on regional economics, but at the end of the day, they are still a European or American-owned company. And that means that these large world companies are marketing, selling, and lobbying. For them, the task is political because every Member of Parliament would like that bit of economic activity in their electorate. And so, alliances are formed with these companies and the political relationships are important, particularly when a parliamentarian's seat is marginally held, or the government is in a precarious position.

But a tension arises when prevailing government policies about regional economic development are juxtaposed with the realpolitik of a member's seat or even the survival of the government with a slender majority. Policy ambiguity is the new reality.

36.4 The DMO and policy ambiguity

The DMO is a government organisation and as part of the bureaucracy, has an inherent stability. It works within the context of government budgets, legislation and regulations that are promulgated pursuant to the legislation. But another reality is that much legislation is a reaction to the past rather than a facilitator of the future. So, a bureaucrat can operate safely in the comfort zone of the known legislation and the known regulations. But then the government of the day requires a stimulation of economic growth in a region with, for example, high unemployment. This might be in conflict with existing government policies that have guided the long-term disposition of industrial growth throughout the country. And many procurement projects have a life of around ten years, whereas the life of a government is three years. So, the project can outlast many governments with potentially opposing policies on Defence procurement, regional growth, and logistics hubs.

The line bureaucrat in the DMO can cosset himself or herself in the existing policies, but the DMO Executives are bound to follow the policies of the government of the day. Here is where the capital *P* politics impacts on the lowercase *p* politics with the DMO; another source of internal risk and information ambiguity.

So the overall procurement system is complex, because it is impossible to predict the political future and it is pluralistic because of the numerous stakeholders and their

different value systems. Even within Defence, there are different value systems. There is even a division within Defence that has to champion regional economic development and there might be another division which can't wait for this industrial growth, because the soldiers in the field need the new equipment urgently. Pluralism means that we don't have common goals or common values.

36.5 Managing the boundaries

Now within all this social complexity, I have to deliver the procurement project. And to do that, I have in front of me, the concentric circle map that I just described. My focus is on the boundaries between me in the centre and the peripheral segments. How should I communicate with each stakeholder group in the outer circle segments? And within my centre circle, I also have disparate groups with their own goals and objectives. Now, these boundaries represent uncertainties, risks, and opportunities. And the only way that I can move my project forward over ten years through the different epochs of realpolitik, is to get each stakeholder to treat me as a reliable source of accurate information; to treat me as a trusted professional.

How do I get people who have different goals to achieve, different values to me; how do I get them to accept me as being someone who puts forward the truth, who puts forward realistic plans, who doesn't play politics? This is an idealised view of the true civil servant and I doubt that it really exists because the 'small p' politics within Defence is bloody strong.

But here are some examples of how this can all play out. Up here in one of these outer segments, you can define a contractor who builds trucks. Once they have finished the delivery, there are no other orders. And there are companies who are faced with that challenge right now. Also from my personal history, take the introduction of the Steyr rifle at Lithgow [a regional Australian town] in the early '90s. Once they'd manufactured the Australian Styr, the only thing that was going to keep that factory producing more rifles was a potential market in South East Asia. But that market was dominated by Colt of the US, or the Chinese who sold AK47s. So, here's a small Australian company with a production run of say *x*, trying to compete against an American world manufacturer who has got a production rate of say*100x* per year for perhaps the next 20 years. This Lithgow company is going to struggle to survive for another 2 or 3 years.

When you actually talk to the company people like we did, you become very pragmatic. OK, let's not worry about the problem. What's the next level we could operate at, such as maintenance support and building components to become part of the global supply

chain? Clearly they don't have the same goals as you, but you can still help them get their goal to survive; you just have to suggest smarter ways of doing it. In other words, I'm trying to get the 'small p' politics at the DMO level of operation to align with the capital *P* politics of government.

Some people might see this as a large game of chess with moves and counter moves, but I see it as a map with mountains, jungles, and lakes. It's a matter of getting to the goals with the least energy and that might require some detours along the way. But remember, these people inhabit a sector of the outer circle and I'm in the inner circle. I'm not dealing with people who have got my interests or priorities, but I need to respect their objectives and their world. And as well, I have to show the same respect to the plurality of objectives within my own organisation. If I can show that what I offer is un-emotive professional advice which is timely, accurate, and relevant, then I have a good chance of being perceived as credible and then positive things can happen.

Now, how many bureaucrats and how many contractor representatives see a world of pragmatic alignment in the way I have described? Clearly, many don't and when that happens, chaos abounds for a period of time. Eventually, those individuals skilled in crisis management will surface. I know that there is a chain-of-command in Defence and the General's mantra is that there is no problem that we can't solve, but for a healthy organisation, we should be able to resolve these matters at much lower levels. So, when you get the contractor down for a talk and say, "OK, don't tell me what you want, but rather, what is it you are trying to manage, what is the risk, what is the uncertainty you are trying to control?" In 99% of the cases, you get to a point where there are two people who surface; one from each organisation, capable of managing and resolving crises.

At the moment in the DMO, these skilled individuals occupy positions too high in the organisation. That's an unhealthy world; it's not terminal but it's a bloody serious cold. We need people lower in the organisation who understand the world they're living in, who understand their neighbours and who understand that they have to be part of problem resolution.

36.6 Understanding neighbours

How do you put yourself in your neighbour's position? To start with, let's have another look at my concentric circle diagram. The DMO was in the centre circle and now I am going to move us into one of the peripheral sectors in the outer circle. In our place, I will put a single contractor. All the other contractors remain where they are in their outer circle sector.

As an analogy, the DMO represents settlement and stability. In contrast, the contractor is a nomad; perhaps a prostitute, but nomad will suffice. He can survive as long as he can find sustenance. When the food runs out, the nomad moves on. That is why the American or European defence contractor is generally more agile than the smaller local contractor. It's easier for the foreign contractor to 'fly in and fly out' as they shift resources around a world stage.

But every contractor works in the jungle and the alligators are hungry, whereas the DMO tries to skirt around the jungle because their nourishment comes from the government. In the aggressive defence equipment market, it's all about market share and the destruction of competition. So the contractor is going to have different goals and values to the DMO. The contractor will actively seek political alliances to enhance their survival prospects. This might be with other companies, industry groups, and governments at all levels. Recently, there has been some fairly strong letter writing campaigns from members of parliament around the country to the Minister, in support of a particular option (ref to Bendigo). This is an alliance at work and without alliances, a company is likely to become terminally ill.

36.7 Understanding ourselves and our neighbours

Defence is a bloody difficult customer. I'm thinking of a company we are dealing with whose turnover is 100% with Defence. In about 18 month's time, we will not be extending their contract. They will have no reason to exist. They will go broke, because the competition is huge, they don't appear to have any political or commercial alliances, and their technology is now out-of-date.

In contrast, I don't need to create political alliances because I have an established, perhaps formal, relationship with the Minister but I am responsible for the quality of that relationship. I go to the Minister to get approvals for my projects. So what about this company now in the inner circle of my diagram? If that's an Australian-based company, it's at massive risk. If that's a world company, the risks are probably not as significant; however their biggest risk is their profitability. I saw that happen to a company in the last 12 months which was setup in Australia with a UK parent. The business wasn't showing the results; it wasn't getting into this fickle customer. They came to talk to us one day and literally within 5 days, the Australian element of the company had been sold. It was that ruthless. It's all about market share.

36.8 Between benevolence and paternalism

My relationship with industry can be fairly fickle. My biggest opportunity is in technology and what I can and cannot do. Variety is very positive for me. What should I do when it is clear that a company, which is contracting to us, is no longer technologically competitive? I need to make a decision in 12 months time but how should I behave now? This bloke will go broke or pull out of the Australian market. Now, I might still want him to go broke, so our objectives aren't the same; however, I have to keep our equipment going for another 2-3 years. I need him to be around for 2-3 years. I need to understand what he requires to stay around for 2-3 years.

I want him here and I need to know what it's going to take to do it. There is nothing you can't resolve with industry. I could string him along for 2 years and it will cost him a lot of money, or I can tell him the reality now. “Yes, you are going to close the business but you are not going to lose $2.5m waiting for me to tell you.” Alternatively, “I don't want you to make them anymore but I'll buy your IP; I'll give you the golden handshake.” Or, “I'll buy the licence to use your IP and I'll give you an enduring handshake.” By the way, this attitude is not common in the DMO.

36.9 Towards cognitive maturity

Back to my diagram with the concentric circles and now I put the DMO back into the inner circle. And again, I want to focus on the boundaries, the interface between the DMO and contractors, or any other stakeholder group for that matter.

How do different levels of managers operate? Look at it in terms of a vertical scale. At the bottom, you have the technical specialist who knows what to do tactically. This is your intelligence agent. He tells you what is happening and you interpret that information in terms of fact, timing and relevance. In the middle, you have your strategic thinker and negotiator with strong empathetic and communications skills. At the top, you have your diplomat with exceptional cognitive abilities. The top two levels are dominated by inter-personal skills. In the defence business, people at the top level need to have the other skill level in their background. But some don’t and they compensate by having a deputy to fill that gap.

My general observation is that technocratic organisations dealing with matters of defence equipment tend to be heavy in the technical areas and are lacking, in various degrees, with mediators and the diplomats. Indeed, companies will not survive if they are composed purely of technical experts. On the DMO side, I could count on probably two fingers, people that I have met who possess that diplomatic profile. One of them

has just gone (Steve Gumley). The other one is the current Head of Land Systems, General Cavanaugh; and I've known him since he was a Lt Colonel. He operates in that realm. These are the only people who, in my opinion, could turn a culture around.

And a consequence of this and one of the biggest weaknesses within the DMO Executive is that they have tried to introduce reforms, but they have never been able to reform the causes of the problem. That is, the systems including the personnel issues. For example, if there is a grossly underperforming staff member, it takes between 18 months to 2 ½ years to do something about it and 20% of the supervisor's time and there is a history of drawn out litigation.

36.10 REFORMING STRUCTURE AND CULTURE

After Gumley resigned and the Black review was delivered, defence minister Smith was asked if the issues in the DMO were structural or cultural and he came on the side of structural reform. You need to tease this out and this is my explanation. I work with Minister Smith and I can tell you that he reads everything that you put up. His comments are clear, concise and astute but he has only been in the job for a short time.

Before you can really determine whether something is cultural or not, you look at it from the point of view of saying, "What's stopping me getting what I need? Why am I having difficulty dealing with this?" So, your normal default position is to tackle structure. To say, "I need to remove some of the walls; I need to knock a few doors open; I need to make sure I'm getting relevant, timely, accurate advice." As you start to understand the natives a bit better; as you start to understand their behaviour, and their customs, you start to identify where culture is forming the barriers. I don't think it is one or the other. I think all you are seeing is a Minister who is dealing with an organisation that he hasn't had very much to do with.

He is aware that two or three of his predecessors have been badly mauled by it and therefore, when you are tackling reform, the first thing you've got to understand is, "I need to understand the truth." Structure blinds the truth. Then, once you believe that you are getting information from the right people, if it's still not timely, not accurate, then that's the cultural issue. So, I think all he is saying to the world is, "I want to restructure to ensure that I'm getting the truth and that I understand what's going on here." The next evolutionary step is, "I've got to then look at the culture."

If he addresses culture first, you can waste a lot of time because again, if you are not getting critical timely information then you'll get caught out. I don't believe it's one or the other, it's simply the nature of a fairly astute and educated man dealing with a highly complex and pluralist organisation: Step 1 - where am I not getting information and

what walls are there? Step 2 - why do people behave like that? But in all of this, remember that his biggest risk at the moment is that if one Labor politician takes ill, then he's up for an election. And that comes back to what's driving the capital *P*.

So, you start by studying the communication and decision-making channels and that's structure. Then you find causes of why the structure could be failing. When you think of it, structure will fail for a couple of reasons. Think of it this way. You have the Minister at the top and he is contemplating structural failure in the DMO; he is not getting the information he needs. What could be the impediments? Is it a result of prevailing legislation which is messy and ambiguous and/or is it culture? In theory, he can fix the legislation and any regulations that flow from it. The next step is to consider what is it in the structure of the organisation that causes people to behave [the culture] in ways that impeded the information I need. Often these barriers are linked to existing policies and procedures, such as the time it takes to remove a non-performing staff member that I mentioned before.

My personal view is that Gumley did a lot to get a culture of professionalism turned around. He got the culture of accountability. I honestly believe that is entrenched at an individual level. I would say that throughout my peers, there's an acceptance that we are accountable; there is an acceptance that we have to make things happen and change. Bringing professional rigour to project management: I think he achieved that. To me, whilst it might seem hard, I think it was easy in the sense that a lot of people in DMO wanted that change. The culture was there that said we want to change the systems, the procedures and the debilitating data management systems.

If you said to me, "Did Gumley fail in reform?" No, Gumley failed, like a lot of people have, in trying to streamline the processes and make them work in terms of information efficacy and timeliness. Now, that never changed in the time Gumley was there but he did inculcate a professional capability in project management. But against that, the formal policies and procedures that have to be processed are a matter of concern. You know as a manager that you have to do it, but there is no way of doing it; that’s culture reacting to structure and in one sense, the culture is being imposed.

37

CAPITAL *P* POLITICS, LOWERCASE *P* POLITICS: DISDAINED AUTHORITY, FORSAKEN HUMANITY, COLLATERAL DAMAGE, AND CULTURAL LEADERSHIP[193]

37.1 SYSTEMIC FAILURES IN THE SECURITY VETTING OF PERSONNEL[194]

Senator JOHNSTON: Can I go to the issue of security vetting, with Mr Merchant.

Mr Merchant: The investigation by the Inspector-General of Intelligence and Security, I think it is fair to say, is well advanced...

Senator JOHNSTON: How many we have effectively had to redo is, I think, a measure; can you tell us that?

Mr Merchant: That process is only just starting.

Senator JOHNSTON: How many applicants?

Mr Merchant: We are looking at a validation exercise that will extend over thousands of applications.

Senator JOHNSTON: Is that 5,000, 10,000, 200,000?

Mr Merchant: Our initial focus will be on about 5,000 top-secret clearances but we will extend it to lower level clearances, so the total number is probably going to be around 20,000 new clearances—people who had not previously been through an ASIO [Australian Security Intelligence Organisation] check.

Senator JOHNSTON: This was first raised in May 2010 via a number of sources, firstly directly with superiors of the contracted employees, who were all aware—were on television and what have you—but also with four parliamentarians. Are you aware of the issues being raised in 2010 with four parliamentarians?

Mr Merchant: I am certainly aware that a number of the former contractors raised issues about their treatment by their management and the Defence Security Authority during their time in the vetting centre in Brisbane. That seemed to be more around—

Senator JOHNSTON: Bullying and other things?

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[193] Capital *P* Politics refers to the parliamentary context. Lowercase *p* politics refers to the bureaucratic context.

[194] (Extracts from:The Senate, 19 October 2011)

Mr Merchant: Yes.

Senator JOHNSTON: ...[T]he four parliamentarians were the former member for Forde, Mr Raguse; Minister Snowdon; Minister Griffin; and Minister Emerson. They were all given firsthand information about these problems back in 2010. Are you aware of that?

Mr Merchant: I am certainly aware of the issues raised concerning their treatment and the management practices, and subsequently the Defence Security Authority engaged an independent firm to investigate those claims.

Senator JOHNSTON: Was that Trent and Brennan?

Mr Merchant: Yes.

Senator JOHNSTON: Their remit was simply to look at the management of these individuals?

Mr Merchant: That was the focus of their work. Of course, what we now understand is that one of the people who looked at those, Ms Trent, did include a reference in a report to the Defence Security Authority that referred to concerns that the individuals had about what she termed 'security practices' at the centre.

Senator JOHNSTON: The status there is that the IGIS [Inspector-General of Intelligence and Security] can only take a brief from the Prime Minister.

Mr Merchant: In regard to this matter which relates to activities and practices of the Defence Security Authority, because it does not fall within the six intelligence agencies that form part of her normal remit, yes, it required a referral from the Prime Minister. The minister requested the Prime Minister to refer this matter to the Inspector-General of Intelligence and Security. That was subsequently done and therefore the IGIS started her inquiry just about the time, I think, we were last here at estimates.

Senator JOHNSTON: Which was early June.

Senator JOHNSTON: Julie Trent's report did advert to, way back then, these practices and these problems. On 21 September, the minister said, 'Allegations about poor security processes were first raised in passing in the course of an investigation into harassment and bullying.' Is that entirely correct?

Mr Merchant: As I understood it at the time, the reference to the fact that this was raised in an indirect, passing way in the report we received from Ms Trent.

Senator JOHNSTON: But three ministers were told of these practices.

Mr Merchant: My understanding was that the practices were around the way people were treated. The reference in the minister's media release was not meant to imply that

the individuals had raised these concerns about the inappropriate practices with vetting in passing with Ms Trent.

Senator JOHNSTON: They raised them directly.

Mr Merchant: Her reference in the report though was only a small part of the text of that report. It did not appear in the recommendations. I readily concede, and the minister has said this, that it was unfortunate and it was not right that we did not follow through appropriately on that reference in Ms Trent's report.

Senator JOHNSTON: Not only did you not follow through; three ministers did not follow through on matters that now require us to redo 20,000-plus vets—of security that is of significant importance.

Mr Merchant: ...The first time it came to my attention that inappropriate practices were being alleged in the vetting process was actually on *Lateline* [a current affairs television program] on 16 May this year, and that of course initiated all the subsequent action. It is unfortunate because if these concerns were raised earlier they certainly were overshadowed by the concerns about alleged bullying and harassment practices.

Senator JOHNSTON: You can see my problem: it is good enough for the producer of a television program to elicit the matters, but when they are directly taken to three ministers of this government and everybody sits on their hands and does nothing, and here we are today with a massive administrative issue, one has to ask why it has to take a television program to get something done or to get attention onto these sorts of matters. Action has only come about because of the television program.

Mr Merchant: I am not aware that they were raised in such explicit terms to ministers. It is not my recollection. As I said, the focus seemed to be on the bullying and harassment issue, and that is where our attention was originally concentrated.

Mr D Lewis: Senator, to suggest that people sat on their hands is your characterisation. I would not characterise it like that. The emphasis was clearly on the bullying and the behavioural issue. The matter of the process was raised. It was raised as an adjunct point, if you like, in the report that you spoke of. We cannot comment on what ministers were or were not told. I have no idea. I am sure Mr Merchant has no idea either. It was unfortunate, we accept that, and as soon as the matter came to what I have described as substantive attention then action was taken to rectify it.

Senator RONALDSON: I am told on 23 June 2010 that a letter to the then minister, Mr Griffin, specifically made that minister aware of these security issues, together with the bullying, but specifically of these security issues. I am told that Ms Trent's report averted to these security issues in 2010. I am told that on 7 July a letter from Mr Griffin to Mr Raguse, the then member for Forde, indicated that he was aware of the matter. A

letter from Mr Snowdon on 26 October indicated that he was aware of the matter. It strikes me that these ministers are aware of the matter and here we are today with this problem. It has been sitting around waiting on a television program.

Mr Merchant: In my recollection, the references were about the awareness of the allegations of inappropriate management practices at the vetting centre. Certainly the specific details about the allegations of inappropriate process practices within the vetting only became apparent to us, and to me, when the contractors appeared on the *Lateline* program.

Even when you look at some of the wording in Ms Trent's report, there were words about management practices but all of the focus was on the bullying and harassment rather than on the process issues associated with the vetting issues. Certainly, Ms Trent's report did include a reference to the fact that, apart from the bullying and harassment allegations, the contractors raised issues of concern relating to security practices at the vetting centre. 'Security vetting practices' was not even in the report; it was ‘security practices’ at the centre.

She recommended that, given the seriousness of that issue, it be followed up by DSA, the Defence Security Authority, and also she said she would provide supplementary information. We did not receive that supplementary information but, equally, we did not follow that up. We admit that that was an oversight and we very much regret it, because otherwise we would have got onto that issue earlier and, indeed it is my sincere wish that we would have got onto it much earlier so that we did not have to have the issue aired on *Lateline* before we picked it up and then started to look at it. Of course, that is what we have done since.

Senator RONALDSON: The issue that concerns me is not necessarily DSA's conduct because we have ventilated that. We have been down that path and we have seen that errors happen and such is life, sort of thing. What I am concerned about is that I am told that as early as March 2010 these members of parliament, including a senior cabinet minister, Mr Emerson, was told of these specific issues. You are not aware of that and, if you are not aware of that, you cannot probably comment.

Senator JOHNSTON: Just to clarify and finalise this line of questioning: you are not aware of the three ministers being advised, as early as mid-2010, of the security vetting and security practices going on?

Mr Merchant: I am not aware of anybody in the formal correspondence saying that there was a problem with the process of data entry in the security vetting process.

Senator JOHNSTON: The workarounds.

Mr Merchant: The workarounds, yes. There may have been references to inappropriate practices, but, as I said, I think at the time our interpretation of all of that was that it was about the bullying and harassment.

37.2 Finding the essence of a problem[195]

STEVE CANNANE, PRESENTER: 20,000 Defence security clearances will have to be re-checked, including 5,000 employees vetted at top secret level.
The revelation emerged at Senate estimates hearings in Canberra today.
Earlier this year, three whistleblowers[196] told Lateline that information in thousands of security checks on Australian military and civilian personnel had been fabricated to speed up the clearance process.

Some of the false Defence clearances were eventually entered into ASIO's database.
The shadow Defence minister David Johnston told the Senate hearings that three Labor ministers were told of the problems with security vetting last year, but failed to take action.

John Stewart reports:

JOHN STEWART, REPORTER: In May, three former Defence workers told Lateline that false information had been included in thousands of security checks to speed up the vetting process. They said the information was made up to fill in the gaps and ASIO's security data base had been seriously compromised.

MONICA BENNETT-RYAN, FORMER DEFENCE SECURITY AUTHORITY STAFF (May 16): One of them didn't have a birth certificate. And so, it was a case of, "These things, these problems exist, and what do you want me to do about it?" And I was told these words: "Be creative".

JOHN STEWART: The clearances included background checks on security guards working at military bases, staff working at Australian embassies and senior public servants working with sensitive information.

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[195] (ABC TV Lateline, 2011, October 19)
[196] A person, usually an employee or member of an organisation, who alerts the public to some scandalous practice or evidence of corruption. (Butler, 2009)

Today the deputy secretary for Intelligence and Security, Stephen Merchant, told a Senate estimates hearing how many clearances would now have to be rechecked.

STEPHEN MERCHANT, DEPUTY SECRETARY FOR INTELLIGENCE AND SECURITY: We're looking at a validation exercise that will extend over thousands of applications.

QUESTIONER: Is that 5,000, 10,000, 200,000?

STEPHEN MERCHANT: Our initial focus will be on about 5,000 top-secret clearances, but we will extend that to also lower level clearances. So the total number is probably going to be more around the 20,000 clearances.

JOHN STEWART: The whistleblowers were interviewed by a management consultant who prepared a report for the Defence Department in 2010.

Defence officials today admitted the report contained a warning about compromised security vetting, but they'd failed to act until three whistleblowers spoke out on the Lateline program a year later.

STEPHEN MERCHANT: I readily concede, and the Minister has said this, that it was unfortunate, that - and it was not right that we did not follow through appropriately on that reference. And it indeed is my sincere wish that we would have got onto it much earlier so that we didn't have to have the issue aired on Lateline before we picked it up and then started to look at it.

JOHN STEWART: The shadow Defence minister David Johnston told the Senate hearing that Defence security staff had raised their concerns with Labor minister's, but they'd failed to pass on the information to the Defence Department.

DAVID JOHNSTON, OPPOSITION DEFENCE SPOKESMAN: Three ministers were advised of this in 2010 and one of them was a Cabinet minister. It didn't surface until almost a year later.

JOHN STEWART: However, Defence officials say that most of the concerns being raised by Defence staff were about bullying and harassment within the Defence Security Authority and not about security vetting.

DUNCAN LEWIS, DEPARTMENT OF DEFENCE: I think to suggest that people sat on their hands is - that's your characterisation. I wouldn't characterise it like that. I mean, I think the emphasis was clearly on the bullying and behavioural issue. The matter of the process was raised. It was raised as an adjunct point, if you like, in the report that you speak of. We can't comment of what ministers were or were not told. I have no idea.

JOHN STEWART: A spokesman for the Defence Minister's office says that Senator Johnston's claims are baseless and the Government has taken the matter very seriously since the allegations were first raised in May this year.

The spokesman said an initial assessment of the Defence Security Authority has already been conducted and the inspector general of Intelligence and Security is currently investigating the vetting operations.

John Stewart, Lateline.

37.3 Dealing with an annoyance[197]

FRAN KELLY: And Minister, we've heard this morning the Defence Department is conducting a massive overhaul of top security clearances because it's been revealed up to 20,000 security checks could have been compromised, basically to speed up vetting processes. And the Opposition says this could jeopardise our national security.

STEPHEN SMITH: Well this is a matter that's been on the public record since May. Some so-called whistle-blowers made some suggestions on the *Lateline* program, *ABC Lateline* in May. I did a couple of things. I immediately got the Inspector-General of Defence to make some initial inquiries and then, in May also, recommended to the Prime Minister that we ask the Inspector-General of Intelligence and security to do an investigation and report.

It's quite clear that there were very serious management oversights and difficulties. The inspector-general will deliver a report to the Prime Minister we expect in the very near future. But already I've reported on a number of occasions or made public on a number

[197] (Extracts from: ABC Radio National, 2011, October 20)

of occasions that we've taken a range of steps to address these procedural difficulties. We are going through the painstaking process of making sure that there've been no adverse outcomes. What I mean by that is that no-one got a security clearance who shouldn't have got one.

FRAN KELLY: Okay.

STEPHEN SMITH: There was a very low risk of that. But we're leaving nothing to chance. When I get the Inspector-General's report, there's a very distinct possibility or probability that I would make that public. It's quite clear there have been serious management oversights. But as soon as it came to public attention, we acted.

And I'm expecting that the Inspector-General of Intelligence and Security will give us a report which will make clear the management changes that we need to put into place. But we've already adopted some of the changes that we've already seen as a result of our own analysis and a result of some of the preliminary work that she's done.

FRAN KELLY: Stephen Smith, thank you very much for joining us.

STEPHEN SMITH: Thanks, Fran. Thanks a lot.

37.4 PERSONAL ACCOUNTABILITY OR COLLECTIVE ACCOUNTABILITY?[198]

TONY JONES, PRESENTER: Joining us from our Canberra bureau is the Defence Minister, Stephen Smith. Thanks for being there.

STEPHEN SMITH, DEFENCE MINISTER: Pleasure, Tony.

TONY JONES: 20,000 security clearances being compromised by astonishing incompetence or worse, but the inquiry concludes that no-one's to blame. How can that be?

STEPHEN SMITH: Well I'm not sure that's right. It's, I think a rigorous, some might say scathing assessment by the Inspector General of Intelligence and Security.

TONY JONES: So who's to blame?

STEPHEN SMITH: Well, Defence generally, firstly. Secondly, but the Inspector General in her report draws attention to a lack of oversight by responsible officers. She

[198] (Extracts from: ABC TV Lateline, 2012, February 02)

has some, I think, very prescient remarks to make about personal institutional accountability.

TONY JONES: *Yes, but no individual supervisor, manager or anyone up the chain is actually taking any blame for this apparently. I mean, perhaps people secretly have been moved sideways or something like that, but no-one's actually taking the blame for what appears to be a totally corrupt and immoral system*. (Emphasis added)

STEPHEN SMITH: What occurred here at the very beginning of a process, and I'm not defending it, it was wrong, it was maladministration. So I'm not defending any of the practices and nor should Defence and the new secretary of the Department is not doing that.

TONY JONES: Yes, it is an extraordinary level of assess - or reassessment that you've got to go through, and yet as I said at the beginning, no-one appears to be taking any blame for this. And this is strange because the inquiry found the allegations of the Lateline whistleblowers were true. Now one of them says she was told when critical information was unavailable, that is addresses, employment records, even birth certificates that she should, "Be creative." Now the question is: who was telling her to be creative? Who was telling these workers to fabricate information, and what's happened to them?

STEPHEN SMITH: Well, Tony, I'm not going to go through the names or the position of individual Commonwealth officers or public servants, but if you read the materials that I have made public today, not just the Inspector General's report, not just the letter from the Secretary of the Department of Defence to me - if you read those two reports you can see in the Inspector General's report named officers of whom she is critical, you can see in the letter of advice to me from the Secretary of the Department of Defence today giving me an update on implementation that personnel changes at executive level in this area have occurred. Now I'm not going to name officers, but as I said earlier, we recently, for example, adopted the recommendations of the Black Review into personal institutional accountability.

What the Inspector General has to say about personal and institutional accountability in her report is very prescient. *She says that senior officers not only have to report up to their senior officers, they have to look down and make sure that the advice they are receiving from further down the chain is verifiable and is based on firm and sound evidence and advice*. (Emphasis added)

And in this instance that clearly did not occur, which is why when the contractors made the public statements that they have, my reaction was essentially: where there's smoke there's fire, which is why in less than a month after the matter came to attention on your

show I had both the Inspector General of Defence and more importantly the Inspector General of Intelligence and Security on the case.

TONY JONES: OK. Will the Defence apologise to these whistleblowers who evidently were totally correct in bringing this to the public?

STEPHEN SMITH: Well they already have. *The Secretary of Defence wrote to them today. My understanding is he arranged for those apology letters to be delivered from the moment I got to my feet on the floor of the House of Representatives this evening*. (Emphasis added) So, they are either delivered or in the post. The Inspector General of Intelligence and Security's finding and recommendation that Defence should apologise was in my view absolutely correct and that's been done.

37.5 Dr Vivienne Thom -The Inspector-General of Intelligence and Security[199]

...[A]lthough it may be appropriate for senior executive officers to rely on the advice of subordinate officers to some extent, this does not diminish the individual personal responsibility or accountability of individual senior executive officers. *In particular, senior executive officers cannot rely only on information they receive – they also need to actively assure themselves in whatever way they can that advice is complete and accurate and that they understand its significance*. (Emphasis added)

Recommendation 1: The Department of Defence should write to the three Lateline complainants and acknowledge that their allegations in respect of data-entry were true.

On 29 May 2011 the Prime Minister formally requested that I conduct an inquiry into 'allegations of inappropriate vetting practices in the Defence Security Authority and related matters'.

The allegations raised by the original complainants shaped the initial stages of my inquiry. I found that the data-entry practices alleged by the Lateline complainants did occur although there was no evidence of any attempt to subvert or mislead the vetting process. Given this finding, and the fact the Defence had failed to heed earlier warning signs, I think that it is important that Defence should now acknowledge to the Lateline complainants that there was substance to the allegations relating to data-entry.

My reason for naming Mr Roberts and Mr Sinfield was that their identities were, in any event, readily ascertainable from a number of public documents. I have not concluded

[199] (Extracts from: Thom, 2011, December)

that they were solely responsible for the management shortcomings but note, however, that as senior executive officers they hold particular positions of leadership that carry significant responsibilities in terms of accountability.

When assessing the contributing factors I was concerned to reflect the perceptions of staff because that is what drives their behaviours. I have not tried to ascertain which particular middle manager or supervisor was responsible for particular advice to staff or to identify who was to ‘blame’ for bad advice. If middle-management at the NCC (National Coordination Centre) applied pressure for output that seemed to be largely as a result of factors over which they had little control.

Both Mr Roberts and Mr Sinfield have commented that these events took place in a particularly difficult environment and that the NCC represented but part of a broad range of responsibilities and challenges. I recognise the genuine efforts made by both to manage multiple complex projects and to ensure that changes were implemented and that new systems could support the processes and achieve efficiencies. They were not supported well by the IT change program. I also note that both acted in good faith at all times.

While I have found that a significant contributing factor to these problems was lack of management oversight I have decided that there is no evidence of sufficient weight that any person was guilty of a breach of duty or of misconduct to justify referral to the Secretary of the Department of Defence.

38

AN OFFICIAL RESTATEMENT OF THE WOES AFFLICTING DEFENCE EQUIPMENT TENDERING

Selected extracts from:

Procurement procedures for Defence capital projects (Preliminary report 2011).[200]

The committee believes that the government and Defence *must look beyond Defence's procurement processes* to the root causes of its capability development woes. (p.xiii) (Emphasis added)

[E]vidence before the committee suggested that the convoluted process, lack of clarity and lack of compliance, all point to failures of the governance structure within the broader Defence Organisation. (p.xiii)

[E]ntrenched structural impediments to efficient and effective leadership within Defence could be at the source of Defence's procurement problems. (p.xiv)

The committee is concerned that when implementing the ongoing and seemingly endless reform agenda, Defence's focus has produced layers of additional administrative process without fixing deeper problems. It also means that Defence is caught in a reform roundabout where before one set of reforms can be implemented, another one takes over. (p.29)

This most recent review adds to the mounting and substantial body of evidence that the acquisition and sustainment of Defence's major capital equipment is beset by long standing problems that persist despite numerous reviews and reform programs. (p.94)

In 2003, Kinnaird[201] argued that further fundamental reform was needed to ensure that the ADF receives the capabilities that it expects according to the schedule required by the government. Five years later, Mortimer[202] concluded that reform in

[200] (Australian Parliament Senate Foreign Affairs Defence and Trade References Committee, December 2011)
[201] (Kinnaird, et al., 2003)
[202] (Mortimer, 2008)

acquisition and sustainment should continue in order to extract maximum benefit across the capability systems life cycle. In 2009, Pappas[203] found the need for 'fundamental reform'. Recently, Rizzo[204] and Black[205] added to the reform program. Indeed Rizzo found, among other things, that Navy had 'poor whole-of-life asset management, organisational complexity and blurred accountabilities, inadequate risk management, poor compliance and assurance, and a "hollowed-out" Navy engineering function.' Black pointed to poor outcomes in Defence including delivery failures for capability projects and poor or inappropriate decision-making. (p.25)

Kinnaird found that poor project definition, analysis and planning before tenders were sought from industry contributed to failures including cost over-runs, schedule delays, and reduced capability to deliver platforms and systems. (p.40)

Kinnaird recommended the expenditure of up to 15 per cent of project funds prior to approval to cover independent investigations and analysis and industry studies. Mortimer also underlined this crucial analysis. (p.41)

Kinnaird, Mortimer and Pappas recommended that a military-off-the-shelf (MOTS_ alternative be part of any set of options put to government. This can provide a benchmark against which other options can be compared. (p.50)

Kinnaird found that 25 per cent of over 2000 DMO staff were from the military. Further, he noted that the short military posting cycle often combined with no clear requirement for minimum project management skills, was not 'consistent with the development of the professional project management culture and the commercial focus essential for enhancing the DMO's performance. Kinnaird found that this situation was exacerbated if military staff regarded themselves as 'remaining within their respective Service reporting chain rather than being accountable to the head of the DMO'. While acknowledging that Service loyalty was an integral part of military culture, he argued that it should not be confused with the reporting arrangements of a commercially focused organisation. Notwithstanding this recommendation, Kinnaird also recommended that the Service Chiefs, as Capability Managers, retain the right to place military staff in the DMO to monitor acquisition and logistics placements on their behalf. (p.73)

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[203] (Pappas & McKinsey & Company, 3 April 2009)
[204] (Rizzo, July 2011)
[205] (Black, 2011)

Mortimer noted that core personnel in CDG were military officers on short-term postings with an average of 18 months in an area where the work was complex. (p.60)

Mortimer noted that just as Defence and DMO find it hard to formulate 'realistic expectations of project progress, so too does industry'. (p.75)

Pappas identified a number of strategic reasons as to why Australia should maintain a local Defence industry including national sovereignty, the ability to develop valuable knowledge, guaranteed supply, and the ability to maintain and upgrade in Australia. Pappas recommended therefore that the 'cost of local sourcing in comparison to other options must be determined prior to government approval, and presented to Government with the option set. Furthermore, Pappas recommended that local sourcing should be considered 'when it is a strategic priority or where it is competitive with other options, and if local sourcing is chosen outside this criteria, that the rationale be clearly articulated'. (p.87)

The capability process is choked by unsurmountable layers of administration and bureaucracy. In this regard, the Pappas Report held the view that there were too many documents whilst the Black Review argued that there were too many committees, the combined result of which is a 'process labyrinth'. (p.89)

The Rizzo Report highlighted the long-term costs of COTS/MOTS acquisition whereby Defence loses engineering capacity which then carries costs in terms of project and capability failure. (p.53)

Mr Coles' observation that the review was unable 'to identify anyone who was charged with taking full responsibility clearly and decisively for all aspects of the sustainment of the Collins Class Program'. His review gained the impression that there were 'highly-charged, difficult and often hostile relationships' between the Department of Finance and Deregulation, DMO, the Navy and Industry.[206] (pp.93-94)

It only takes a cursory glance at a Defence procurement chart to see the convoluted and incomprehensible web of documents, committees and milestones that underpin the capability development and procurement process. (p.5)

[There is a] reluctance on the part of the defence industry to criticise publicly Defence procurement processes given the influence Defence is able to exert over industry as a monopsony. (p.6)

[206] (Coles, 4 November 2011)

The procurement of capability is complex for reasons including the fact that it is the ‘combined effect of multiple inputs’. Rather than being simply the sum of these inputs, capability is the synergy that arises from the combination and application of these inputs and this determines the level of capability in any particular context. (p.9)

Defence projects are inherently complex for reasons...including the level of new or emerging technology employed and to their scale. Complexity is a key factor in determining risk and the risk mitigation measures to be applied. (p.10)

Air Marshal Harvey: “In seeking to achieve the best capability outcomes for the war-fighter, the best commercial outcome for government and industry and the best value for money result for the taxpayer, we cannot avoid risk and, even with management strategies in place, we are unlikely to be able to retire all schedule risk from every project.” (p.11)

Miller Costello & Company: “The government acts solely and unilaterally as both regulator and customer.” (p.11)

In relation to reporting, questions of independence arise when ‘bad news’ from technically competent people at the coal face is rolled up in sequential summaries to be a ‘green light’ by the time the report reaches the Chief of the Defence Force (CDF) or Minister. (p.14)

Air Commodore (Retired) Bushell: “[C]ongenital problems in Defence included an inability to manage complex projects [stemming] from an entrenched, process-driven, contract centric approach to project management, rather than employing sound Project, Systems and Equipment Engineering and management systems and procedures developed especially for controlling technology projects.” (p.26)

Air Commodore (Retired) Bushell: “[T]he problems being encountered have been institutionalised firstly by the fundamental models used in management and governance of the acquisition bureaucracy, and secondly by the practice of replacing technologically skilled engineering professionals with technologically unskilled generalists. That is, the imposition of administrative process over project and systems engineering management.” (p.27)

The ANAO [Australian National Audit Office] also recognised that managing projects in an ‘environment of successive, significant organisational and management reforms can add to the complexity of the task’. (p.28)

Witnesses highlighted that Defence drives much of the White Paper development which it then in turn quotes as the strategic guidance that gives it leave to develop and propose a capability case to government. (p.35)

There is now a disconnect emerging between government expectations of Defence stemming from NSC [National Security Committee of Cabinet] guidance as to the desired ability to achieve ‘an operational effect’ and the capability Defence actually operates. That is, capability in the procurement cycle, capability held captive in an unfunded DCP [Defence Capability Plan], and capability cases drawn from the White Paper that have yet achieved first or second pass approval from government. (p.36)

Identification of capability leads to the development of the DCP which outlines a 10-year program for new major capital equipment investment. In this regard, a revised DCP completes a five-yearly Force Structure Review and Defence White Paper package. (p.39)

CDG makes recommendations to government on the appropriate capability that would meet government priorities with agreed workforce and funding guidance. (p.43)

DMO is responsible for assisting CDG to develop the CDD [Capability Definition Document] suite which defines the capability system baseline, provides cost and schedule estimates, and incorporates the results of risk reduction studies. It provides advice on industry’s capacity to support new capabilities being either acquired or supported in-service. (p.45)

The majority of submitters to the inquiry held the view that whilst early engagement with industry is fundamental, there are few opportunities for two-way exchange of information and knowledge with industry in the needs stage of the capability development process. (p.47)

Request for Information (RFI) is used to obtain estimated cost, capability and schedule information on a new project. (p.50)

The inclusion of a MOTS option will often translate into a hypothetical off-the-shelf option or local construction of an off-the-shelf design. MOTS should only be pursued when the Australian defence industry is unable to meet the capability requirement. (p.53)

Defence recently reinvigorated its environmental working groups to facilitate early informal engagement in order to establish what is available on the market and gather ideas from industry. (p.55)

The Defence Capability Assessment Branch was established in 2004 within the Department of Finance and Deregulation (Finance) Budget group. The branch is staffed by specialist cost analysts responsible for evaluating the costs and financial risks associated with Defence capability procurement proposals. (p.59)

High turnover of staff within CDG and DMO was also raised in evidence as a problem in relation to the consequent difficulties for large primes and SMEs. (p.60)

The committee recognises a serious disconnect between Defence and industry's view of the approval rate, which is affecting industry's ability to plan and up-skill as well as the working relationship between Defence and industry. (p.64)

DMO works with industry to turn government-endorsed requirements into functional military equipment. (p.65)

Some submitters argued that the consequent lack of common understanding of procurement policy across the DMO was reflected in its 'poor implementation and apparent non compliance' with the various manuals, schedules and processes. For industry, this lack of application can translate into inconsistent messages and different expectations. (p.75)

Defence industry stakeholders held that the relationship between DMO and industry was often not harmonious or productive and this leads to project failures.

[T]he question was raised as to why the Industry Division sits within DMO, when it 'belongs at the highest strategic level underneath the secretary and the CDF'. (p.77)

Whilst recognising the hollowing out of engineering skills in Navy, the committee acknowledges that Air Force has been able to retain, to a greater extent, its engineering and technical expertise and focus. (p.85)

There is a diffusion of responsibility, decision-making and accountability. As a result, decisions belong to everyone and they belong to no-one. (p.89)

The environment is process-driven. These matters also go to the culture of Defence and its respective agencies.

The committee will consider whether there needs to be a change in attitude and approach including in relation to Defence's perceptions of, and relationship with, industry. (p.90)

39

THE HIGH ART OF DIPLOMACY: THE MEDIUM *IS* THE MESSAGE

The USA and Australia exchange messages

COMMONWEALTH OF AUSTRALIA

House of Representatives

Hansard
[research digest only]

THURSDAY, 17 NOVEMBER 2011[207]

PROOF

The SPEAKER (Mr Harry Jenkins) and the **President of the Senate (Senator the Hon. John Hogg)** were announced by the Serjeant-at-Arms and entered the chamber.

The SPEAKER took the chair at 10:25, made an acknowledgement of country and read prayers.

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[207] (House of Representatives, 17 November 2011)

ADDRESS BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

The SPEAKER: On behalf of the House, I welcome as guests the President of the Senate and honourable senators to this sitting of the House of Representatives to hear an address by the Hon. Barack Obama, President of the United States of America.

The Hon. Barack Obama having been announced and escorted into the chamber—

The SPEAKER: Mr President, I welcome you to the House of Representatives chamber. Your address today is a significant occasion in the history of the House. I welcome guests who are with us in support of the President's visit and other guests who are present in the galleries. On behalf of the parliament, I extend a very warm welcome to our visitors.

The SPEAKER: Mr President, it gives me great pleasure to invite you to address the House.

The HONOURABLE BARACK OBAMA (10:43): Prime Minister Gillard, Leader Abbott, thank you both for your very warm welcome. Mr Speaker, Mr President, members of the House and Senate, ladies and gentlemen, I thank you for the honour of standing in this great chamber to reaffirm the bonds between the United States and the Commonwealth of Australia, two of the world's oldest democracies and two of the world's oldest friends.

So here is what this region must know. As we end today's wars, I have directed my national security team to make our presence and mission in the Asia-Pacific a top priority.

Our enduring interests in the region demand our enduring presence in the region. The United States is a Pacific power and we are here to stay.

We see our new posture here in Australia. The initiatives that the Prime Minister and I announced yesterday will bring our two militaries even closer together.

Six years into our landmark trade agreement, commerce between us has soared. Our workers are creating new partnerships and new products, like the advanced aircraft technologies we build together in Victoria.

This is the story of the alliance we celebrate today. This is the essence of America's leadership. It is the essence of our partnership.

As we grow our economies, we will also remember the link between growth and good governance, the rule of law, transparent institutions and the equal administration of justice, because history shows that, over the long run, democracy and economic growth go hand in hand, and prosperity without freedom is just another form of poverty. This brings me to the final area where we are leading: our support for the fundamental rights of every human being. Every nation will chart its own course, yet it is also true that certain rights are universal—among them, freedom of speech, freedom of the press, freedom of assembly, freedom of religion and the freedom of citizens to choose their own leaders. These are not American rights, Australian rights or Western rights; these are human rights. They stir in every soul, as we have seen in the democracies that have succeeded here in Asia. Other models have been tried and they have failed—fascism and communism, rule by one man and rule by a committee. They failed for the same simple reason: they ignored the ultimate source of power and legitimacy—the will of the people.

That is what we stand for; that is who we are. That is the future we will pursue in partnership with allies and friends and with every element of American power.

This is the essence of America's leadership. It is the essence of our partnership.

Thank you very much.

Members and senators rising and applauding—

The SPEAKER (11:11): Mr President, on behalf of the House and the parliament, I thank you for your address and the depth of the message that it contained.

I wish you a successful and enjoyable remainder of your stay in Australia and success in your travels in the region. Selamat sukses! I hope that you have a safe return home to your 'cheese and kisses'—that is, the missus, your wife—and to the 'billy lids', the kids, your children [an uncommon use of rhyming slang from a past Australian era].

As the President has ensured that peace and tranquillity has descended upon the House, I feel I can say that the House stands adjourned until Monday, 21 November 2011 at 10 am.[208]

[208] The Speaker resigned from his position as Speaker on 24 November 2011.

House adjourned at 11:15

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39.1 US MILITARY BUILD-UP RUFFLES REGIONAL FEATHERS

Ashley Hall [ABC Radio – The World Today] reported this story on Thursday, November 17, 2011[209]

ELEANOR HALL: Well while it is perhaps predictable that China's government would react negatively to the announced deployment of US Marines to Darwin, other countries in the region are also nervous about the move.

Indonesia's foreign minister is warning that the military build-up could provoke what he called a "vicious cycle of tensions and mistrust".

Ashley Hall reports on the reaction in the region.

ASHLEY HALL: If you believe the hype, the announced marine deployment is a groundbreaking military agreement that cements the enduring relationship between the two countries, and announces the return of US engagement in the Asia Pacific.

KIM BEAZLEY [Australian Ambassador to the United States of America, and former Defence Minister in the Hawke Labor Government]: I think it is a symbol of what is a very, very much a change in US foreign policy.

ASHLEY HALL: Kim Beazley is the Australian ambassador to Washington.

KIM BEAZLEY: The US, which has global interests, but nevertheless among those global interests, priorities. They've shifted their priorities to the Asia-Pacific zone and we are a more and more important part of the Asia-Pacific zone so this consolidates, helps consolidate, an American presence within it.

[209] (Hall, 2011, November 17)

ASHLEY HALL: Mr Beazley has told Radio National that since 50 per cent of the world's trade passes through South-East Asia, the US has a role to play in keeping it secure.

KIM BEAZLEY: Nothing is more important than the operation of normal international law in that zone. That includes things like free access to the global commons, which is another way of talking about free lines of communication and the settlement of disputes.

And virtually all the countries in the archipelago and adjacent to it have got maritime territorial boundary claims against each other. The resolution of that peacefully and in accordance with what is the actual rights of an individual state as opposed to the actual power of an individual state - the only power that really globally that really sits in a disinterested way to support the legal outcome if you like, or a proper legal outcome is the US.

ASHLEY HALL: Mr Beazley says the deployment deal should have come as no surprise to China because it's well aware of the close relationship the US and Australia enjoy. Nonetheless, Beijing's response has been at best suspicious.

The former secretary of the Department of Defence, Paul Barratt, argues the deployment won't fracture Australia's relationship with China, but the tension could have been avoided with a more cohesive policy.

PAUL BARRATT: What we're hearing is really a proposal for upgraded training arrangements with the US marines which makes a lot of sense. It's difficult to find wide area training spaces these days but the Government is trying to present it as a major transformation in the defence relationship, or progression of the defence relationship with the United States and that has to set people in the region wondering why are we doing this at this time and why are we doing it at all.

ASHLEY HALL: So why is the Government announcing it in this way then?

PAUL BARRATT: Well I think it's just the obsession with having major announcables [public political announcements designed to enhance political capital] and so this one's

it and it takes the president of the United States, an incredibly time-poor person, to Darwin to paint a backdrop for this.[210]

So it's been presented as something very big and that's the problem that it's creating in the region. It's not something that's nearly as big as is being presented.

ASHLEY HALL: Indeed it's presented as a way of the US re-engaging with the Asia Pacific. Is it that?

PAUL BARRATT: Well 2,500 marines rotating through Darwin for six months a year - hardly.

ASHLEY HALL: Paul Barratt says it's no coincidence Barack Obama's made the announcement as he moves towards an election in 18 months.

Dr Rod Lyon agrees. He's the director of the strategy and international program with the Australian Strategic Policy Institute [partly funded by the Australian Department of Defence].

ROD LYON: We here in Australia think about what it means for us and whether China will disagree but I think there are other audiences beyond that. I think there are audiences in South-East Asia, I think there are audiences in other US allies in Asia and I suspect there are even US domestic audiences that Obama is trying to sort of play to.

ASHLEY HALL: Dr Lyon says strategic alliances in the region are changing.

ROD LYON: All countries in the region know we are entering a transformational, strategic period. All countries are hedging a little bit about the way things might unfold during that period of transformation and all are watching for new signs of different patterns of security cooperation or the rise of new multilateral organisations that suggest that other people are getting a bigger share of the influence pie.

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[210] President Obama spent 27 hours in Australia.

ASHLEY HALL: And a part of that involves China's claim to the South China Sea, and the natural resources it contains. But Indonesia, Taiwan, Malaysia, the Philippines, Vietnam, Cambodia, Singapore, Brunei and Thailand each have their own territorial claims over parts of it. And it's that tension that's causing Asian countries to reassess their alliances.

ROD LYON: We have seen some South-East Asian countries go to Washington saying 'we'd like you to be a little more visible around South-East Asia.' But none of those countries want the sort of solid commitments that might pull them into conflicts they don't want to be involved in.

ASHLEY HALL: But Dr Rod Lyon says he doesn't expect to see those border disputes over the South China Sea lead to war, anytime soon.

ELEANOR HALL: Ashley Hall reporting.

…oOo…

39.2 Australian Broadcasting Corporation - Lateline[211]

Reporter: Tony Jones

Former prime minister Paul Keating says China must be welcomed into the world as a shared partner and a vital economic power, not a military or political challenge to be contained.

TONY JONES, PRESENTER: To tonight's guest. In the studio is former prime minister Paul Keating to discuss Australia's renewal of its alliance with America and Australia's long-term future in Asia, themes woven through his new book After Words.

Thanks for being here.

PAUL KEATING, FORMER PRIME MINISTER: Thank you Tony.

[211] (Jones, 2011, November 23)

TONY JONES: Now, in 2004, you made a speech in Beijing in which you said you believed China would become an economic competitor of the United States, but not a strategic competitor, and its military growth was unlikely to be about force projection. Is that still the case?

PAUL KEATING: That's still my view, yes. I think the rise of China is one of the great events of all economic and human history and I think this will be overwhelmingly a positive thing for the region and the world.

TONY JONES: Would you concede that the Pentagon and the White House disagree with you on this issue about whether they're a strategic competitor or not? They seem to certainly see China in those ways and appear to be rapidly developing policies to contain China.

PAUL KEATING: Yes, well, I think what we saw this week was the president in Australia saying that - to the American audience, really; it was a speech for the American audience, "We're getting out of the Middle East. We're renewing our interest in the Asia-Pacific and we're sticking it [a trope related to a butcher’s knife entering the neck of a beef carcass] to China."

Now, I think that was the context of the speech. Where we got wrapped up in the speech is of course in it was the announcement of a modest increase in troop movements through Australia. This would have been otherwise unexceptional had it been announced, say, after the AUSMIN meeting between Australian and US ministers in San Francisco six weeks ago, but it got wrapped up in the US kabuki show [a form of Japanese popular theatre with stylised acting, music, and dancing, in which male actors play all the dramatic roles], and in a sense we've got brought into it, perhaps verballed [an alleged fabrication of an oral confession to police] to be part of what looks like the stringing out of a containment policy.

TONY JONES: ‘Verballed’ is a pretty strong expression to use. I mean, that suggests that the president did this on purpose - pulled us in to a containment policy.

PAUL KEATING: I think the Americans are quite ruthless about this. Of course that's what they were up to. But just - look, some of the things the president said - just remember this. He predicted that the model of a country ruled by a committee would fail. He said communism and a country ruled by committee would fail.

In other words, he's saying that the Chinese model he's predicting will fail. But he's saying it in our Parliament House.

He goes on to say things like, "With every element of American power, our new focus is on this region." Well I always thought they were there. I think it's a good thing they're there. I did everything in my political life to see them there. But he says, "With our new focus on this region .... We're here to stay. ... History's on the side of the free. ... By upholding core principles, we partner with democracies."

I mean, this was a diamond-hard speech delivered by a master deliverer, you know, a very engaging person, able to deliver a message, but a rock-hard speech. And that speech was basically saying that the United States is back and you could be excused for thinking that the commentary in the week was about the old Soviet Union.

I mean, China is not the old Soviet Union. And we would make of course a huge mistake seeking to contain it.

TONY JONES: Well, first of all, was it appropriate, in your view, that that speech, the nature of it, the symbolism behind it be made in the Australian Parliament?

PAUL KEATING: This was a speech that really would have been better made in Washington or elsewhere. The fact that it was made here and wrapped around a small increase in troop movements, 2,500 through Darwin, just added the military spice to the big rhetorical speech.

Now, I mean, this gets back to the key issues, Tony; that is, you know, we fought two world wars over the status of Germany. Two. We don't want to be fighting one over the status of China.

I've always held the view that great states need strategic space. I mean, George Washington took his space from George III. Britain took it from just about everybody. Russia took all of Eastern Europe. Germany's taken it from everywhere they can, and China will want its space too.

If we try and lock this place in, you'll have the same kind of result. We would have the same kind of result we had as the Russians, the British and the French tried to lock in Wilhelmine [Kaiser Wilhelm’s] Germany in the last quarter of the 19th Century.

TONY JONES: Yeah, well that - I mean, that inevitably led to the First World War, the containment of Germany in that period. I mean, is that essentially what you're fearing: that a containment of China could lead directly to military conflict?

PAUL KEATING: The name of the game is to keep diplomacy fluid. Once you get the rigidity and the bipolarity, every little event is magnified. This is what happened. When first of all Russia and France decided to have an entente to contain Bismarck's creation. Then Britain joined them in 1904 for the triple entente.

Once that happened, the whole thing went bipolar and rigid. And little events then are massively magnified. So an archduke is murdered in Sarajevo and the whole world goes to war. Now, ...

TONY JONES: Yes, well translate that to the China case in the contemporary period.

PAUL KEATING: Yes, well I think what we need is a region in which China can emerge but not dominate. I mean, it's worth repeating. We need a region where China can emerge but not dominate. And is that region better with the United States in it? Absolutely. You know? I mean, the APEC leaders meeting which I - discussions for which I began 20 years ago next month, the first thing I did as prime minister was all about bringing the United States into Asia.

The United States being in Asia is unambiguously a good thing for the region. What we need is a concert of powers - China, the United States, Japan, India, Indonesia, Australia. This is the kind of arrangement we need.

But if we start trying to believe that we need a bipolar structure, some sort of metal-ringed fence around China to take the view that the rise of China, 20 per cent of humanity after 200 years of poverty is in some way illegitimate, that they are a commercial competitor that has to be strategically watched, we're just repeating the same mistakes that the British, the French and the Germans made and the Russians made at the end of the 19th Century.

TONY JONES: Well, there are two historical lessons relating to Germany. One is that period that led up to the First World War. The other is the period of the 1930s where Germany rearmed without opposition. Now the policy that did not do anything about that was described as appeasement.

I mean, are you at all concerned that those who do not stand against the rearming of China, at risk that it becomes an aggressive power, will be accused of being appeasers?

PAUL KEATING: Tony, look, if - within a decade from now, China will have the GDP of about the United States. A country with this national product will of course have a military of a kind, but we're seeing no evidence and have never seen evidence that apart from skirmishes in the South China Sea about bits and pieces of the oceans they believe - I mean - by the way, the Chinese have been into bad behaviour recently in all these things. That's what partly makes the issues alive.

But in the broader sense, the notion that we are going to see an expansion, a territorial expansion by China with a new naval presence or military presence, you know, is at this point speculation.

TONY JONES: Well, it is reported the Pentagon is rapidly developing a new China war plan. Only this week it announced the creation of something called the Air Sea Battle Office, which analysts say is precisely designed how to work out how to counter China's growing missile dominance, it's dominance in the region with fighter aircraft, new versions of fighter aircraft and warships.

PAUL KEATING: Well, all the more reason let's have a region which can accommodate China in the context of other nations where China cannot dominate it. This is necessary for all of us. And, all countries prudently run a defence policy. The United States does, we do - we do in concert, as it happens.

But the notion that we should regard China as the old Soviet Union and start building a military structure around it, arising not out of American foreign policy so much, but out of the Pentagon, you know, beware. Beware.

TONY JONES: Do you then fear that this is what Australia was essentially dragged into last week?

PAUL KEATING: Well here we are in our Parliament - not in the American Parliament, our Parliament. The American president gets up and says, "The Chinese model will fail. It is bound to fail." And then all the speech’s basically hard rhetoric against China. Now, ...

TONY JONES: So what's the significance of it being in the Australian Parliament? And, I mean, I think you've indicated it should not have been made in the Australian Parliament.

PAUL KEATING: Well I think the Americans pushed their luck [unusually active] in the nature of the speech in our company, particularly in the context of the announcement of the growth in the numbers running through the base. Now if that had been announced by Stephen Smith or Kevin Rudd with Hillary Clinton after the San Francisco meeting of AUSMIN, there would have been very little - 2,500 troops through Darwin, no-one would have worried much. But in this context, different. It gets massively coated [layers of meaning].

TONY JONES: Now, I know you don't want to give advice to a sitting prime minister, but it seems to me you're saying that the Prime Minister should not have allowed this to happen.

PAUL KEATING: Well, the Prime Minister can't write the speech of the United States president.

TONY JONES: It's pretty clear that she would have seen the speech before he made it.

PAUL KEATING: Well I don't know whether she did see the speech before he made it. And a lot of the things in the speech are not exceptional.

But the thing has - see, the president says, "our new focus on this region." Well, excuse me, I always thought the American 7th Fleet was still here. I mean, I thought we still had a base in Okinawa and Guam, you know. The new focus is a way of saying - the word new, the president's word is a way of saying, "We're getting ..." - to a US audience, "We're getting out of the Middle East and we're coming here."

Now, as you know, there are many members of the Republican Party in the United States who are now talking about knocking China over [defeating China]. And this speech plays sort of against that because president Obama's a much more moderate figure and the speech is much more moderate in those sort of terms, but it's still playing to that US audience.

TONY JONES: Yes, but are you saying that the Australian Government, the Foreign Minister, the Prime Minister, they were naive in allowing this to happen? Is that your argument?

PAUL KEATING: Well I would know full well what was going to be said and the context of it and I wouldn't be verballed, frankly.

TONY JONES: But you're saying they were, they were verballed.

PAUL KEATING: With our greatest trading partner and a state where a billion and a quarter people are dragging themselves out of poverty after 200 years. What is illegitimate about this? And what evidence is there that we're about to see some sort of Soviet response from the Chinese government?

TONY JONES: So is your argument that the Australian Government, the Prime Minister, the Foreign Minister, should have stood back from this, should have not allowed itself to be dragged into this aspect of American policy?

PAUL KEATING: Well, not to be part of that particular kabuki show. Not to be fingerprints all over it. And the Foreign Minister said after on the 7.30 Report, when asked, he gave a very hardline response to China, in the Chinese - of course the Chinese are worried about it. And I think, you know, frankly, it's going to be very hard for senior Australian Government ministers to appear in China any time soon.

TONY JONES: So you're saying that Australia will pay a price for allowing this to happen?

PAUL KEATING: I don't know what that price will be and I don't think the Chinese will know, but the whole notion of Australia as a middle power trying to project an independent foreign policy was hugely inhibited by what happens this week.

TONY JONES: Now, you just said that Kevin Rudd [Foreign Minister] made a hardline response. I mean, I saw his interview as well. I mean, he basically explained that Chinese officials had been told in advance about this. Where was the hardline (inaudible)?

PAUL KEATING: No. He said, "We're not going to have any national security policy dictated by any other external power." A cynic could say, "Well, except the United

States." Right? "That's a sovereign matter for Australia. We don't seek to dictate what the Chinese about their national security policy."

I mean, this can be put in much more persuasive terms, I believe, than this, you know? I mean, this idea of hard-balling them [tough, uncompromising tactics] on the basis that we unqualifiedly support the kind of things said here in the new arrangements announced, is I just don't think wise.

TONY JONES: OK. Well how's it being read generally in China as far as you know? And ...

PAUL KEATING: I can't, I can't ...

TONY JONES: ... do you know how the Foreign Minister's response to this has been read?

PAUL KEATING: Yeah. I haven't any intelligence out of China on this. The Chinese - look, the way the Chinese system works, there'll be a response that'll take a month or five or six weeks, there'll be - you know, the committee system up there will analyse every word said and then something will be said.

But the fact is much of our economic bread is buttered [relating to the means of living] in this great state in China, you know? And we do want to see - I mean, it's a fact of geographic life.

TONY JONES: But is it going to - or could it potentially hurt our trade relationship with China, this position that's been adopted in the past week? I mean, you've seen what Clive Palmer [an Australian mining entrepreneur] said today. He said the US is trying to drive a wedge between China and Australia.

PAUL KEATING: Yes. Well, I know.

TONY JONES: And they're simultaneously poking China in the face [to aim a blow at].

PAUL KEATING: Yes. Well I'm not sure what - I would doubt very much you'll see much change in the commercial arrangement between China and Australia, but nevertheless, the whole notion of a concert of power, the development of Australia as a

middle power playing the role we used to do - I mean, you look at the great bit of software [a trope relating to human relations] we developed in the 1980s and '90s with foreign policy: APEC, the APEC leaders' meeting, the ASEAN regional forum, the Chemical Weapons Convention, the Canberra Commission for the Elimination of Nuclear Weapons which I set up, the Cairns Group. All these things were the clever things done by Australia as an independent middle power.

TONY JONES: What are you saying, Mr Keating? That we've thrown away the software and we've replaced it with a club?

PAUL KEATING: Well, put it this way: we are not developing the software. It makes it very difficult to continue developing that middle power software if you are caught up in this kind of rhetoric.

TONY JONES: I've got to say this: Kevin Rudd's a former senior diplomat to China. He speaks fluent Mandarin. I mean, he also said late last year that there's a third way of dealing with China. His third way, in between, as he said, going towards conflict and kowtowing. Are you saying he's missed the third way?

PAUL KEATING: No-one - there's no benefit in kowtowing. Only a fool would be kowtowing.

But, look, let's make this simple point: anyone - the fact that anyone speaks Mandarin doesn't qualify them in understanding about Chinese power. People who understand power understand about power. It's a high art, a high art. So, I don't think any of us have a lien [entitlement] on an innate understanding of how China works and how it may be in 15 or 20 years.

Look, in 15 or 20 years this region may be as peaceful as it was in the years after the Vietnam War. We don't know, and we have to plan for all sorts of contingencies. That's the sensible thing to do. But we must try and maintain a peaceful co-existence of states.

And the idea that trade will sort of dampen everything down, you should remember that Germany was at the end of the 19th Century to the world what China is today: the great major manufacturer. This didn't stop the First World War.

TONY JONES: Let me ask you this then: I said earlier you don't presume to advise the Government, but you are speaking in a general sense about this policy being wrong, so let me ask you this: if you think ...

PAUL KEATING: No, ...

TONY JONES: Well, at least misjudge what the symbolism ...

PAUL KEATING: Well, understand: having the United States in this region is not wrong; it's positive and good. Increasing, modestly, military engagement with the Americans through an Australian base is fine. What is not fine is getting caught up in the rhetoric of what can be conceived as a nascent containment policy.

TONY JONES: Is there, then - getting back to my question, is there a way to fix the damage that you see that's been done here? What would you have to do if you wanted to step back from what you see as damaging?

PAUL KEATING: I just think keep our eye on the main chance and continue to be fair and in our commentary. And the main chance is ...

TONY JONES: But I've got to interrupt you there because you've just said that you can't see a possibility for senior ministers being welcomed in China at the moment.

PAUL KEATING: Well I said it would be - let's call them tetchy [irritating] meetings. The first ones, they'll be welcomed. The Chinese will be clever enough to be polite.[212] But they'll be tetchy meetings.

TONY JONES: I've just got to ask you on another issue, finally, the issue of uranium sales to India. It's going to be hotly debated at the Labor Party conference in a week or so. Where do you stand on that?

PAUL KEATING: I think the Prime Minister's right about it. I think that the kind of commitments the United States now has from India as a nuclear weapons state and as a major developer of civil power, civil nuclear power, while not the general commitments under the NPT [Nuclear Proliferation Treaty] , are sufficient, I should think, for us to be able to export uranium for these sorts of purposes.

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[212] (See cooperative relations between China and Australia: Australian Embassy - China, 2011, November 29)

TONY JONES: I've just got to ask you quickly, what do you think about the way this issue's been handled then? Because the - it's very strange the way the Foreign Minister was kept out of discussions about this, was not informed that this was gonna [going to] be put on the agenda.

PAUL KEATING: Well, I don't know what the answer - as far as, Kevin Rudd supports the policy. I don't know what the reason for that is. But I think the Government's got very - after the American story got leaked to The Sydney Morning Herald, I think the Government has got very, very gun shy [timid] about broad conversations.

TONY JONES: Or specific conversations.

PAUL KEATING: Or specific conversations.

TONY JONES: With specific ministers.

PAUL KEATING: Perhaps.

TONY JONES: Paul Keating, very good to - once again to get your perspective. We thank you very much for joining us on Lateline tonight.

PAUL KEATING: Thank you, Tony.

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POSTSCRIPT:

IAN MCPHEE, AUSTRALIA'S AUDITOR-GENERAL[213]

In April 2012, the Australian Auditor-General, Ian McPhee, published his findings into political interference with a government tender. The service details are not important and compensation has been paid to the aggrieved party. However, the report clearly reflects on an instance of political interference with the design, process, evaluation, and selection of a contractor. The current general disposition of Commonwealth Government tender documents does not preclude this interference from recurring.

The language employed in this report is an exemplar of a dispassionate elucidation of the lineaments of evidence.

The following paragraphs have been selected from the report:

Para 23. ... the Government's decision to select a service provider for the Australia Network through an open [competitive] tender process was silent on the decision-making process for the tender. The lack of a documented government position on this issue created some uncertainty in relation to the decision-making process for the tender, and subsequently led to modified arrangements for, and delays in, the tender process.

Para 25. ... the Prime Minister in her letter of 25 January 2011 noted that the 'outcomes of the tender would be subject to Cabinet consideration, with Cabinet to agree the successful tender bid'.

Para 26. Probity arrangements were also put in place for the tender process. Compliance with these arrangements by all parties would have provided the basis to better control the flow of confidential information during the course of the tender evaluation; information security was later to become an issue in the tender process.

Para 29. [That] change explicitly provided for the approver to make a decision that did not reflect the recommendations of the TEB [Tender Evaluation Board] is noteworthy, bearing in mind there were only two tenderers in the field.

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[213] (McPhee, 3 April 2012)

Para 31. While it was appropriate for the departments to prepare briefings for Ministers on the tender process, the briefings should have had greater regard to the confidentiality and sensitivity of the information being provided for what was still a 'live' tender process. Ultimately, information was not as tightly controlled as it should have been.

Para 32. Following the Government's decision to change the tender process, an Addendum to the RFT was issued on 8 July 2011. The TEB was reconvened and, after reviewing the revised tenders, submitted a Supplementary Tender Evaluation Report to the Communications Minister on 30 August 2011. The report indicated it was the unanimous professional judgement of all TEB members that 'the ANC bid offers the best overall value-for-money; [and] accordingly the Board's original recommendation of selecting the ANC as the Preferred Tenderer remains unaltered'.

Para 34. ... the Minister had decided that both tenderers should go through a parallel negotiation process to: further test the financial reliability of each tenderer given the duration of the proposed contract; clarify commitments made in the tenders; and firm up aspects of both offers.

Para 35. However, before parallel negotiations commenced, the Minister, with the agreement of the Government, announced the termination of the Australia Network tender on 7 November 2011, as follows: due to significant leaks of confidential information to the media, the Australia Network tender process has been compromised to such a degree that a fair and equitable outcome may no longer be able to be achieved.

Para 38. The Communications Minister acted on the basis of legal and departmental advice in relation to key decisions on the tender process, including the decision to terminate the tender on public interest grounds (as provided for in the RFT).

Para 40. The end result is that, after having embarked on a tender process in November 2010 for a 10 year contract for the delivery of the Australia Network, the Government changed course—on public interest grounds—to make a policy decision in December 2011 that the ABC would provide the service on a permanent basis.

Para 41. While the Government was entitled to take such a decision, the Australia Network tender process has presented the Australian Government in a poor light and cost the two tenderers—the ANC and the ABC—time and money. In this context, the ANC informed the ANAO [Australian National Audit Office] that: ANC expended significant costs participating in two tender processes which were ultimately cancelled for political reasons and through no fault of ANC.

Para 43. The manner and circumstances in which this high profile tender process was conducted brought into question the Government's ability to deliver such a sensitive process fairly and effectively. This is despite the fact that many other tender processes

are employed in all areas of government, some involving decisions by Ministers, on more substantial and complex proposals, and are concluded satisfactorily.

Para 44. There are three main issues to bear in mind.

1. Firstly, it is important that, where it is intended that Ministers or Cabinet have a formal role in a tender process, that this be made clear; departments have a role in assisting government to be explicit about this.
2. Secondly, information security is critically important to effective tender arrangements and there are accepted ways within government of managing this, namely, by not circulating confidential tender information to any departmental officers, Ministers or their staff, unless they are part of the tender decision-making process or have a demonstrable need for such specific information.
3. Finally, all parties involved in the management of a tender process should have regard to the importance of adhering to conventional procurement arrangements and effectively managing the range of risks involved, given they can change significantly over time.

Para 45. The Government may also wish to reflect on Ministers performing the role of an approver, in situations where the Minister's portfolio bodies may be submitting tenders for services to be determined by government. In such circumstances, any perception of a conflict of interest could be mitigated by the Government agreeing to another Minister, or more than one Minister, approving the tender outcome.

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Notes:

1) Individual sections have independent line numbers.
2) Page numbers are cumulative across all sections.
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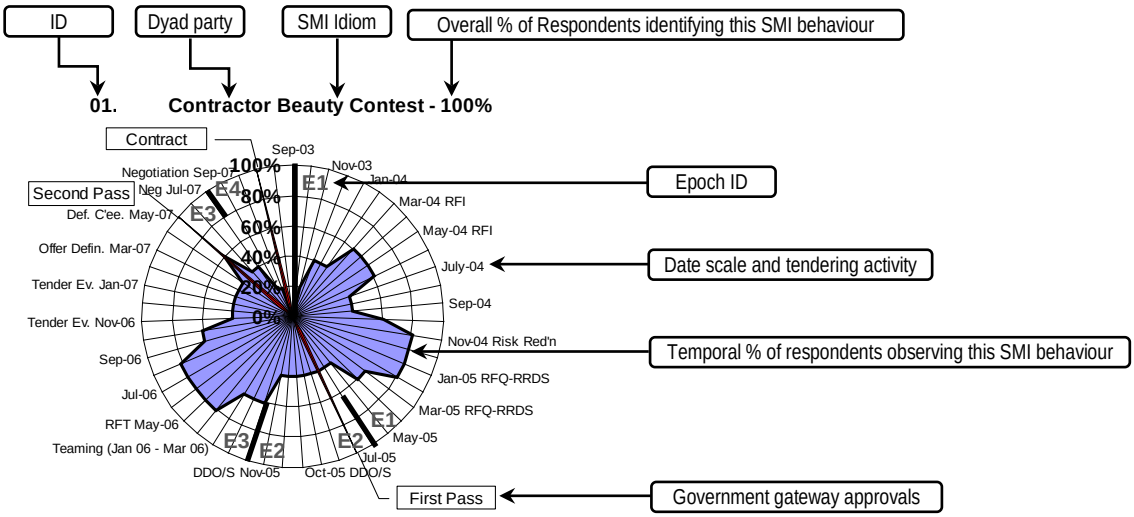
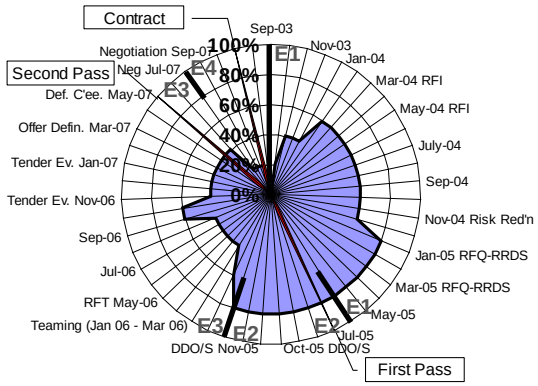
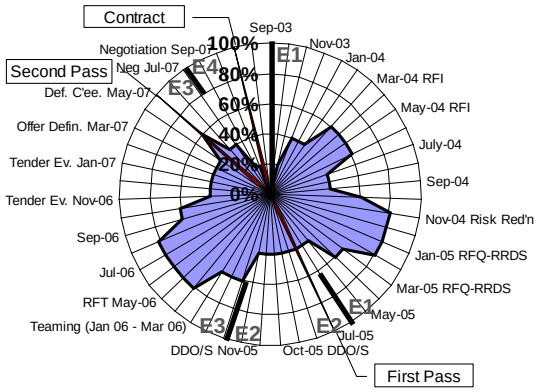
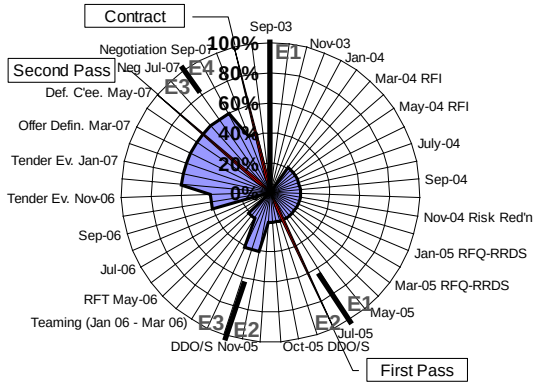
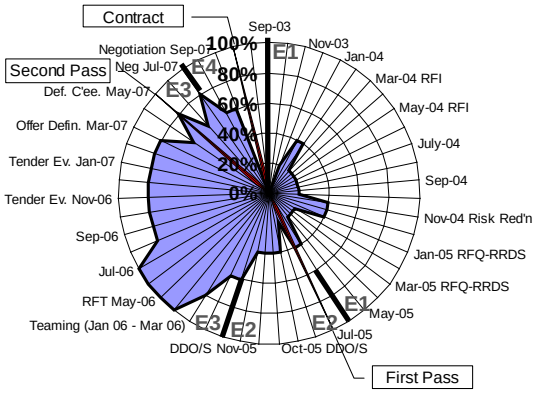
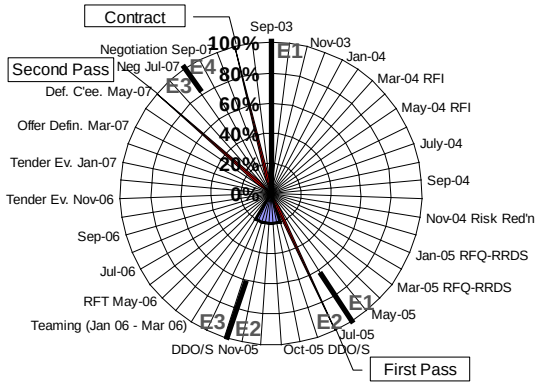
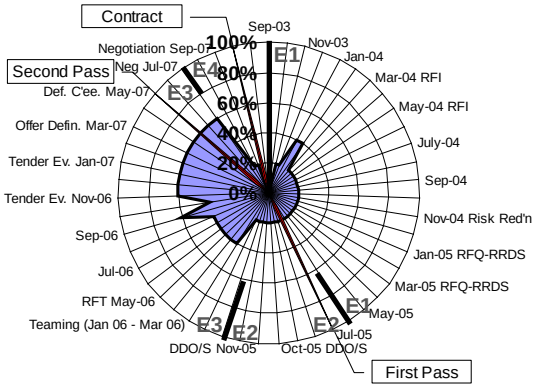
ANNEXURE B. POLAR CHARTS OF SENSE-MAKING ITEMS: NUMERIC ORDER AND EPOCH GROUPS

Legend: Idiom percent indicates the purposive sample response rate.

Percent on the radial axis indicates the percent of the purposive sample with concurrent observations.

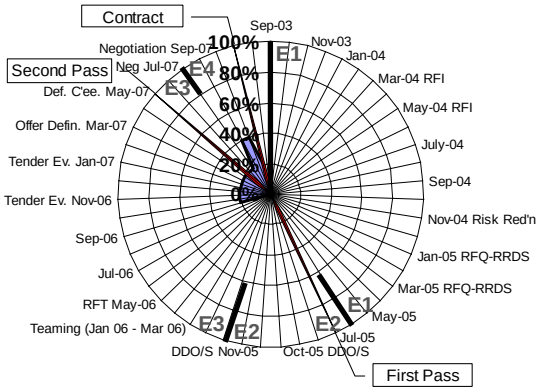


Case S:

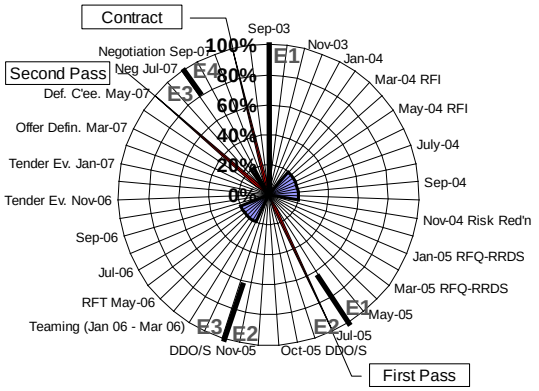
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
01. Client Beauty Contest - 100% 	**01. Contractor Beauty Contest - 100%** 
A party's behaviour concentrates on its presentation values.	
02. Client Smart Thinking - 100% 	**02. Contractor Smart Thinking - 100%** 
Attention is focused on a party's business-model (and potential risks).	
03. Client Gold Miner - 20% 	**03. Contractor Gold Miner - 100%** 
A party uses this project to advance another project's objectives.	

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

04. Client Cargo Cult - 40%

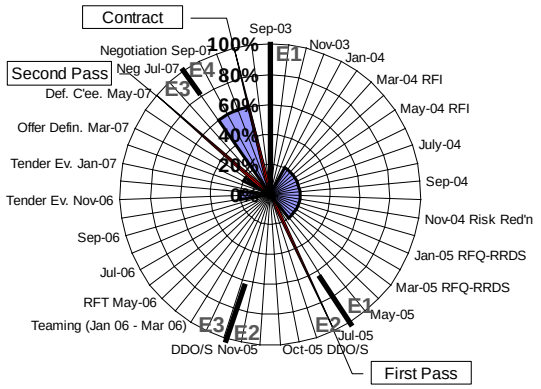


04. Contractor Cargo Cult - 40%

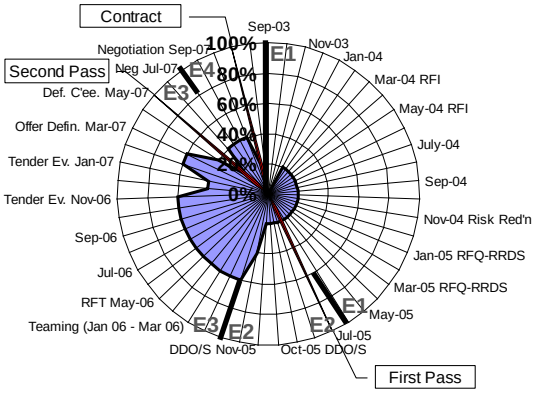


A party's behaviours result from a history of receiving guaranteed non-competitive work.

05. Client Cock Fight - 80%

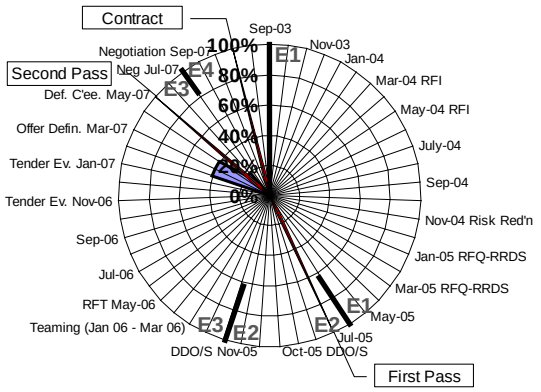


05. Contractor Cock Fight - 100%

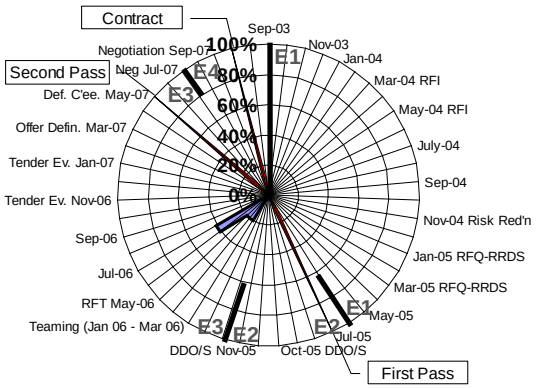


Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.

06. Client Fool's Gold - 40%

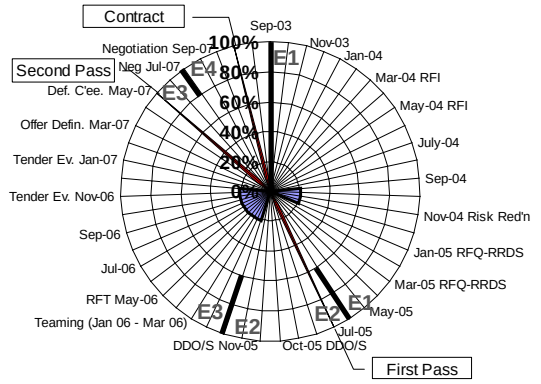


06. Contractor Fool's Gold - 40%

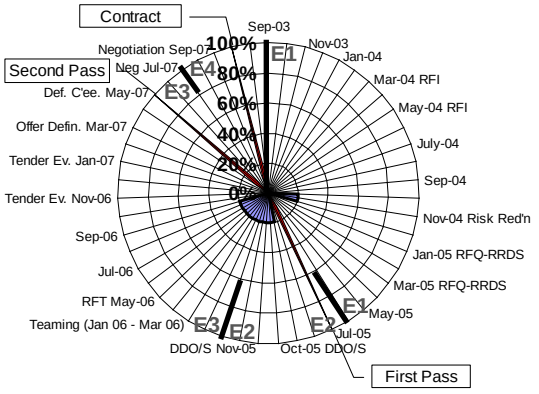


A party is willing to offer anything that is requested, regardless of the commercial implications.

07. Client Masquerade - 60%



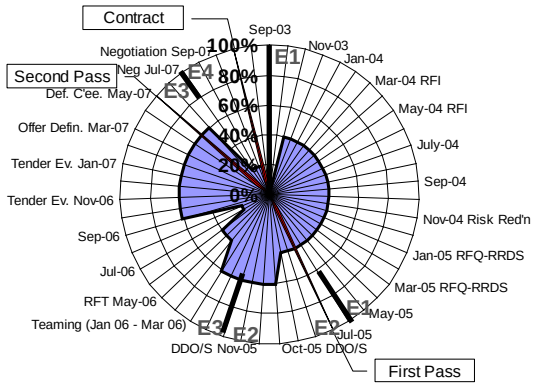
07. Contractor Masquerade - 40%



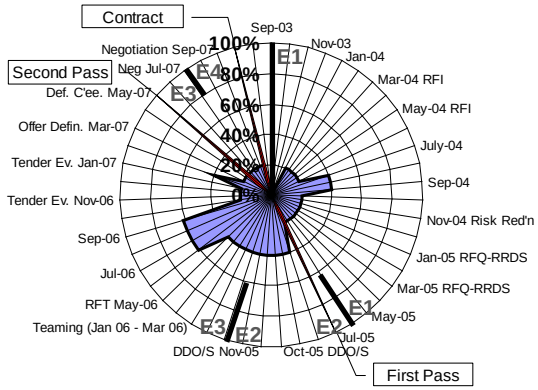
A party displays a 'crafted' pretence for a period of time (particularly in the presence of competitors).

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

08. Client Vanity Fair - 80%

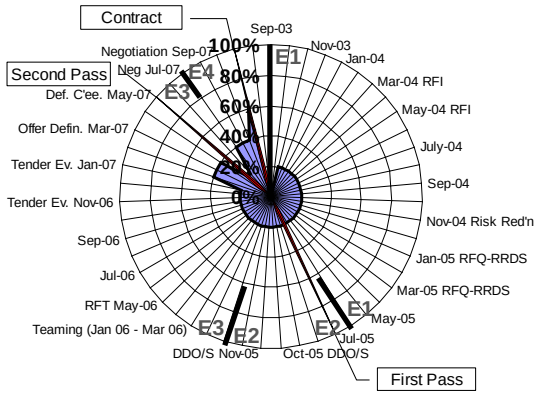


08. Contractor Vanity Fair - 80%

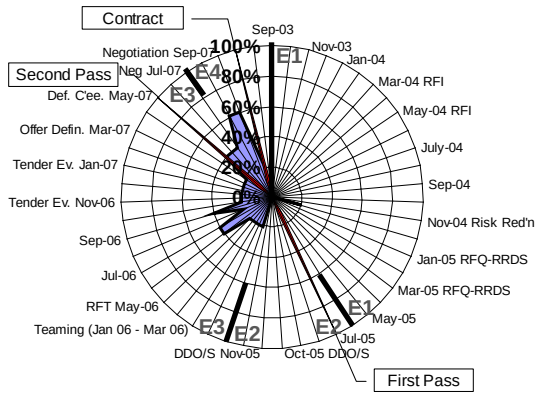


A party feels pressure to participate because of the project size and/or its market stature.

09. Client Winner's Curse - 80%

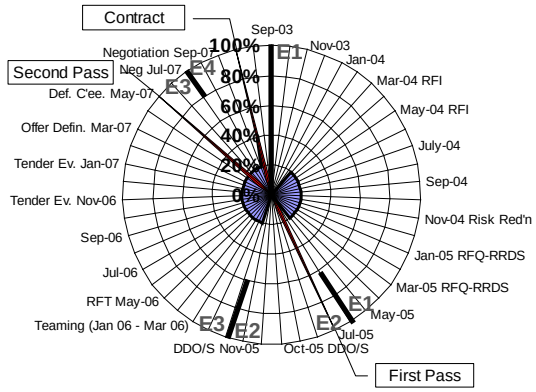


09. Contractor Winner's Curse - 80%

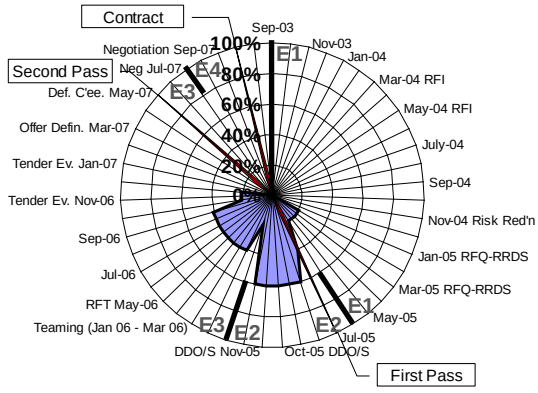


A party realises that it will suffer because it offered a fixed-price to deliver an ill-defined or ill-understood requirement.

10. Client Jungle Jitters - 80%

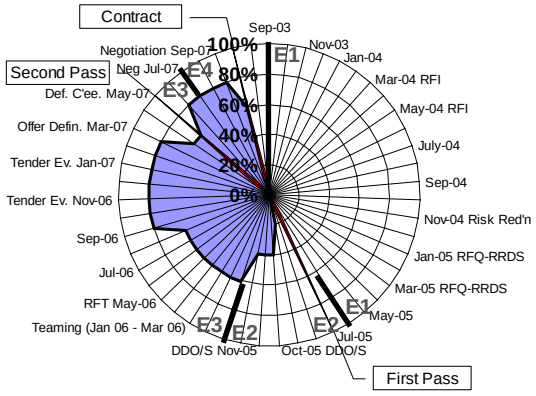


10. Contractor Jungle Jitters - 100%

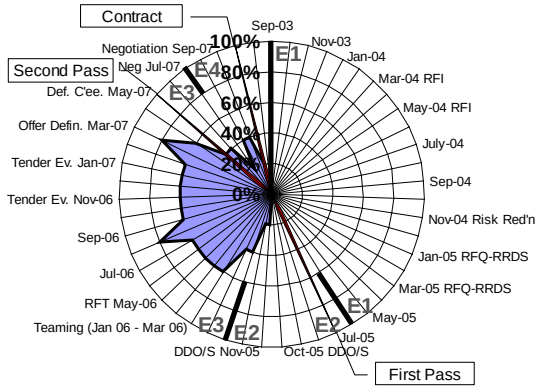


A party is keen for the work but apprehensive about untested relationships.

11. Client Kashmir - 100%



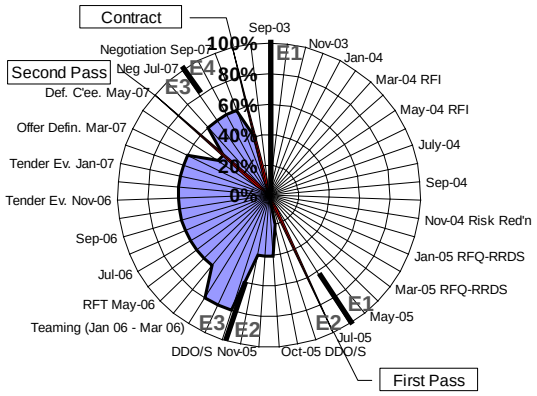
11. Contractor Kashmir - 80%



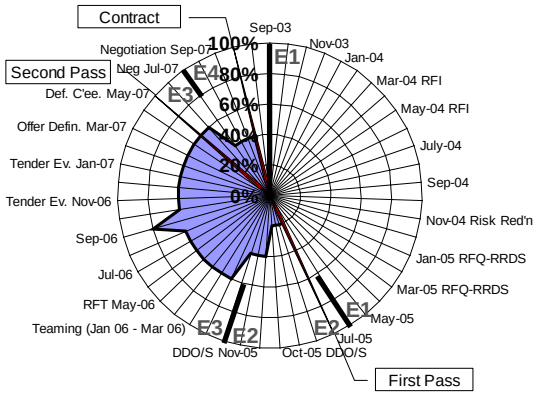
A party behaves apprehensively as it perceives that others may appropriate its current &/or future contract share.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

12. Client Decree Discordare - 80%

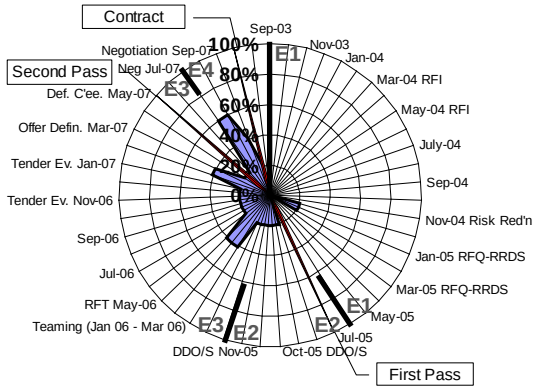


12. Contractor Decree Discordare - 80%

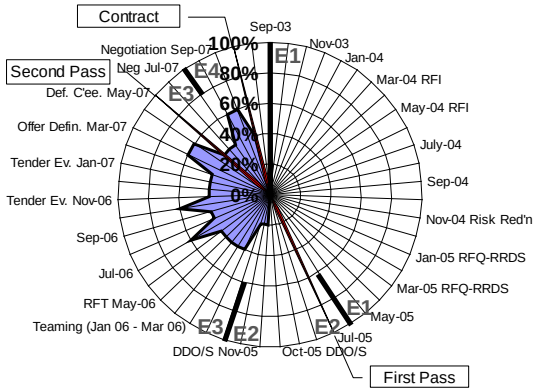


A party believes that another party plays the dual roles of team-player and supplier/system selector.

13. Client Gone to Grandma - 100%

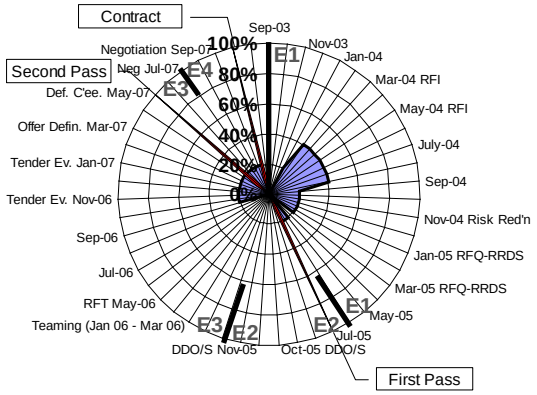


13. Contractor Gone to Grandma - 60%

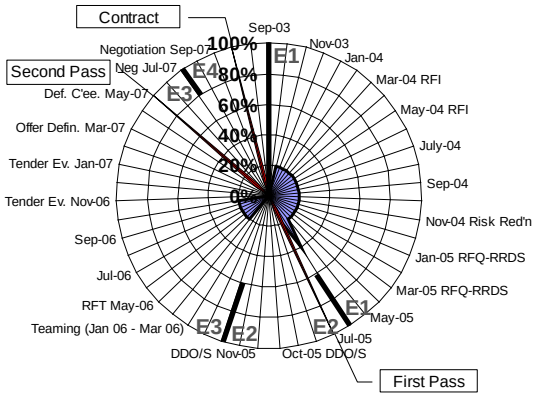


A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.

14. Client Transponders - 80%



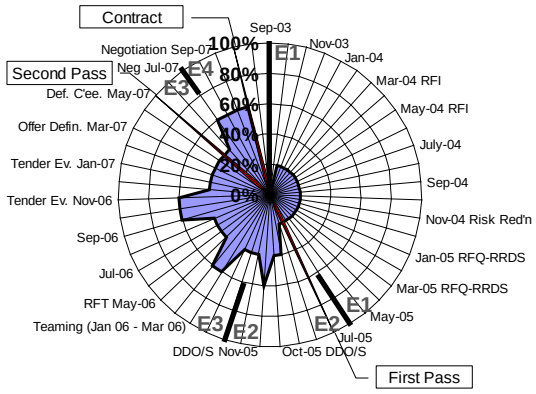
14. Contractor Transponders - 60%



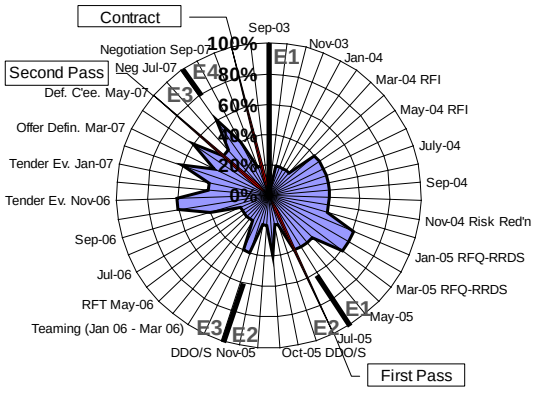
Individuals seek attention by hovering around the project or communicating their importance.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

15. Client Finding Nemo - 80%

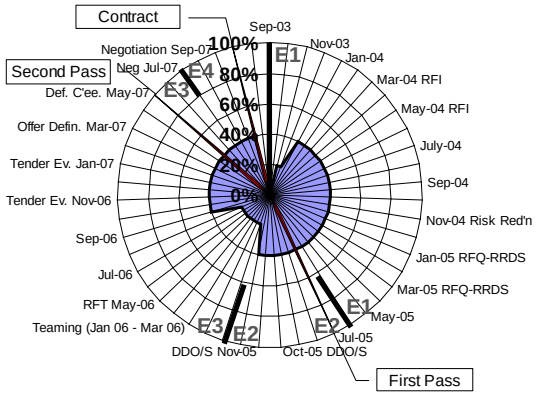


15. Contractor Finding Nemo - 80%

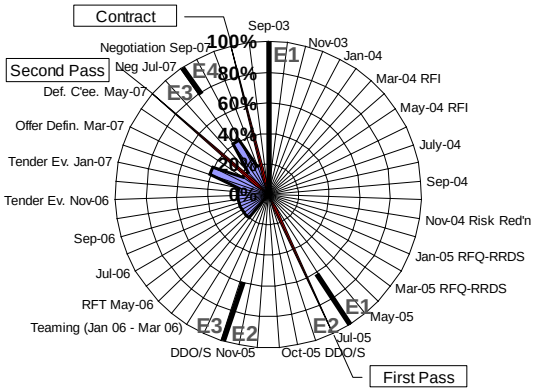


A party knows that there is a game at play but has difficulty defining its structure and parameters.

16. Client Star-Gazing 'Iron Colonel' - 60%

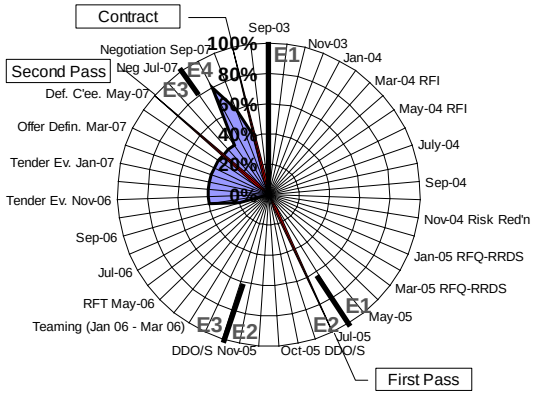


16. Contractor Star-Gazing 'Iron Colonel' - 40%

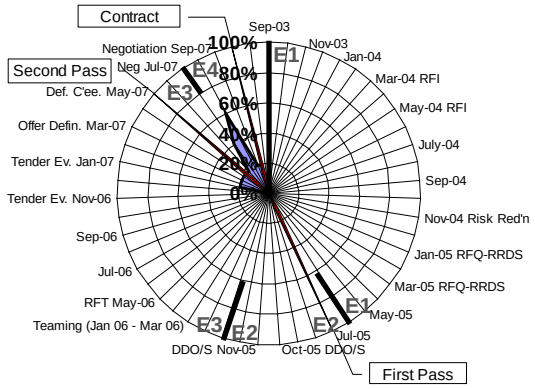


A non-aligned bureaucrat focuses on procedural detail to avoid decisions which might degrade promotion prospects.

17. Client The Scorpion - 80%

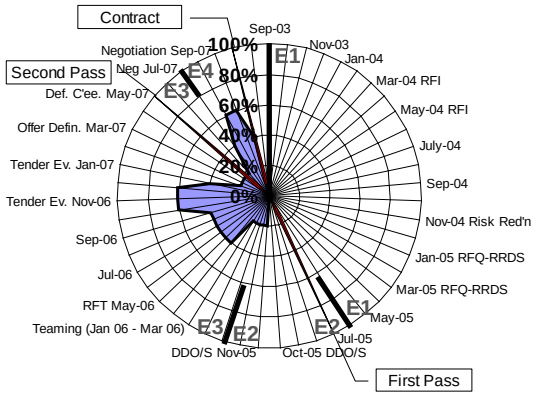


17. Contractor The Scorpion - 60%

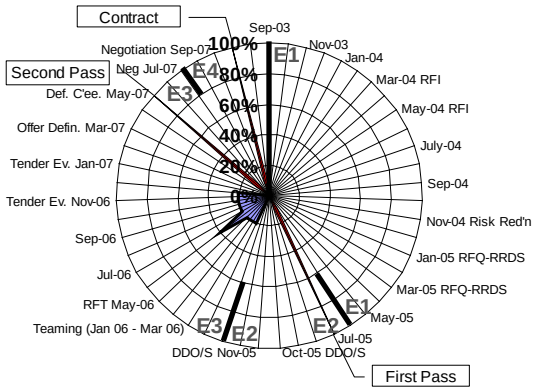


The project is implanted with a 'toxic' human agent whose presence unites opposing parties or drives them apart.

18. Client Selective Hearing - 100%



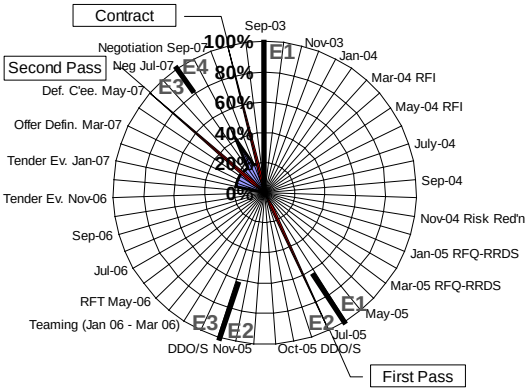
18. Contractor Selective Hearing - 40%



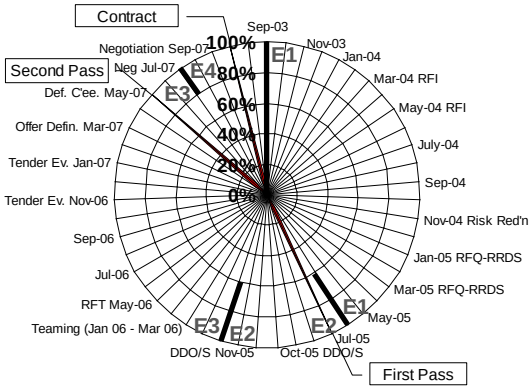
A party chooses to be 'led' to a fundamentally different interpretation of the game at play.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

19. Client Eats Roots and Leaves - 40%

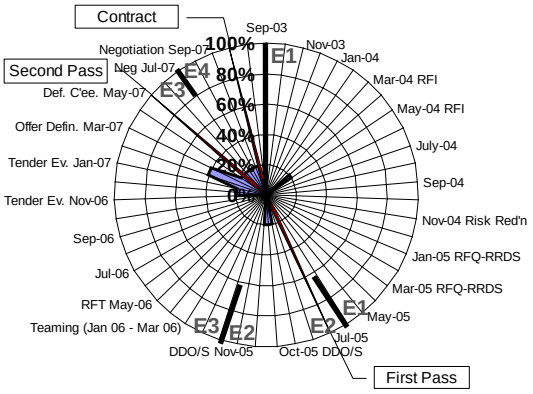


19. Contractor Eats Roots and Leaves - 0%

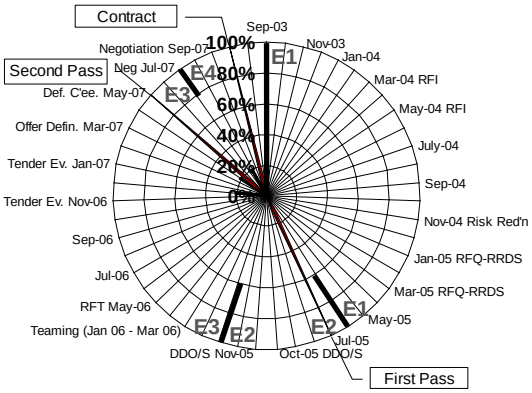


A transient bureaucrat institutes change and avoids on-going accountability by leaving.

20. Client Squawking Crow - 60%

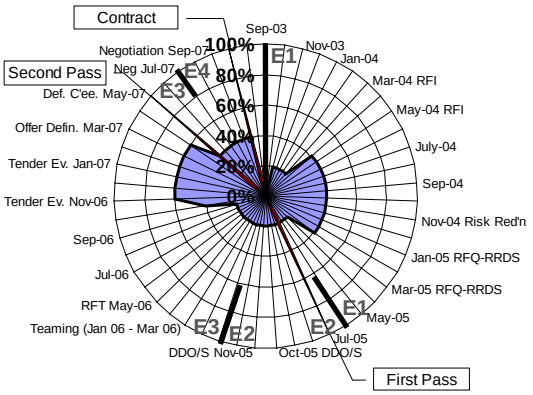


20. Contractor Squawking Crow - 20%

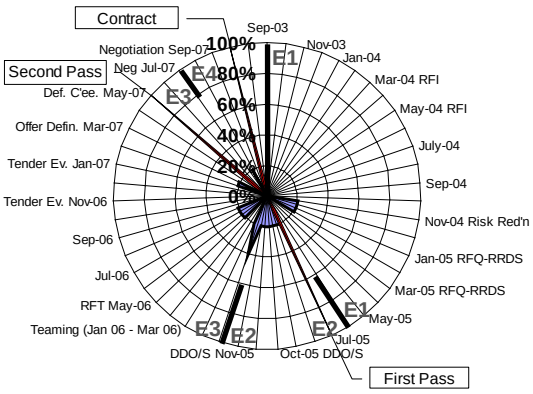


A transient bureaucrat seeks to discredit the process.

21. Client Once Bitten Twice Shy - 80%

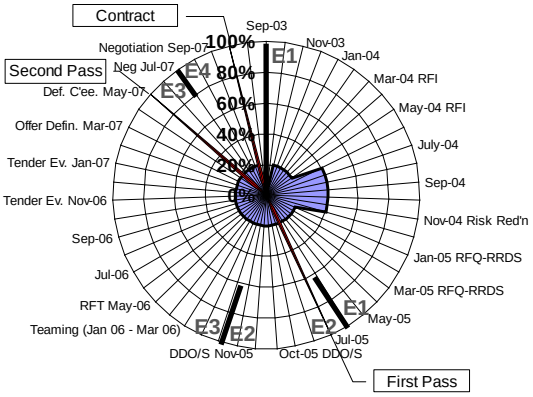


21. Contractor Once Bitten Twice Shy - 40%

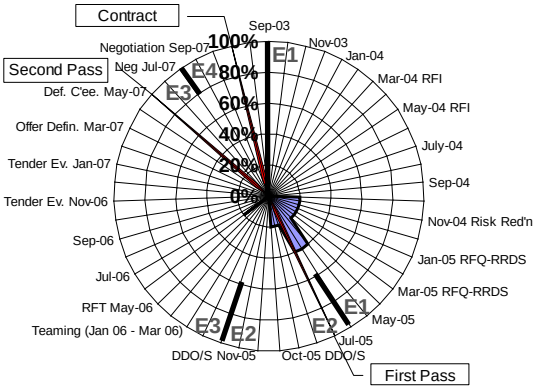


Previous contractual experiences have led to ambivalent or negative feelings.

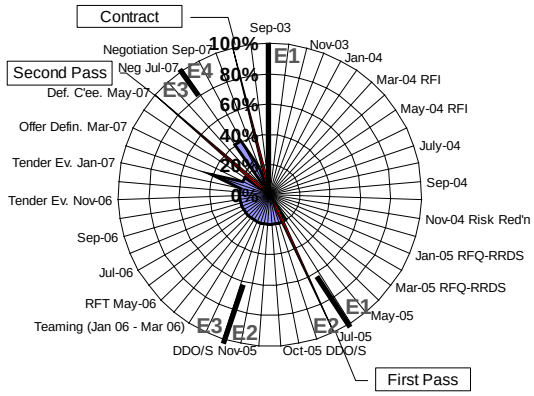
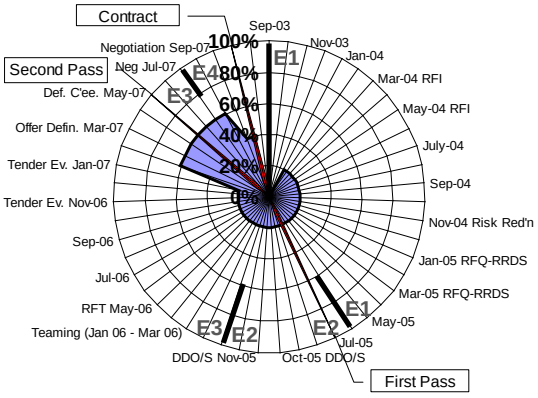
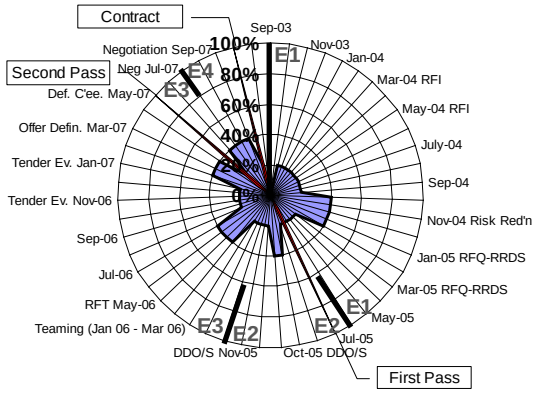
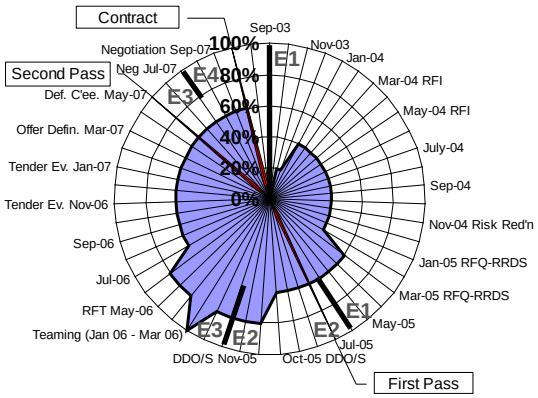
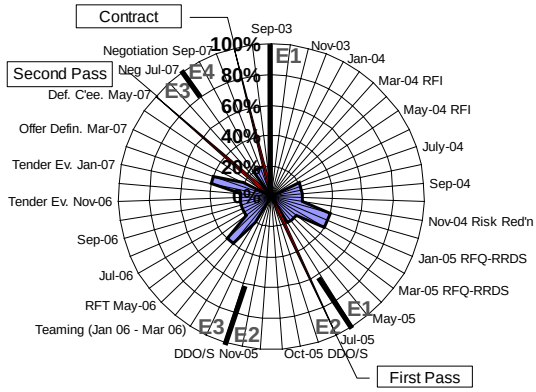
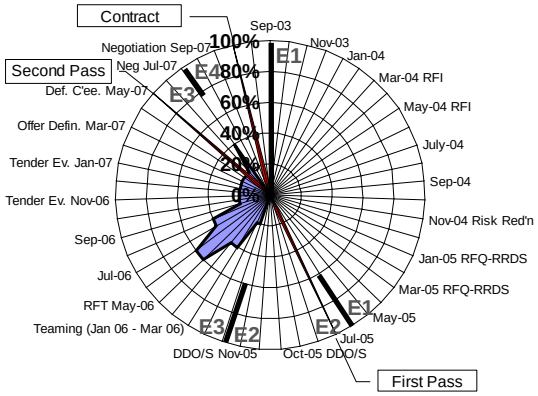
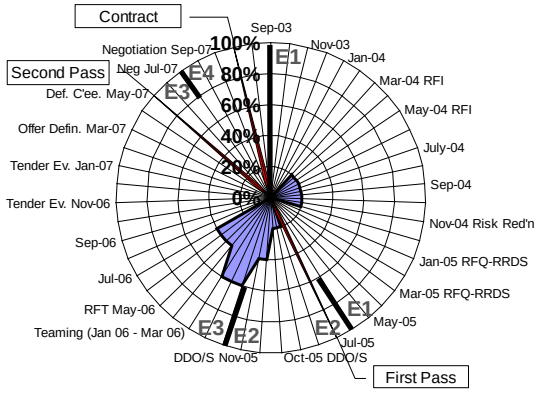
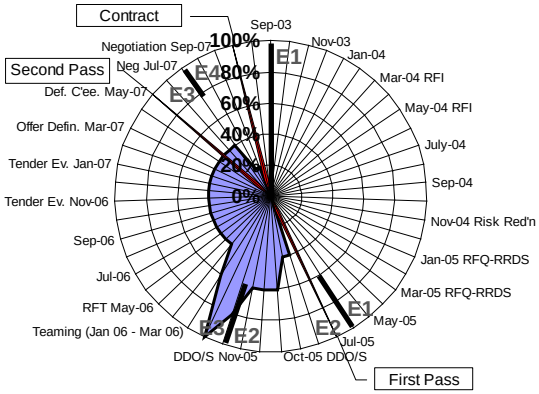
22. Client Unrequited Love - 40%

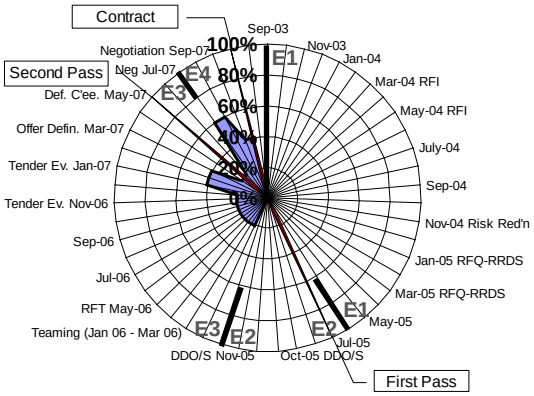
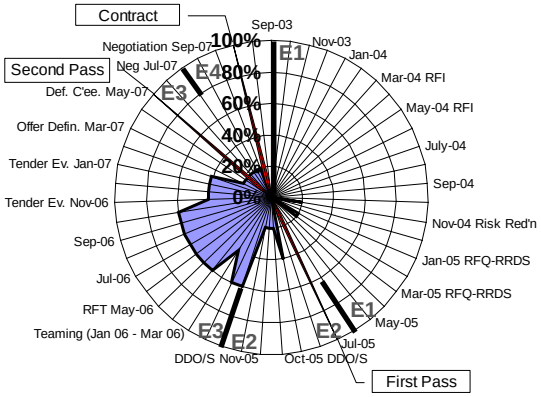
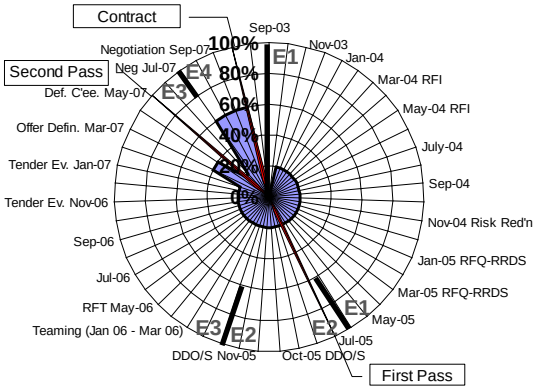
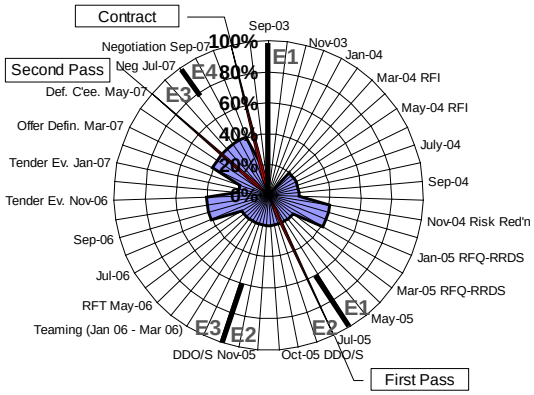
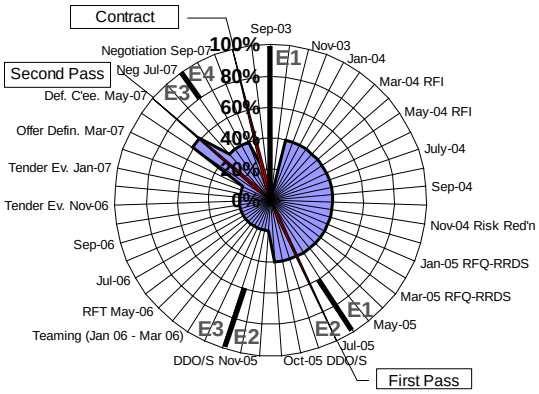
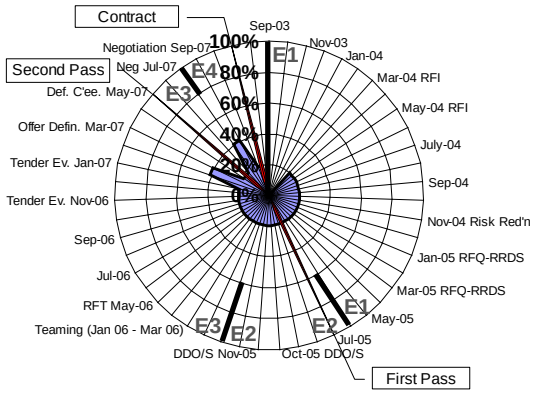


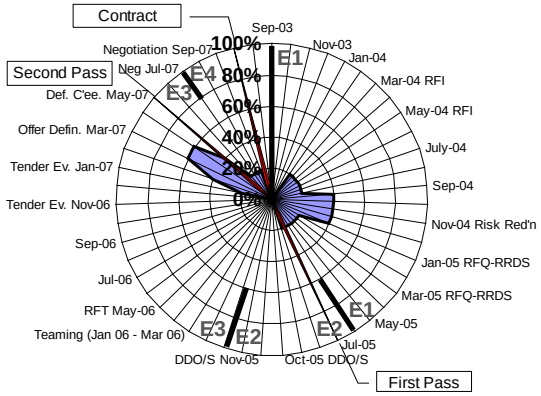
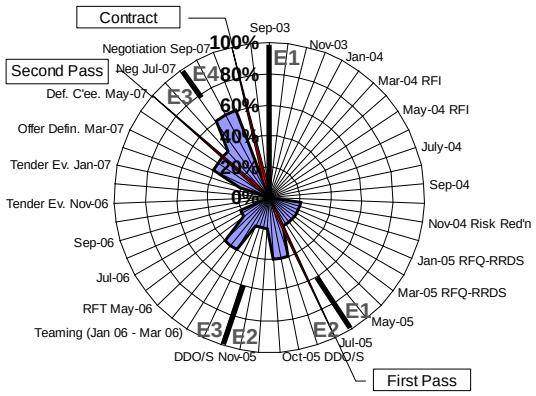
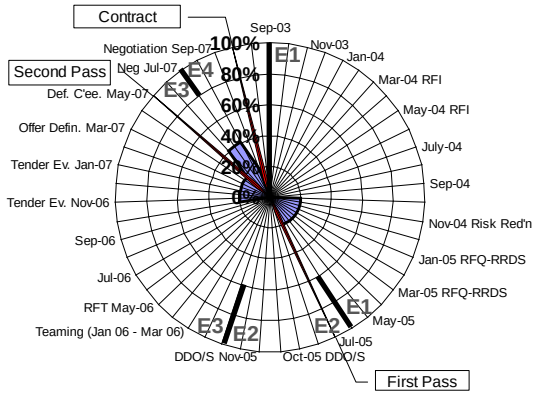
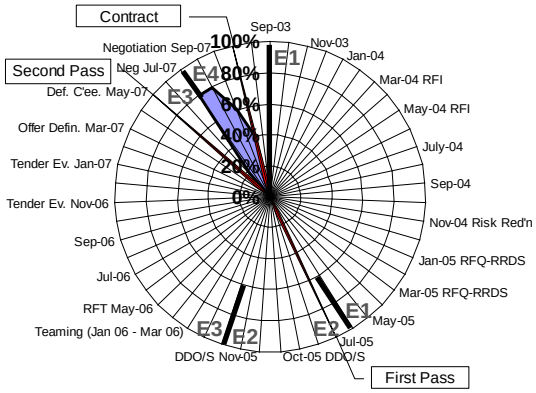
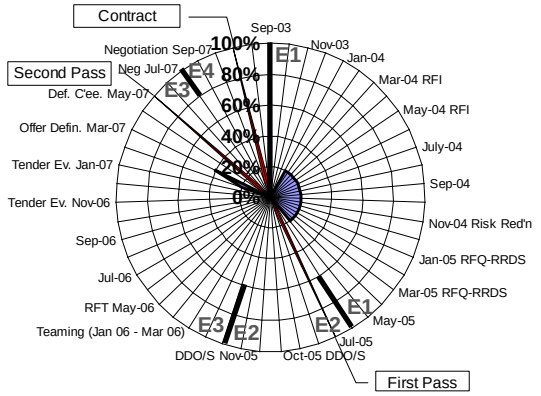
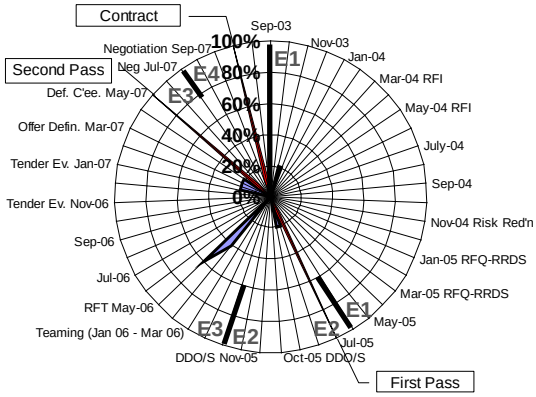
22. Contractor Unrequited Love - 60%

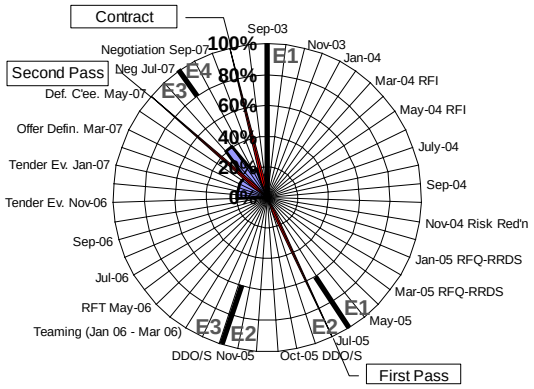
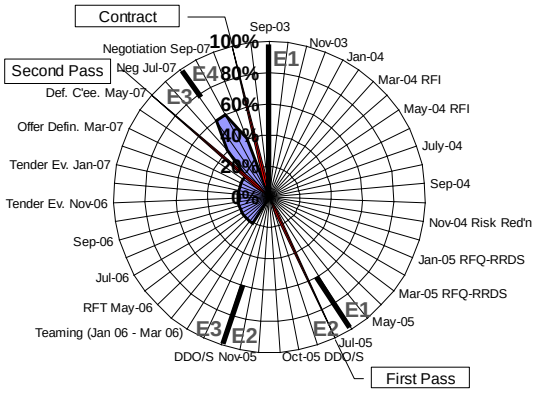
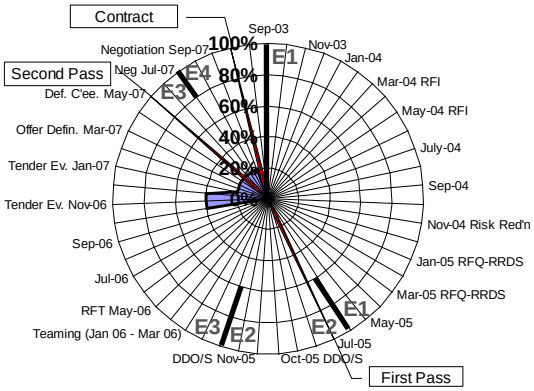
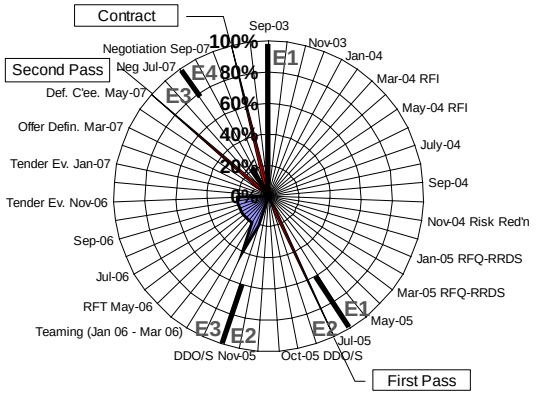
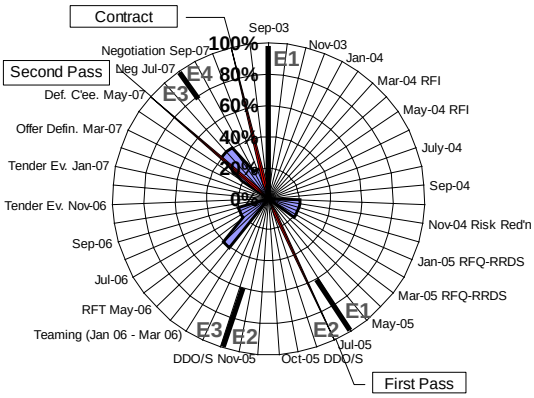
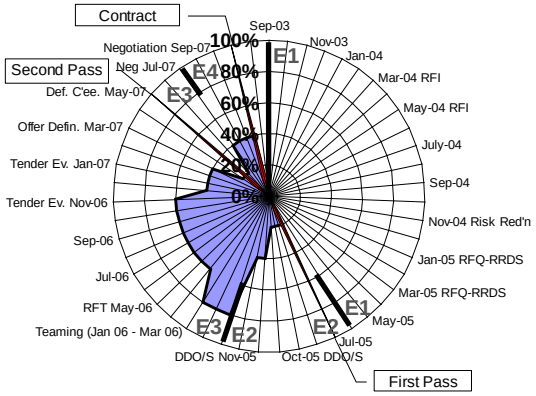


Past superior performance appears to be of academic value only.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
23. Client Pin the Tail on the Donkey - 80%	**23. Contractor Pin the Tail on the Donkey - 60%**
	
Both parties have a fundamentally different perception of the game at play.	
24. Client Auntie Mame - 60%	**24. Contractor Auntie Mame - 100%**
	
Obtaining high-value insights from a non-contracting party.	
25. Client Ring-a-Ring-a-Rusey - 80%	**25. Contractor Ring-a-Ring-a-Rusey - 60%**
	
A party resents being gamed.	
26. Client Speed Dating - 80%	**26. Contractor Speed Dating - 100%**
	
Potential participants must 'mate' before entering the game.	

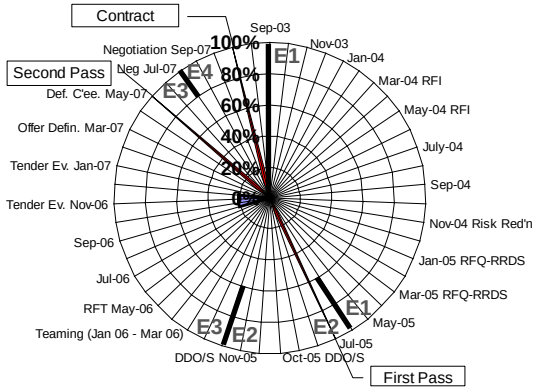
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
27. Client Haughty Opportunist - 80% 	**27. Contractor Haughty Opportunist - 80%** 
A temporal situation fortuitously affords one party enhanced power.	
28. Client Ménage à Trois - 100% 	**28. Contractor Ménage à Trois - 80%** 
A client and subcontractor are negotiating.	
29. Client Turf Wars - 80% 	**29. Contractor Turf Wars - 60%** 
Bureaucrats compete for involvement.	

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
30. Client Machiavelli's Ministrations - 100%	**30. Contractor Machiavelli's Ministrations - 80%**
	
A powerful stakeholder changes the game.	
31. Client Popcorn Machine - 100%	**31. Contractor Popcorn Machine - 80%**
	
A negotiator has an unstable authority base.	
32. Client Surprise! - 60%	**32. Contractor Surprise! - 100%**
	
A significant unanticipated event occurred.	

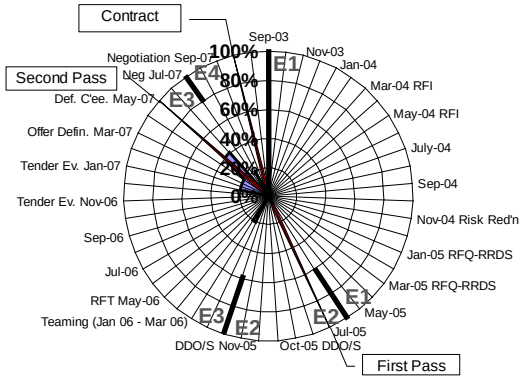
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
33. Client Agent 86 - 40% 	**33. Contractor Agent 86 - 60%** 
A surreal personality is active in the project.	
34. Client Yes Minister - 40% 	**34. Contractor Yes Minister - 40%** 
A superficial game is used to draw attention away from the main game.	
35. Client Call in the Big Guns - 80% 	**35. Contractor Call in the Big Guns - 80%** 
A party seeks Ministerial dialogue.	

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

36. Client Spoil Sport - 20%

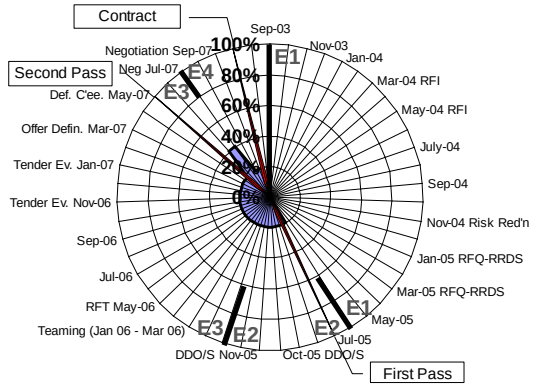


36. Contractor Spoil Sport - 60%

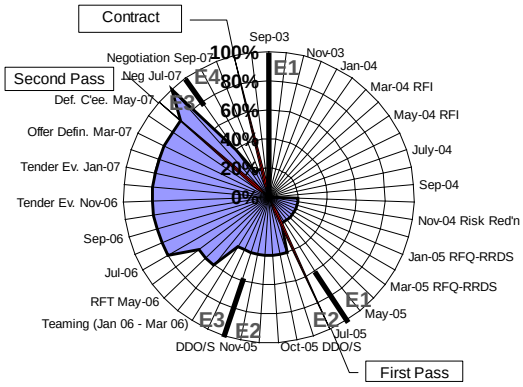


A losing party or contractor seeks to de-stabilise the nascent marriage.

37. Client Gut Ache - 40%

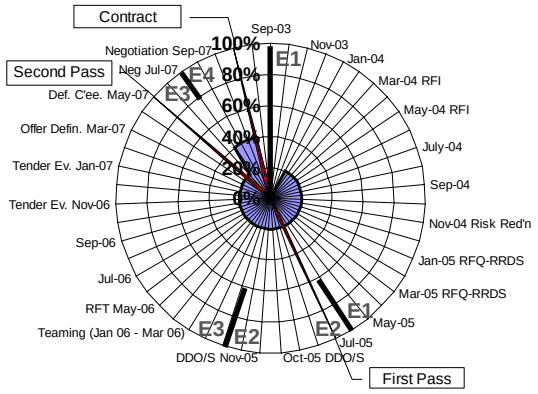


37. Contractor Gut Ache - 100%

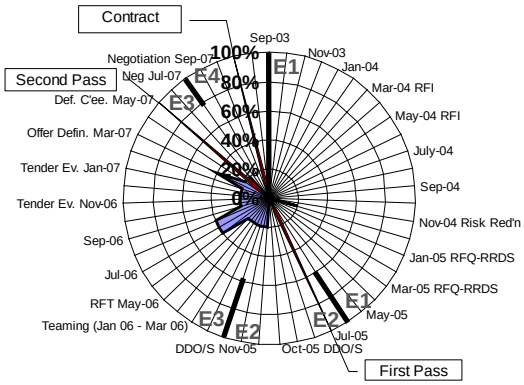


An aura of doubt pervades the process even though everything appears to be technically correct.

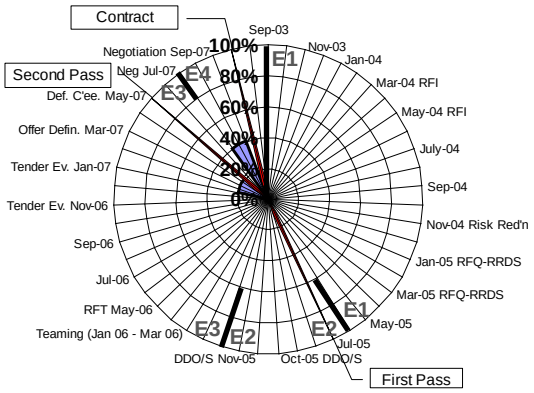
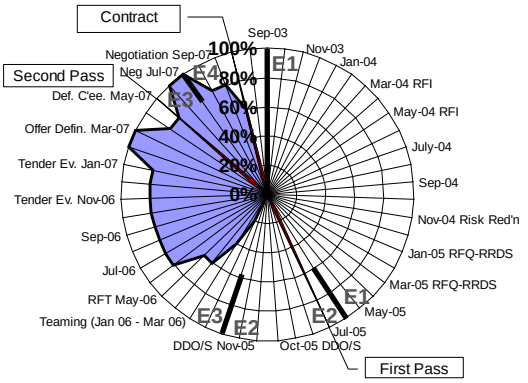
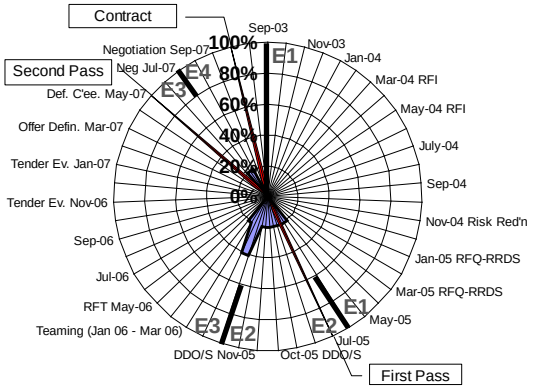
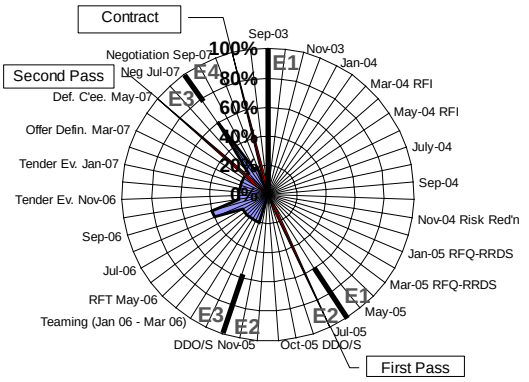
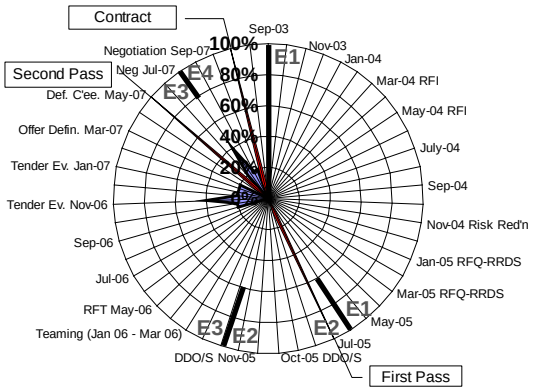
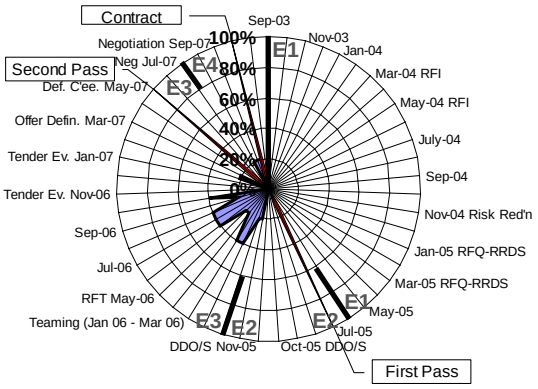
38. Client Dr Salk - 40%

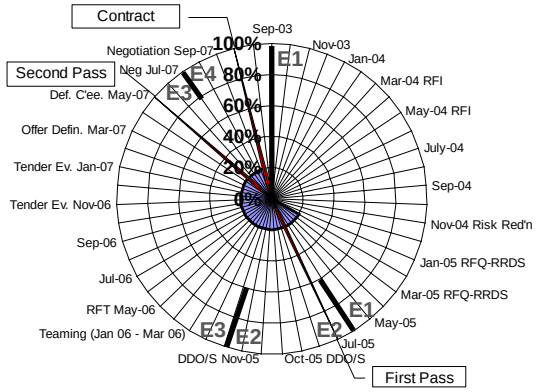
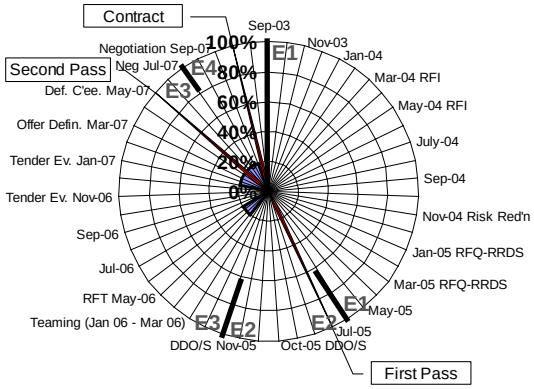
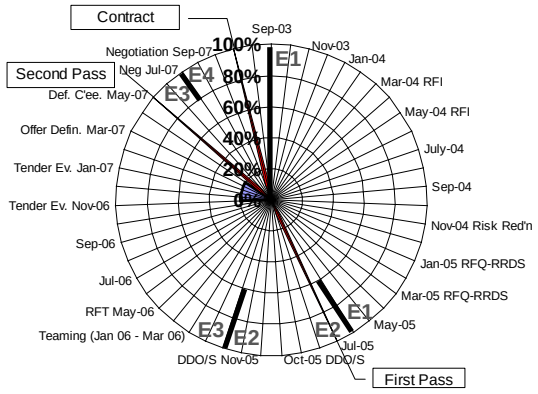
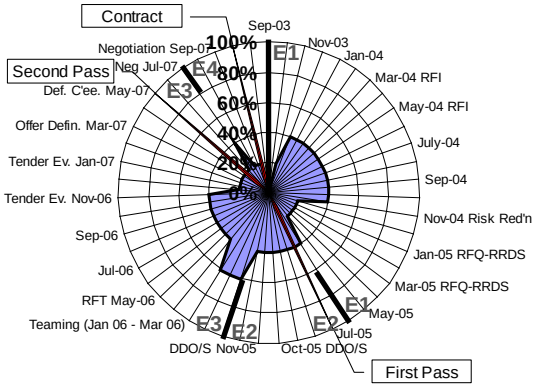
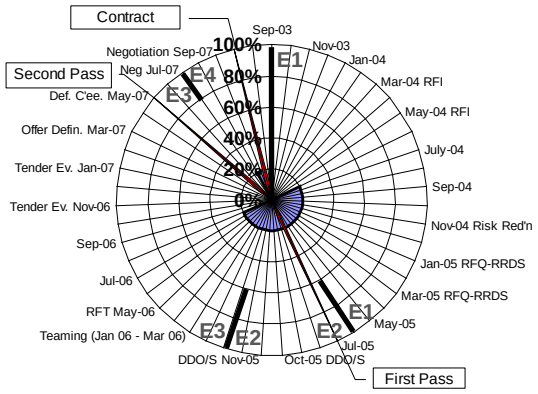
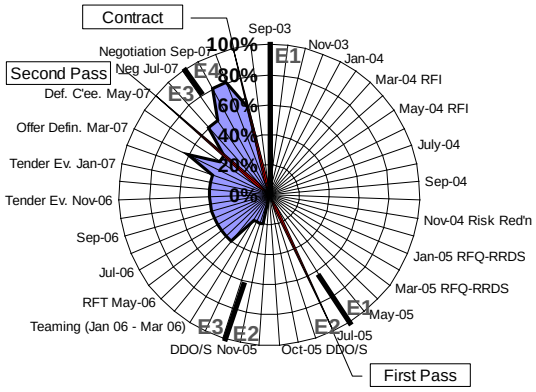


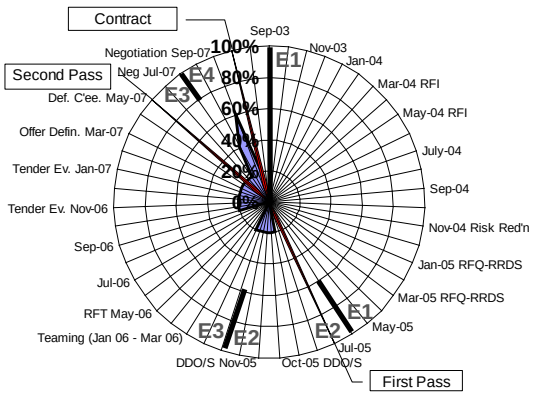
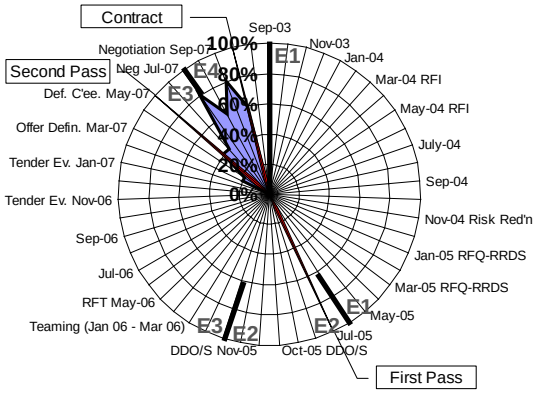
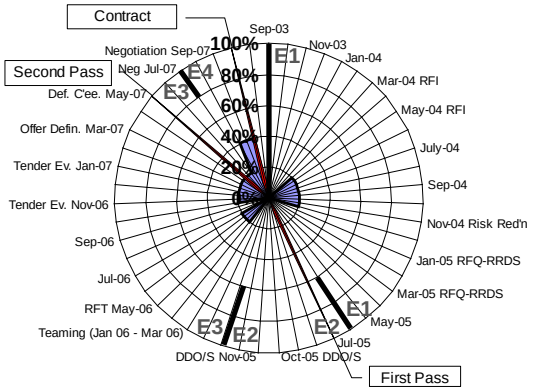
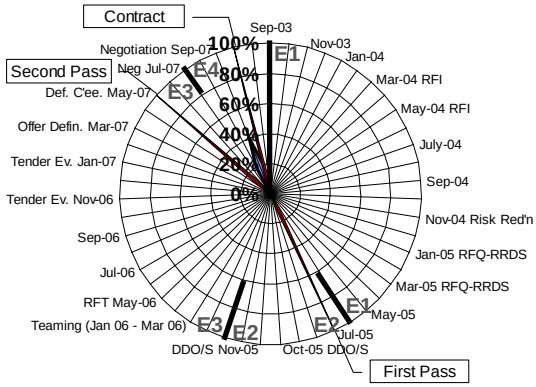
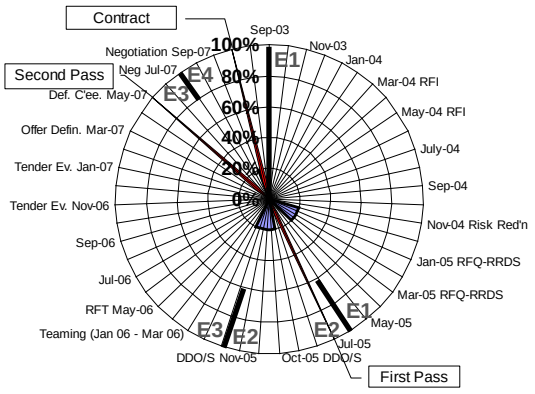
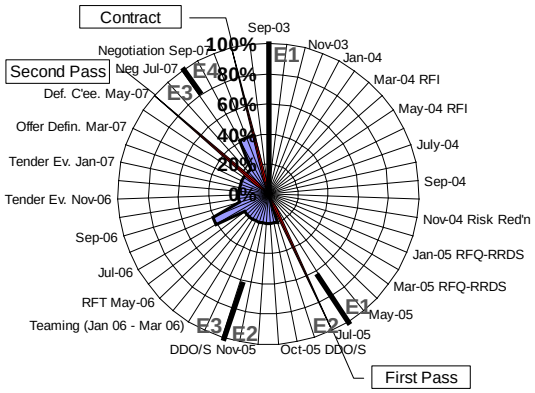
38. Contractor Dr Salk - 40%

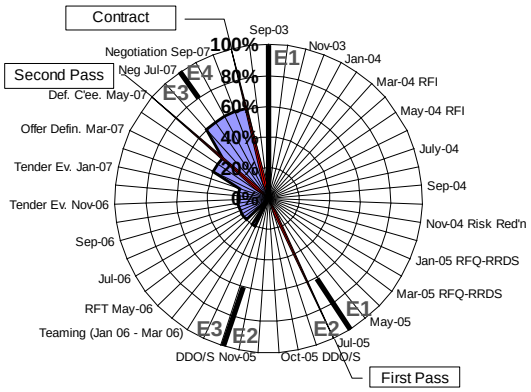
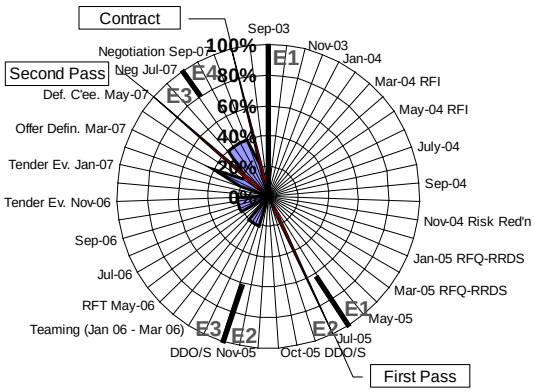
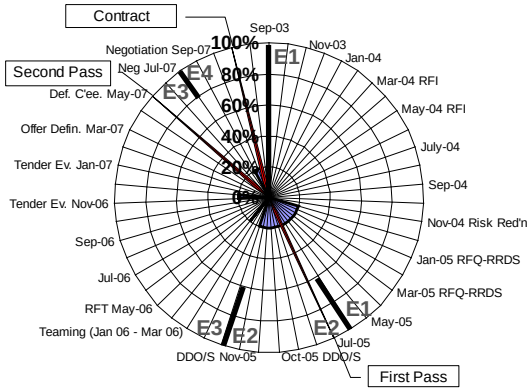
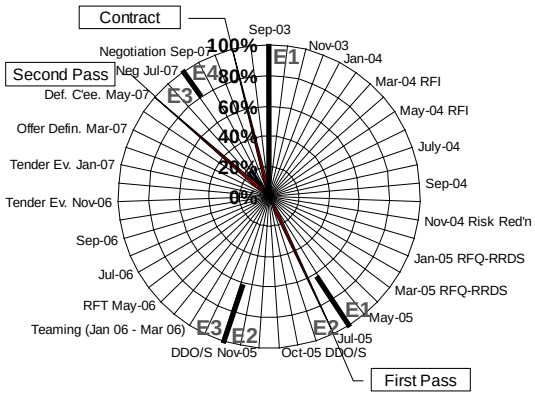
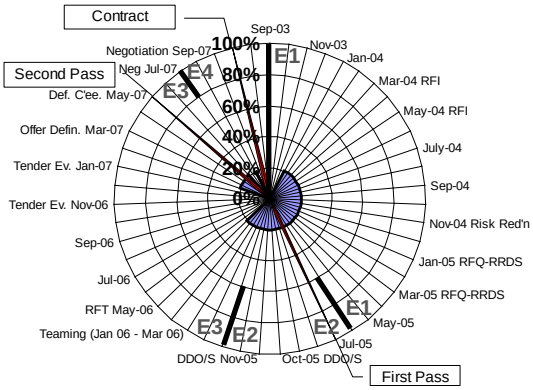
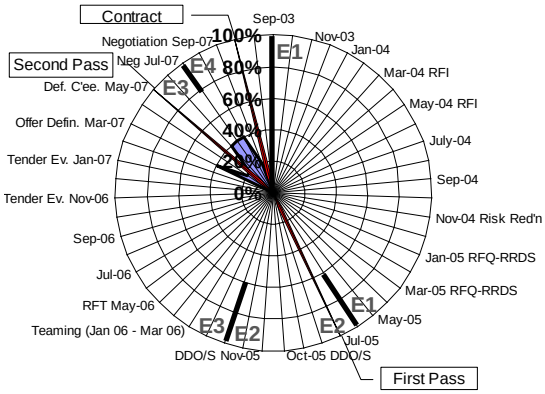


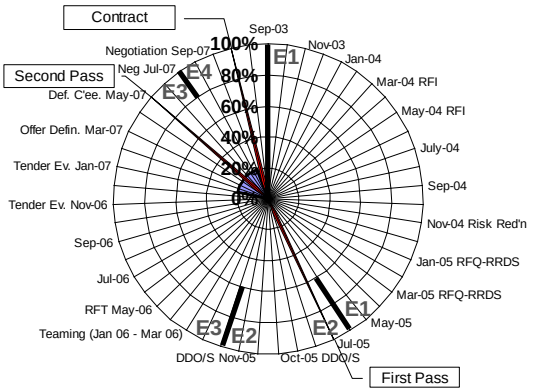
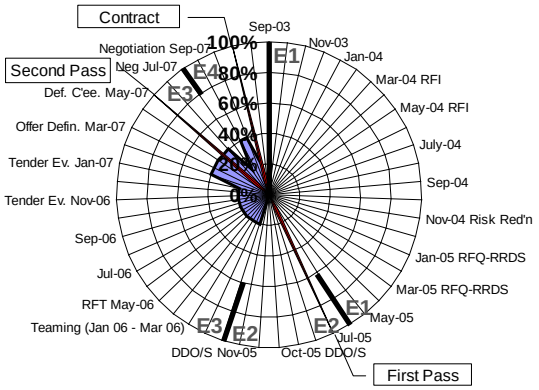
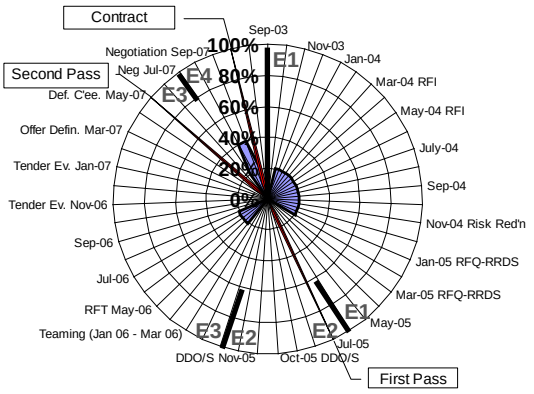
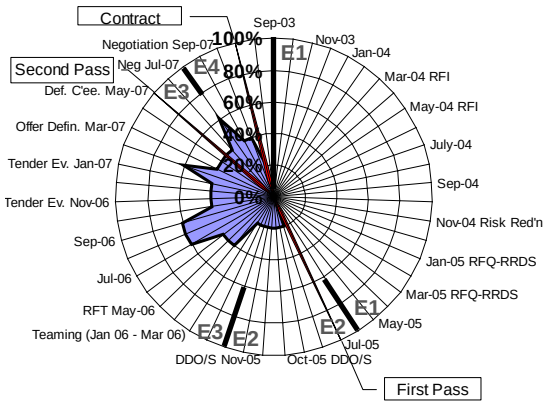
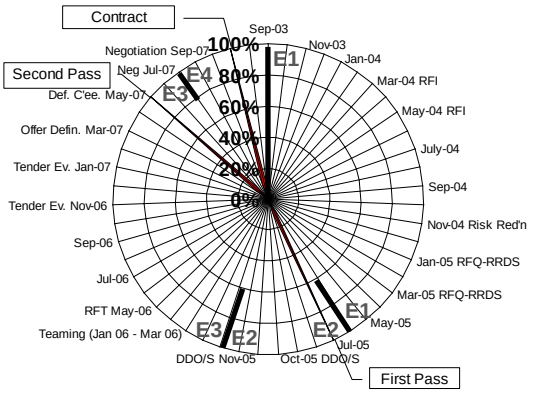
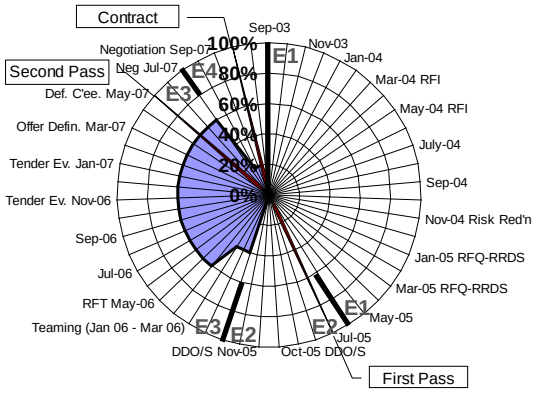
A game is initiated to thwart the emergence of another game.

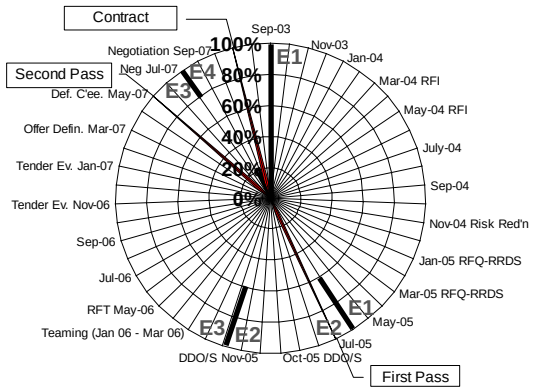
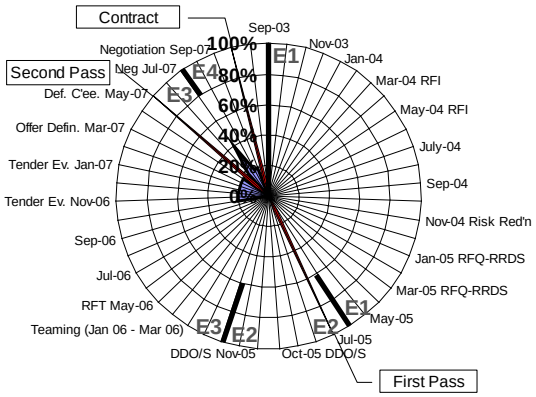
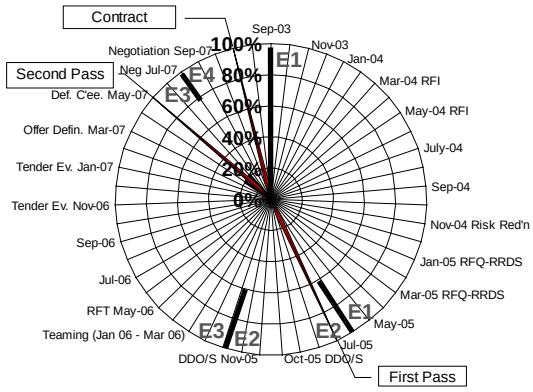
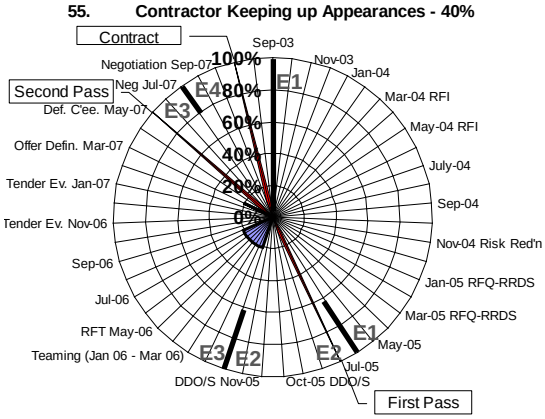
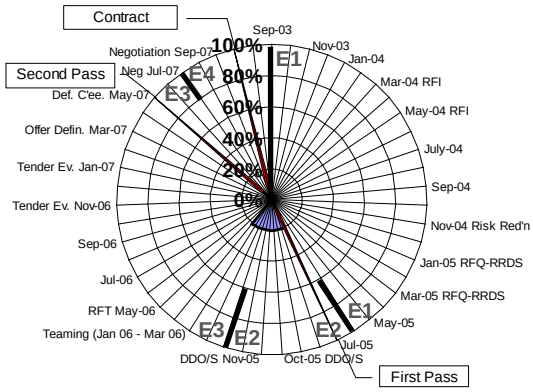
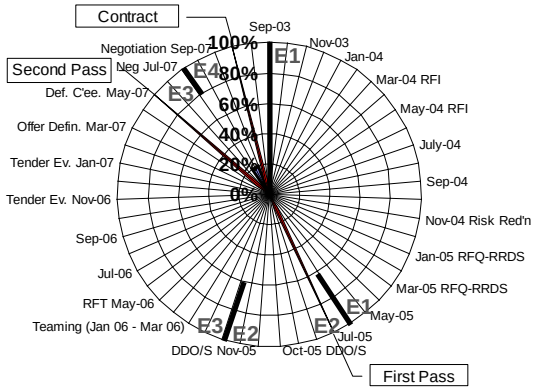
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
39. Client Snake - 60%	**39. Contractor Snake - 100%**
	
Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).	
40. Client Disneyland - 80%	**40. Contractor Disneyland - 60%**
	
The entered environment appears to be carefully orchestrated resulting in a perceived power imbalance.	
41. Client Pennies from Heaven - 80%	**41. Contractor Pennies from Heaven - 60%**
	
Unsolicited quality information is received from or about the other side or competitor.	

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
42. Client Emperor's Clothes - 20% 	**42. Emperor's Clothes - 40%** 
A misperception is institutionalised.	
43. Client Feed Forward - 60% 	**43. Contractor Feed Forward - 100%** 
Political decisions which framed an earlier project are having foreseeable impacts on the current project.	
44. Client Lemons for Sale - 80% 	**44. Contractor Lemons for Sale - 80%** 
A contractor closely monitors the client for any potential contract breach which could sustain a transfer of risk.	

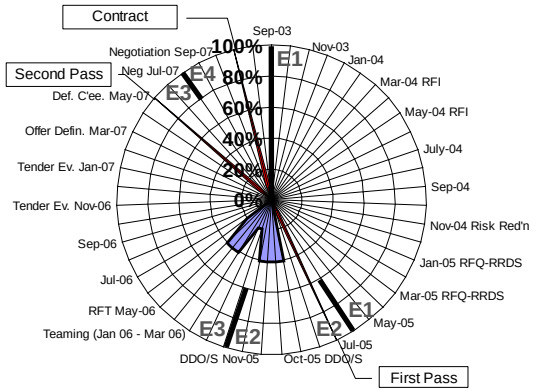
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
45. Client Shotgun Marriage - 80% 	**45. Contractor Shotgun Marriage - 100%** 
Political pressure to consummate a contract or agree to terms.	
46. Client Dirty Tricks - 100% 	**46. Contractor Dirty Tricks - 60%** 
Misinformation is supplied to the highest political level.	
47. Client I Had a Dream - 40% 	**47. Contractor I Had a Dream - 60%** 
Receiving impeccable non-attributable political direction.	

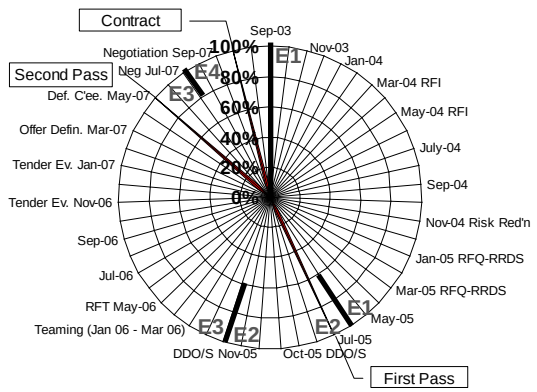
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
48. Client Wedging - 100%	**48. Contractor Wedging - 80%**
	
A small negotiation win on one issue can be used to leverage positions on related issues.	
49. Client White Ants - 40%	**49. Contractor White Ants - 20%**
	
Team members independently seek change from the political office.	
50. Client Pissing in the Wind - 80%	**50. Contractor Pissing in the Wind - 60%**
	
One party's negotiator does not have his principal's approved baseline positions.	

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
51. Client P Platers - 40% 	**51. Contractor P Platers - 60%** 
A negotiation team is comprised of rookies.	
52. Client Who Rules the Waves - 100% 	**52. Contractor Who Rules the Waves - 60%** 
Regardless of the client's specification, it must be done our way.	
53. Client Spinning Bow Tie - 0% 	**53. Contractor Spinning Bow Tie - 60%** 
I don't trust the middle-man.	

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
54. Client Mother's Choice - 40%	**54. Contractor Mother's Choice - 60%**
	
Client suggests the contractor abandons a proposed subcontractor.	
55. Client Keeping up Appearances - 20%	**55. Contractor Keeping up Appearances - 40%**
	
The tendering process progresses conscientiously while a latent political decision has already been made.	
56. Client Free Lunch - 20%	**56. Contractor Free Lunch - 20%**
	
A buyer uses incentives to urge a seller to participate.	

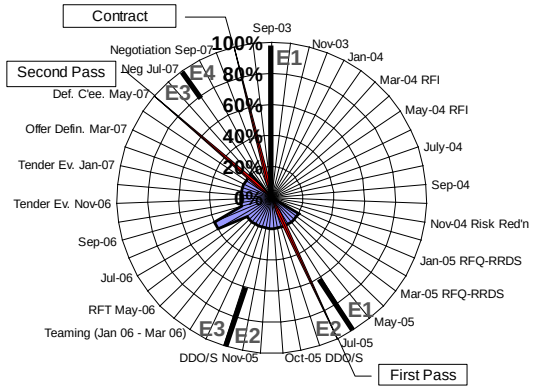
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
57. Client Included Out - 60%	**57. Contractor Included Out - 0%**



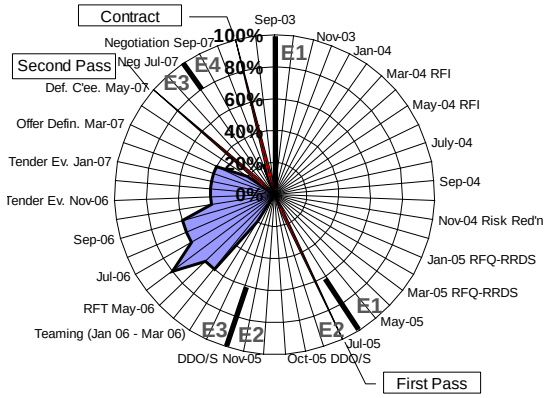


Some potential suppliers receive disproportionate welcoming attention.

58. Client Refilling the Honey Pot - 40%

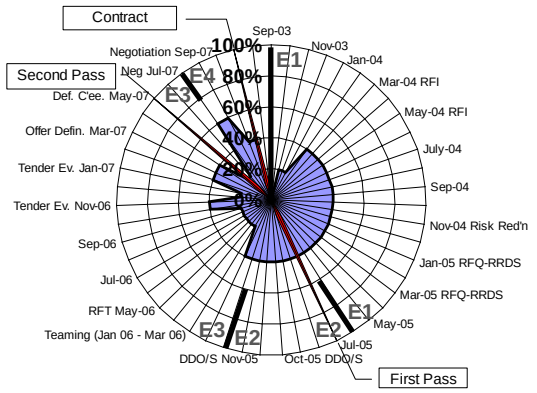


58. Contractor Refilling the Honey Pot - 80%

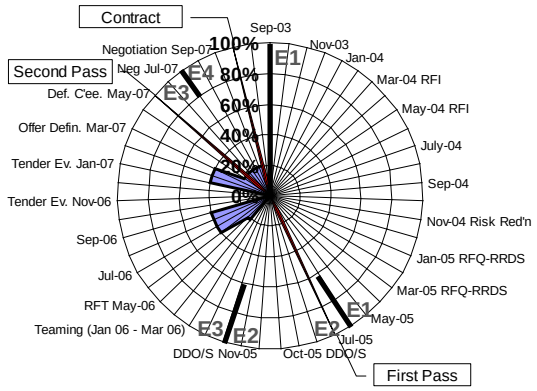


Enticed participants need constant maintenance.

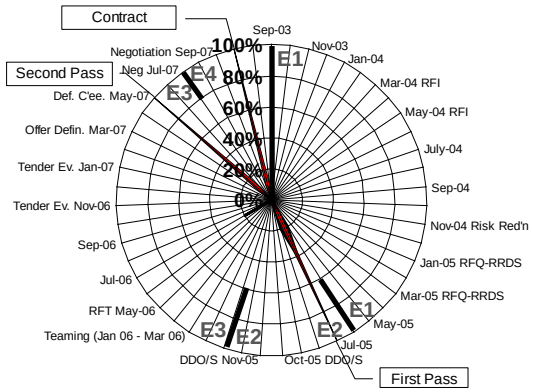
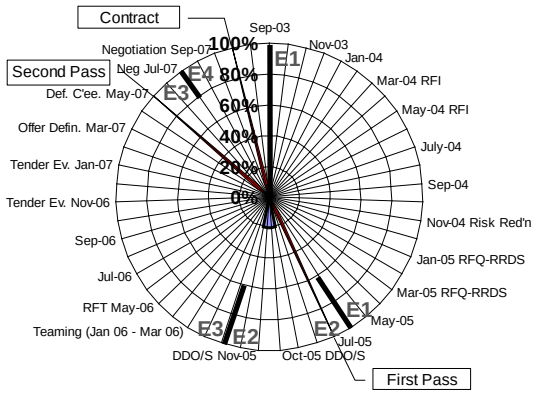
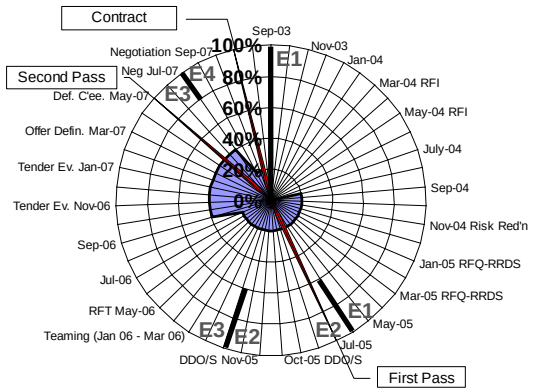
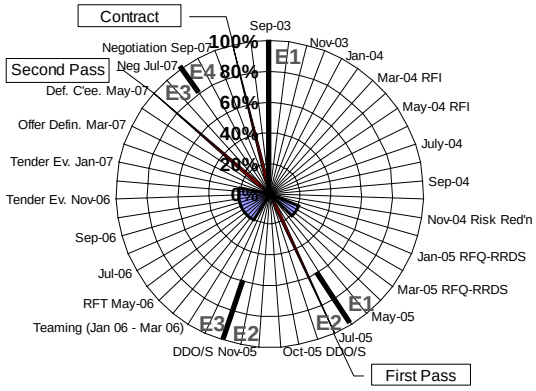
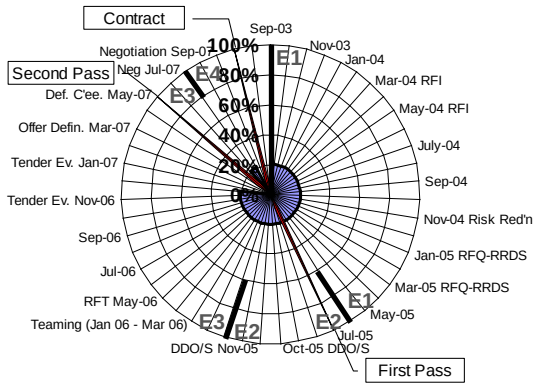
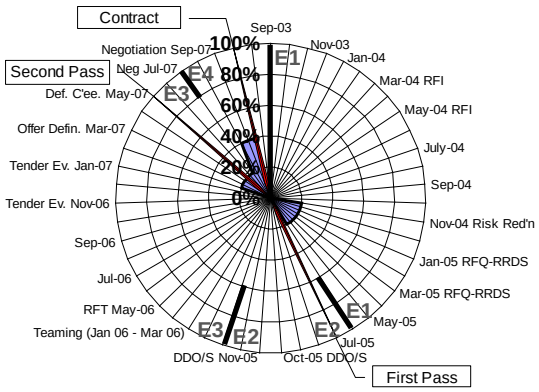
59. Client Seeds of Doubt - 100%



59. Contractor Seeds of Doubt - 80%

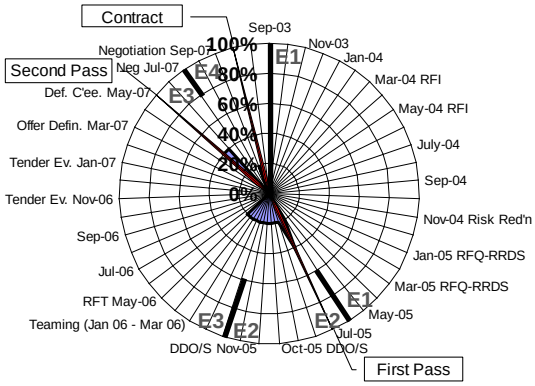


A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.

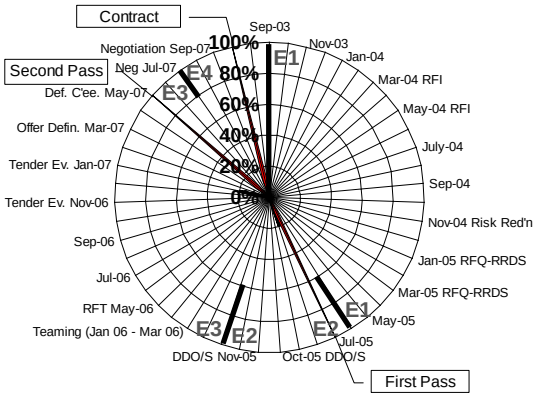
ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
60. Client A Moment of Truth - 40% 	**60. Contractor A Moment of Truth - 20%** 
Impeccable official information of strategic importance.	
61. Client Stalking Horse - 40% 	**61. Contractor Stalking Horse - 40%** 
Tenderers believe they are being used as a political 'stalking horse'.	
62. Client Real Power - 40% 	**62. Contractor Real Power - 60%** 
The political office is called upon to reduce artificial complexity generated by the bureaucracy.	

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

63. Client To Play the King - 80%

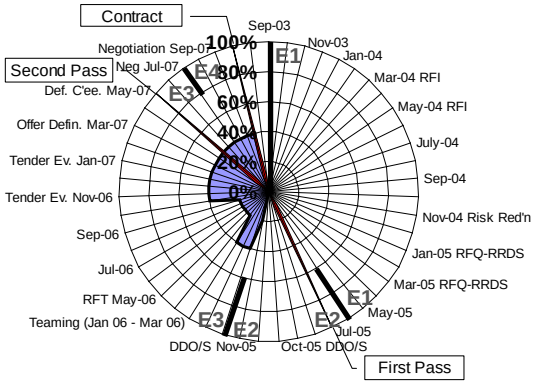


63. Contractor To Play the King - 20%

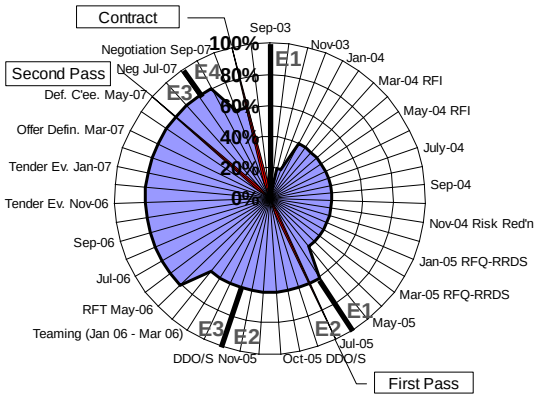


The risks are so high that the decisions can only be carried by politicians.

64. Client Sweet Seduction - 60%

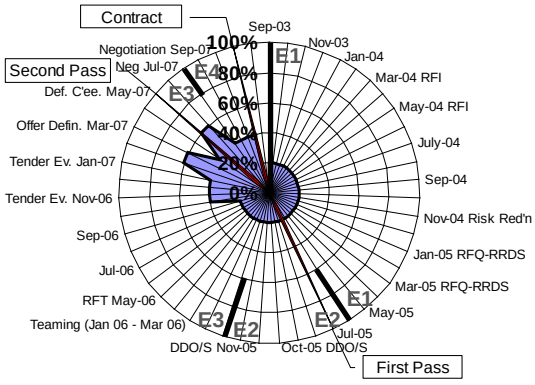


64. Contractor Sweet Seduction - 80%

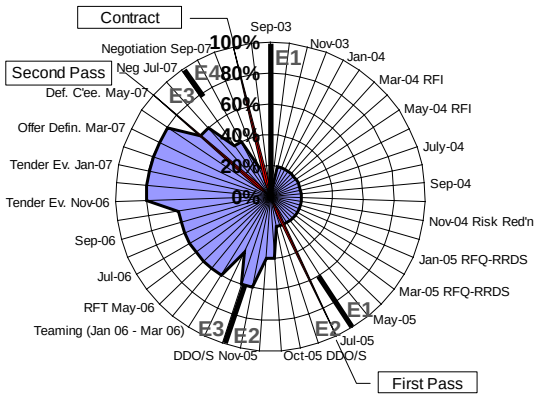


Probing for potential intelligence sources.

65. Client Who's Who in the Zoo - 80%



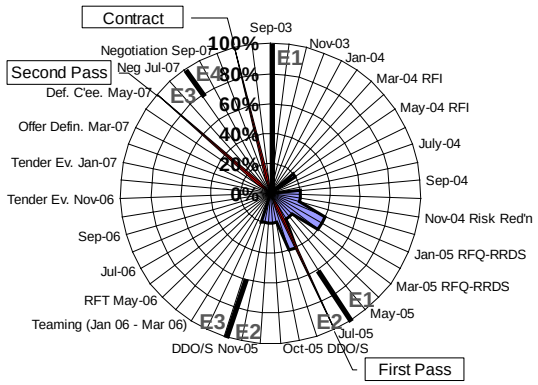
65. Contractor Who's Who in the Zoo - 80%



Putting structure to the political issues and players.

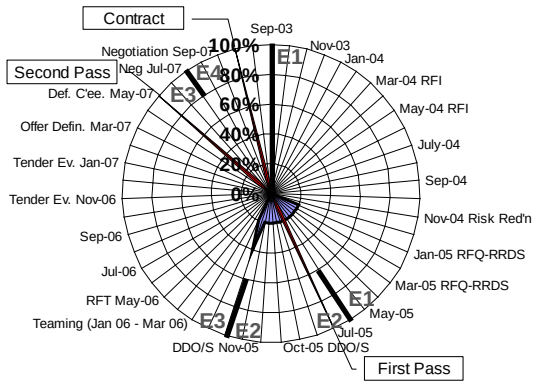
ELECTED RECALLED **CLIENT** AWARENESS

66. Client The Cook and the Chef - 60%



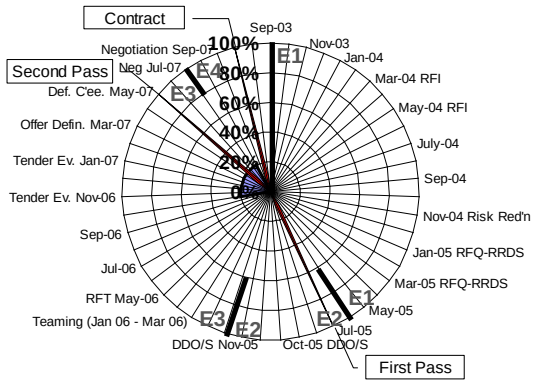
Political manipulation of the acquisition strategy.

67. Client Tectonics - 60%



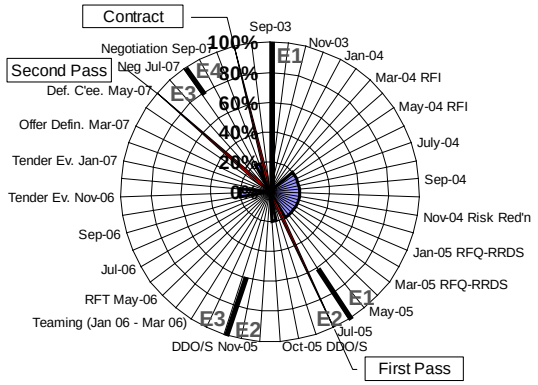
Corporate mergers and acquisitions could impact the political preferences.

68. Client Probity Police - 20%



The level of probity becomes a self-serving process without adding value to the program.

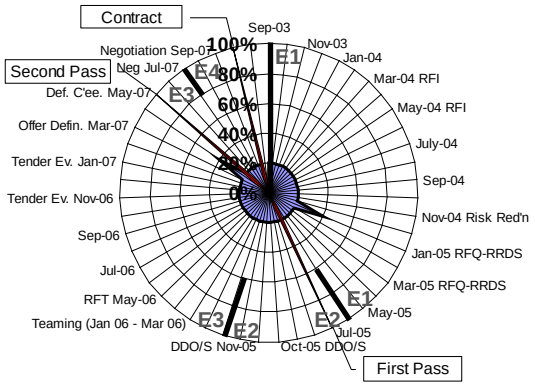
69. Client The Bureaucrat's Bureaucrat - 40%



Black-Letter interpretations are impeding the acceptance of innovative solutions.

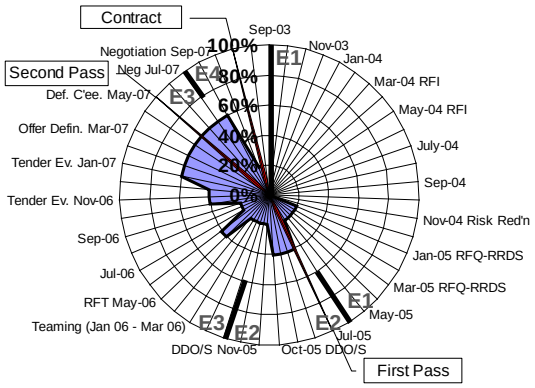
ELECTED RECALLED **CLIENT** AWARENESS

70. Client Power Politics - 60%



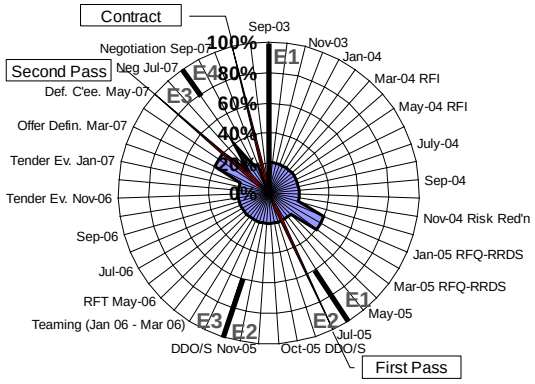
One or more dominating personalities bias the decision-making process.

71. Client With Friends Like These - 100%



A significant project risk is being generated within our own (macro) organisation.

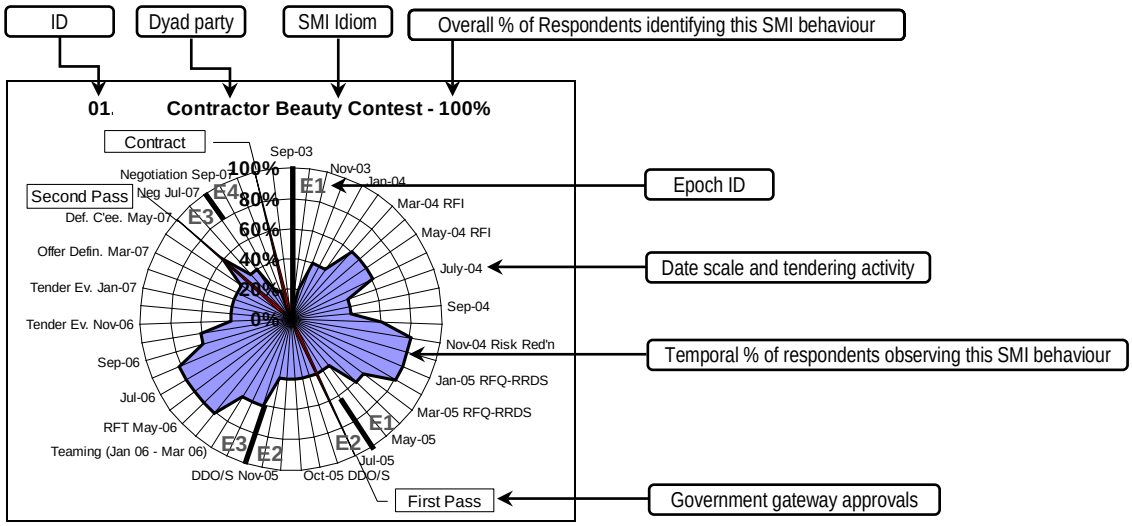
72. Client Steadfast 'Iron-Colonel' - 80%



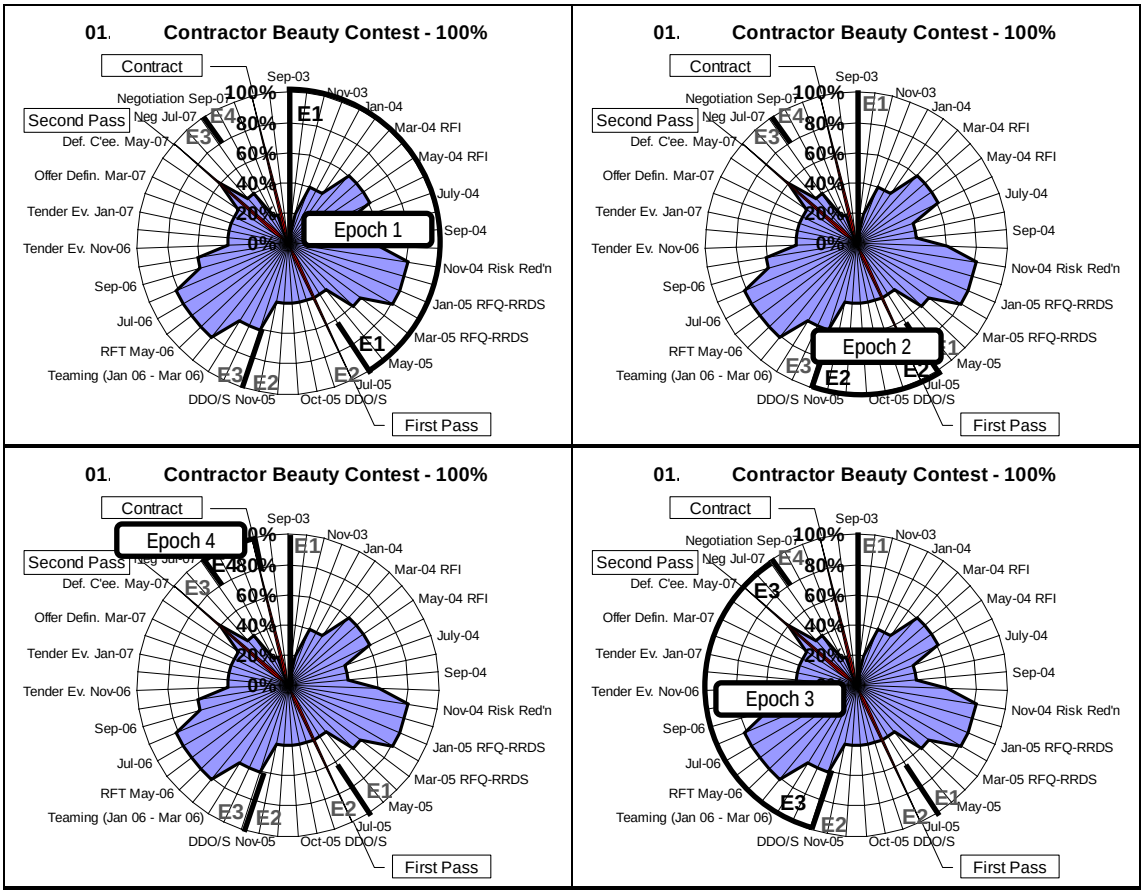
Relentless discourse to achieve the best solution for the war-fighters.

Case S

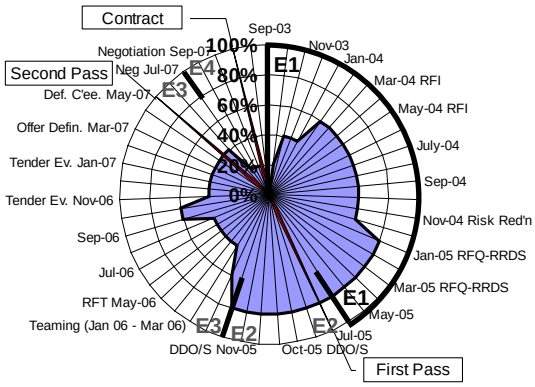
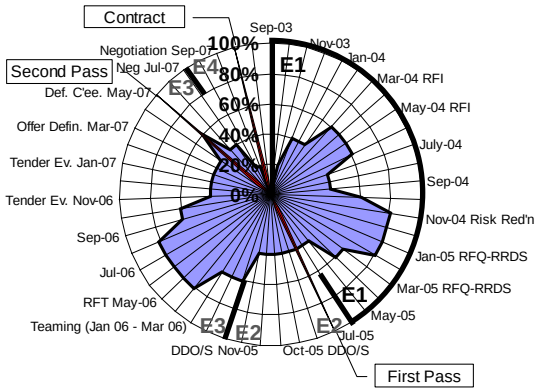
Legend:



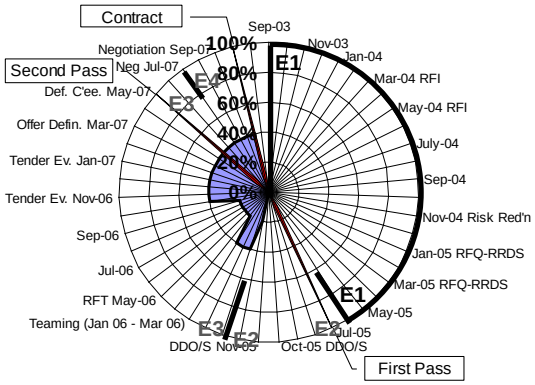
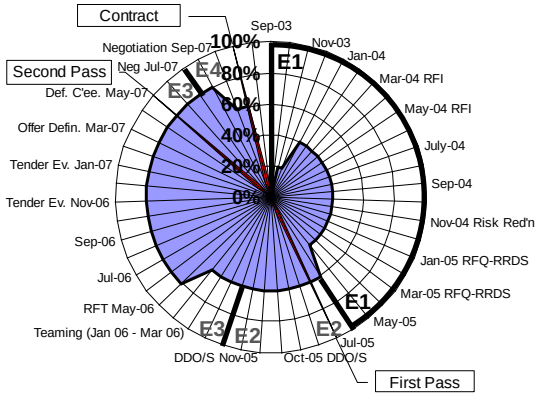
Epoch sectors:



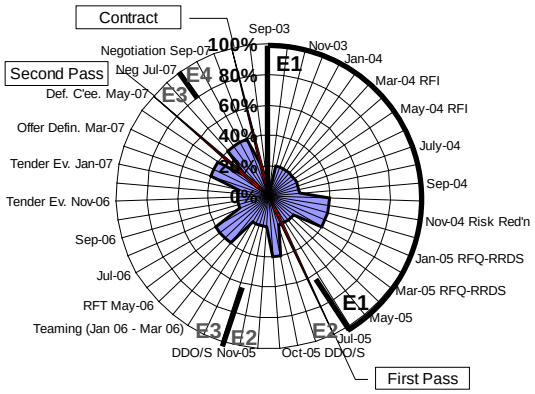
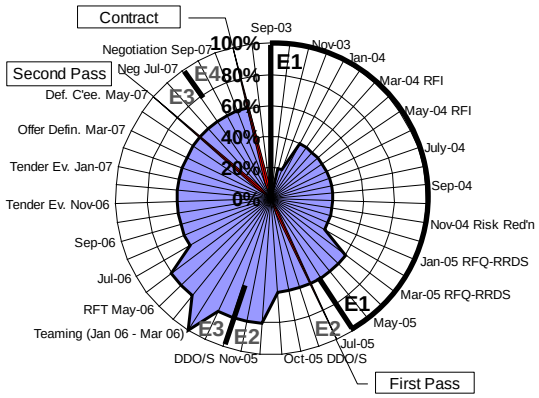
Epoch 1 (E1)

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
01. Client Beauty Contest - 100%	**01. Contractor Beauty Contest - 100%**
	

A party's behaviour concentrates on its presentation values.

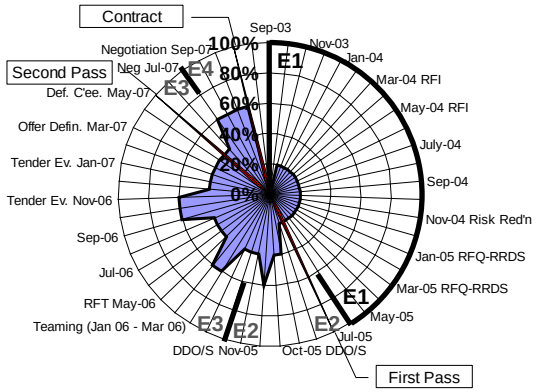
64. Client Sweet Seduction - 60%	**64. Contractor Sweet Seduction - 80%**
	

Probing for potential intelligence sources.

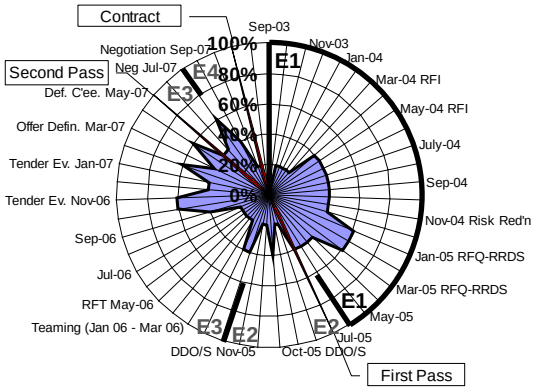
24. Client Auntie Mame - 60%	**24. Contractor Auntie Mame - 100%**
	

Obtaining high-value insights from a non-contracting party.

15. Client Finding Nemo - 80%

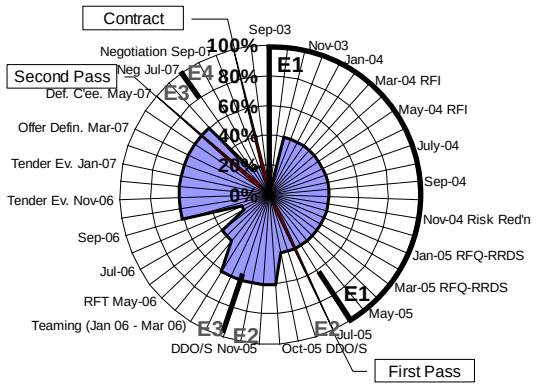


15. Contractor Finding Nemo - 80%

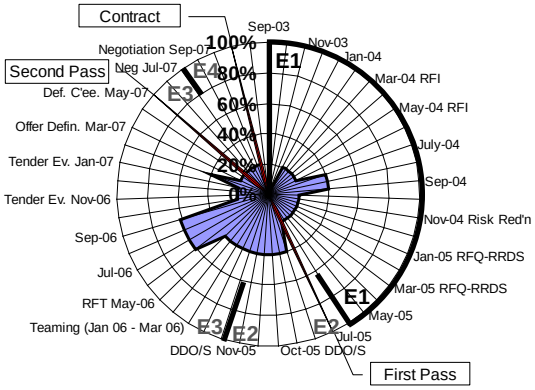


A party knows that there is a game at play but has difficulty defining its structure and parameters.

08. Client Vanity Fair - 80%

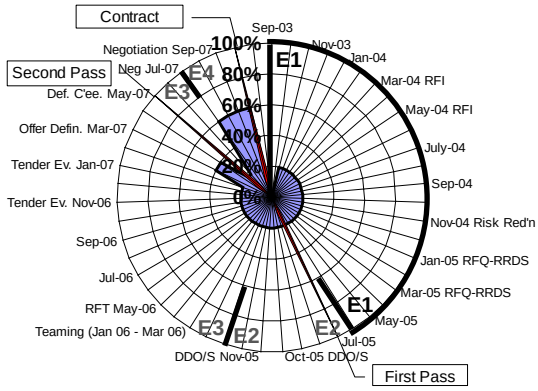


08. Contractor Vanity Fair - 80%

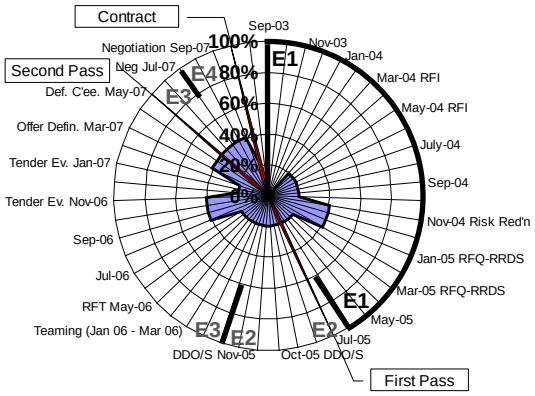


A party feels pressure to participate because of the project size and/or its market stature.

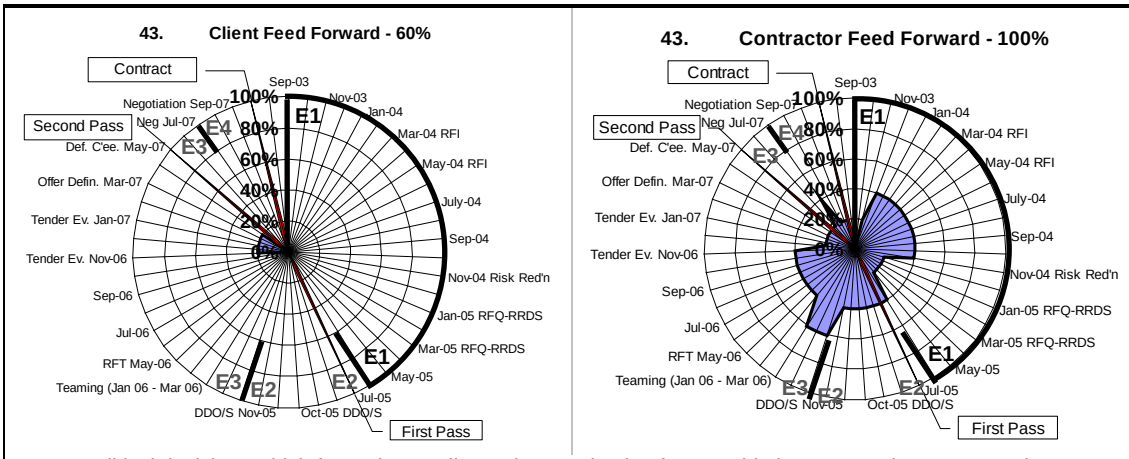
28. Client Ménage à Trois - 100%



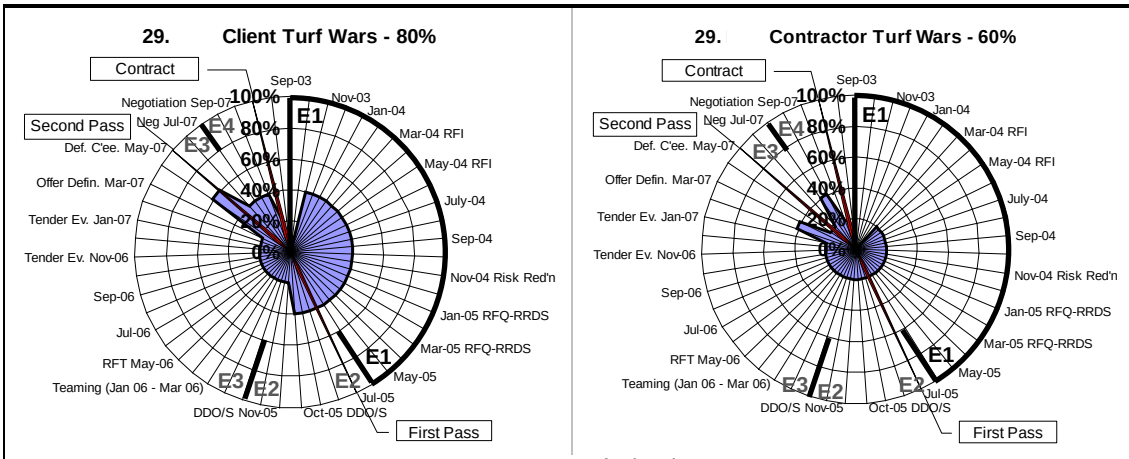
28. Contractor Ménage à Trois - 80%



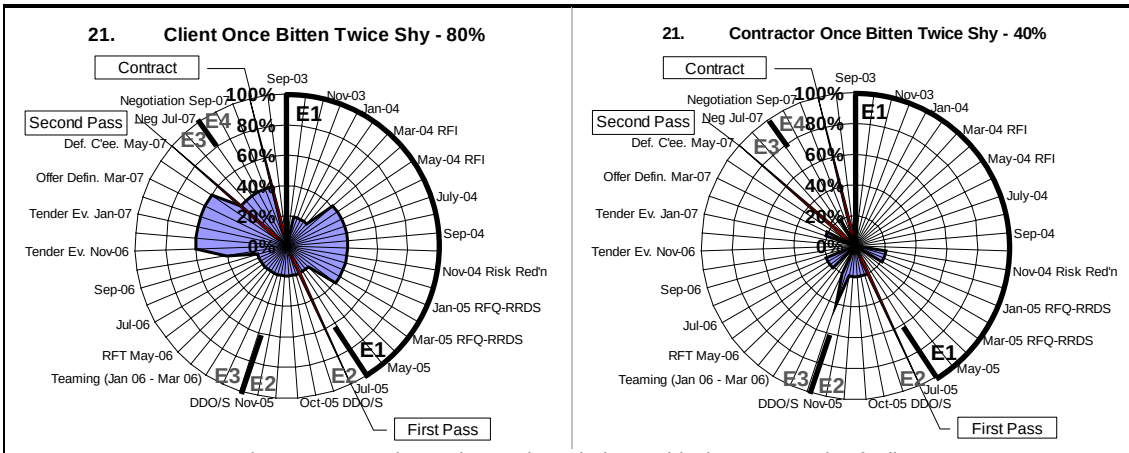
A client and subcontractor are negotiating.



Political decisions which framed an earlier project are having foreseeable impacts on the current project.

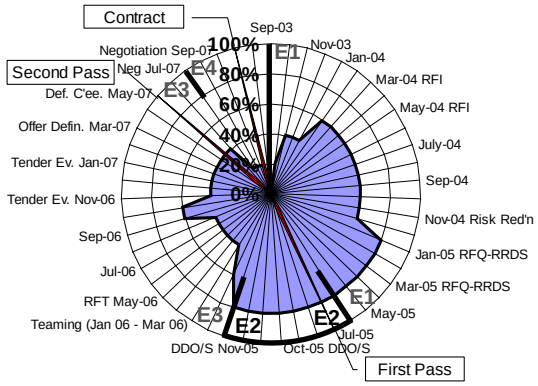
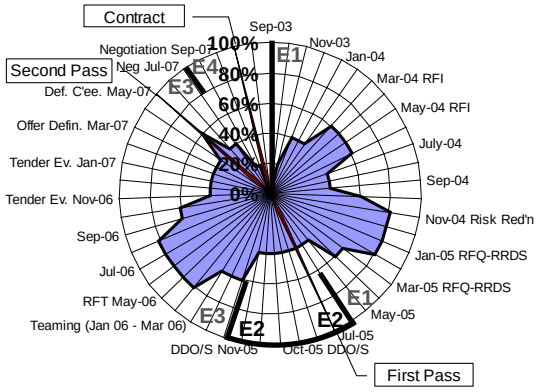


Bureaucrats compete for involvement.

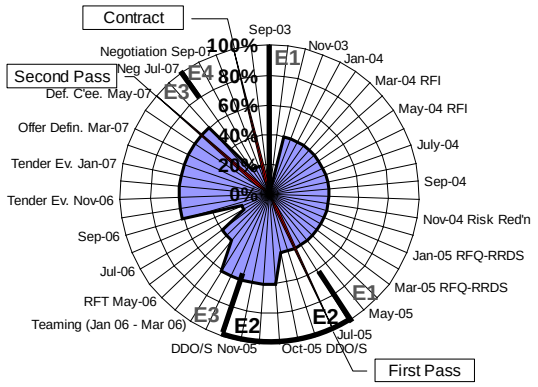
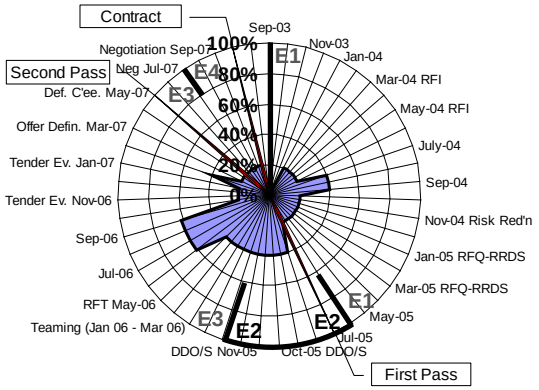


Previous contractual experiences have led to ambivalent or negative feelings.

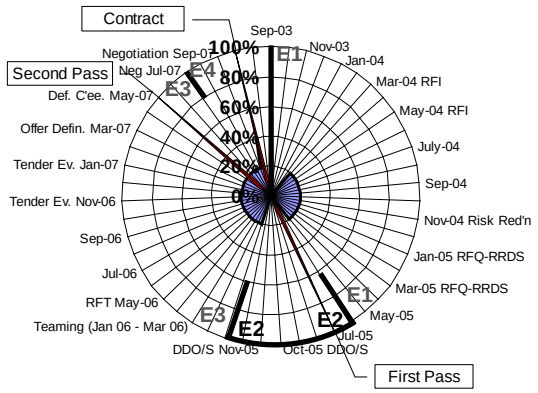
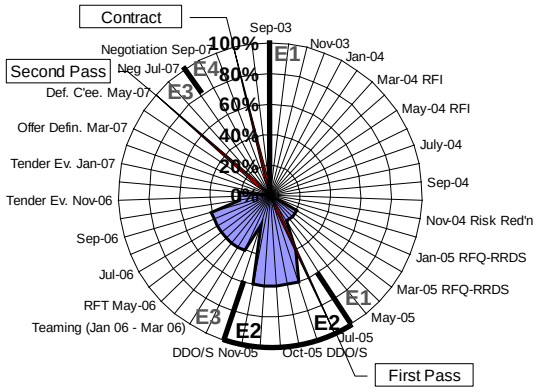
Epoch 2

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
01. Client Beauty Contest - 100% 	**01. Contractor Beauty Contest - 100%** 

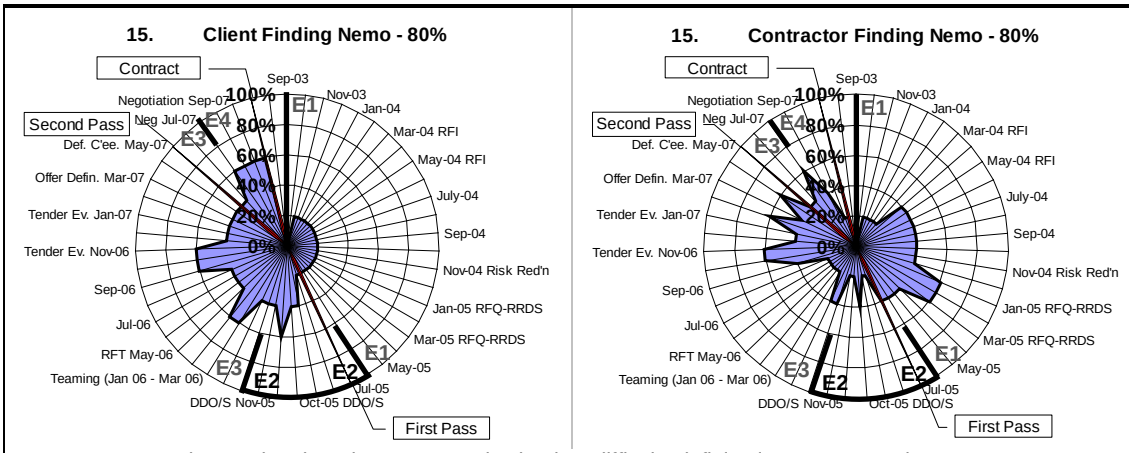
A party's behaviour concentrates on its presentation values.

08. Client Vanity Fair - 80% 	**08. Contractor Vanity Fair - 80%** 

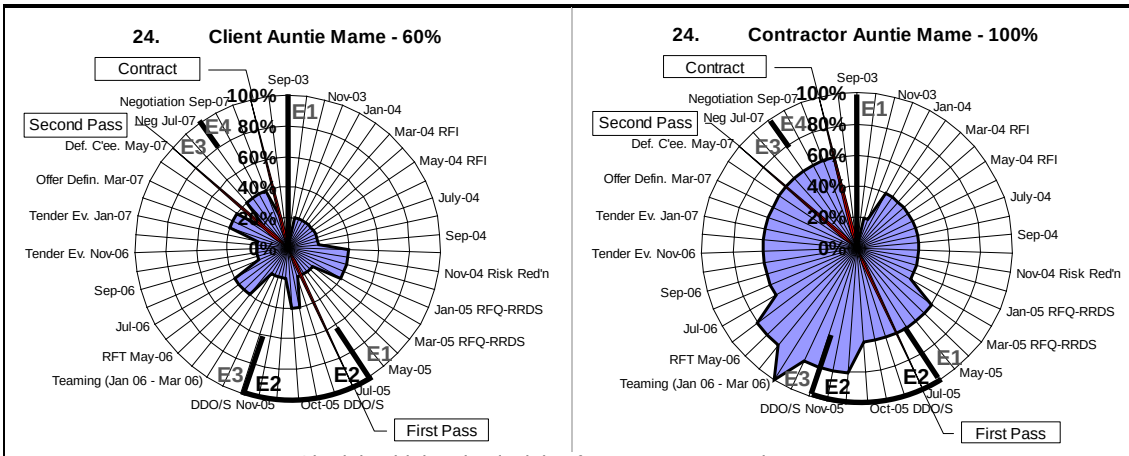
A party feels pressure to participate because of the project size and/or its market stature.

10. Client Jungle Jitters - 80% 	**10. Contractor Jungle Jitters - 100%** 

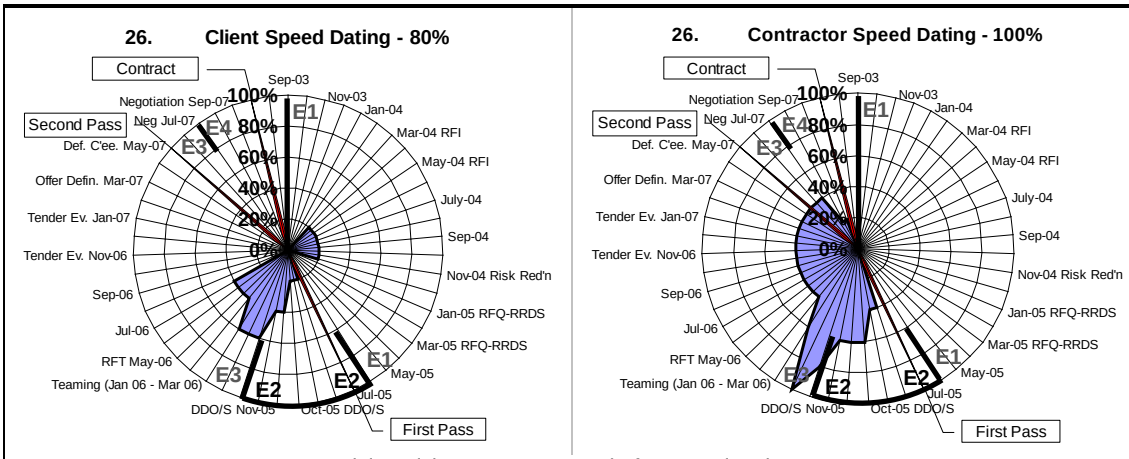
A party is keen for the work but apprehensive about untested relationships.



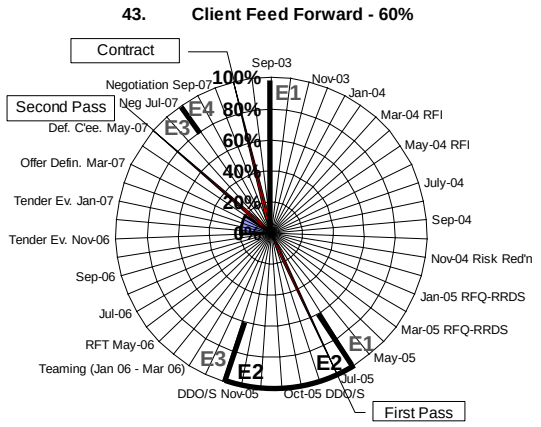
A party knows that there is a game at play but has difficulty defining its structure and parameters.

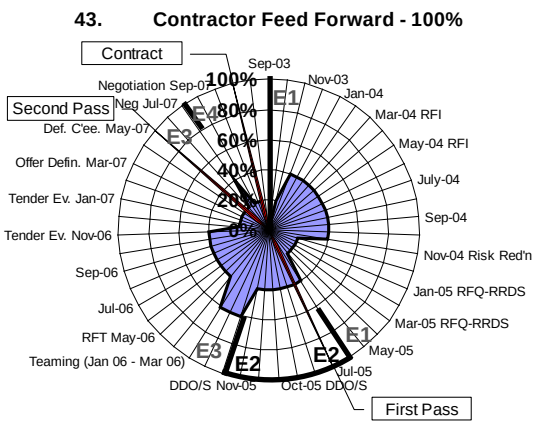


Obtaining high-value insights from a non-contracting party.

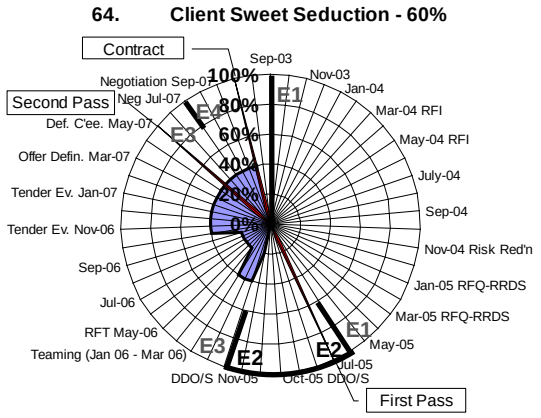


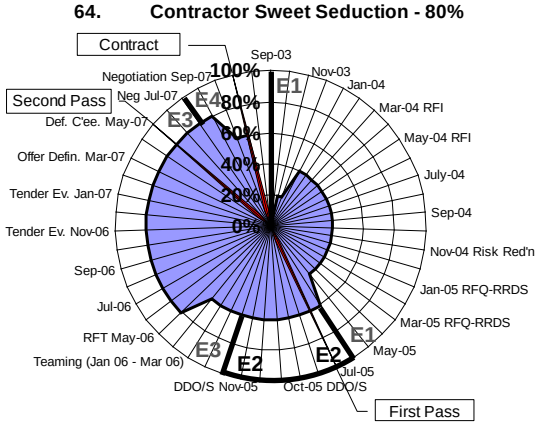
Potential participants must ‘mate’ before entering the game.





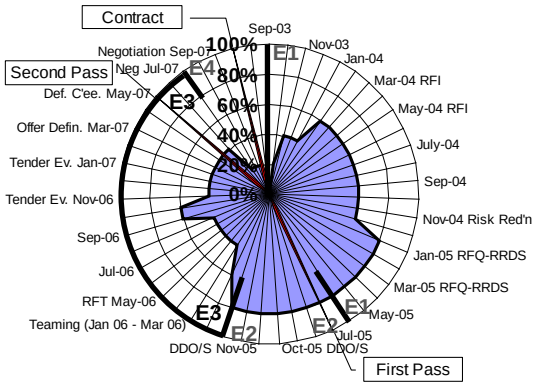
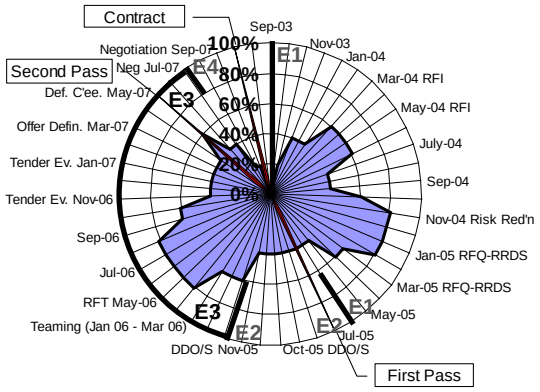
Political decisions which framed an earlier project are having foreseeable impacts on the current project.



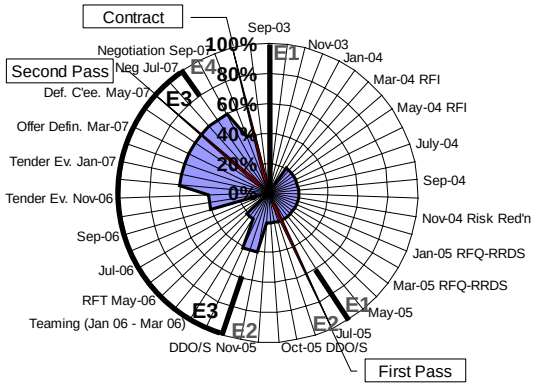
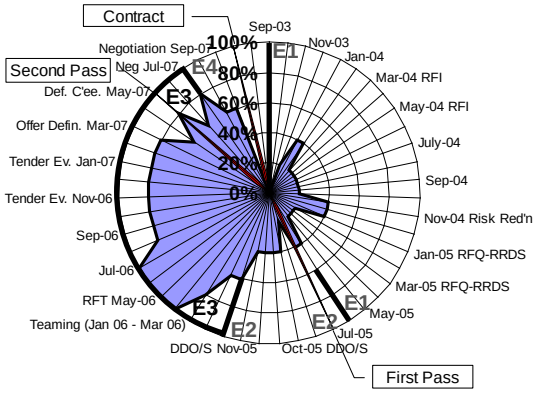


Probing for potential intelligence sources.

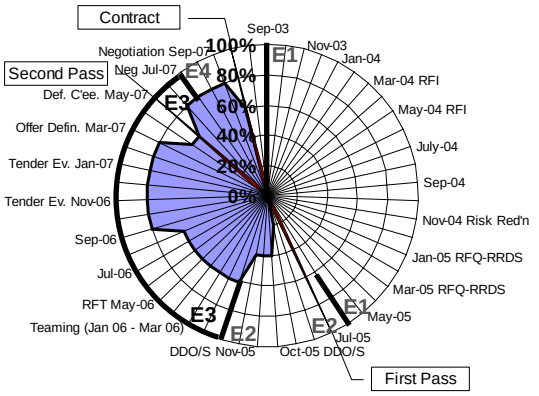
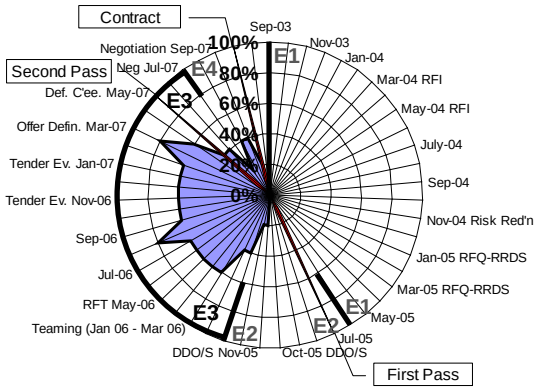
Epoch 3

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
01. Client Beauty Contest - 100% 	**01. Contractor Beauty Contest - 100%** 

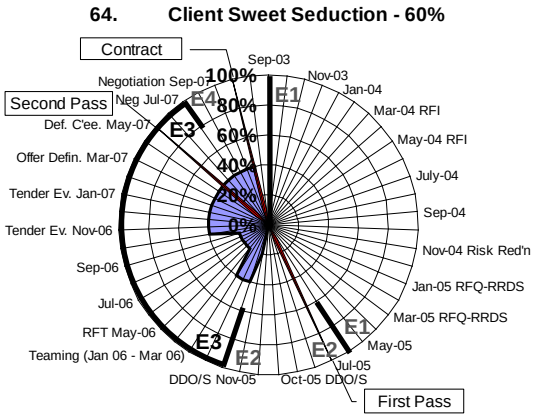
A party's behaviour concentrates on its presentation values.

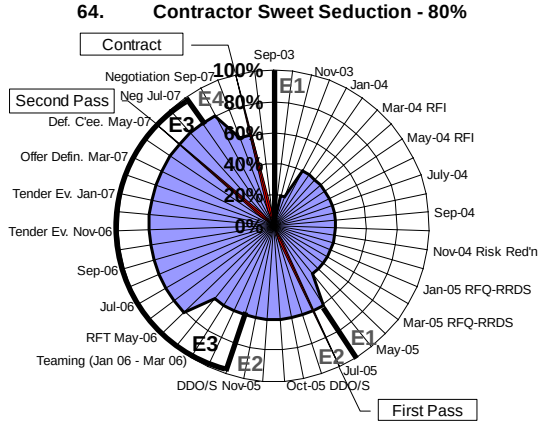
02. Client Smart Thinking - 100% 	**02. Contractor Smart Thinking - 100%** 

Attention is focused on a party's business-model (and potential risks).

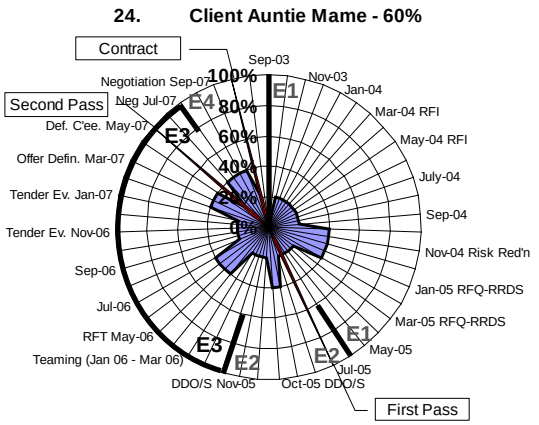
11. Client Kashmir - 100% 	**11. Contractor Kashmir - 80%** 

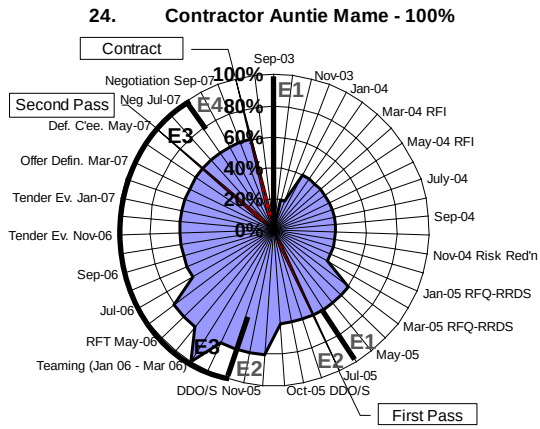
A party behaves apprehensively as it perceives that others may appropriate its current &/or future contract share.



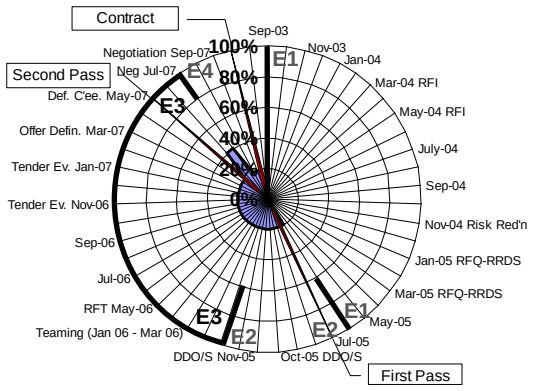


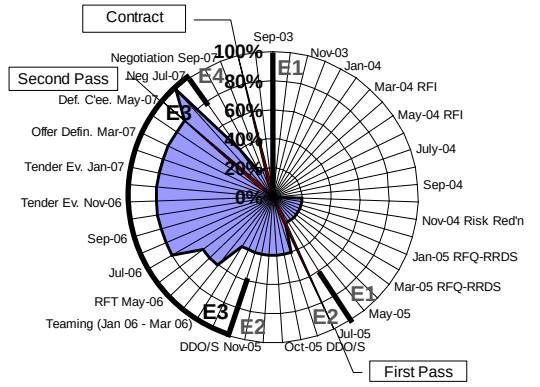
Probing for potential intelligence sources.





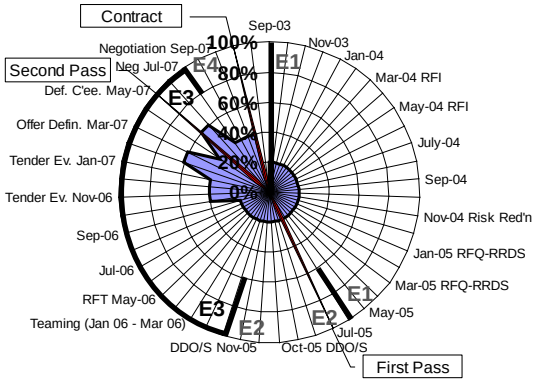
Obtaining high-value insights from a non-contracting party.



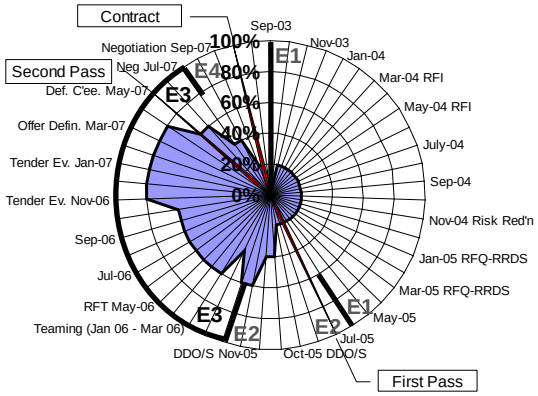


An aura of doubt pervades the process even though everything appears to be technically correct.

65. Client Who's Who in the Zoo - 80%

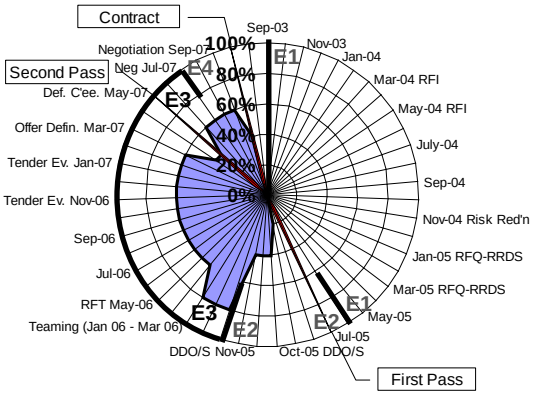


65. Contractor Who's Who in the Zoo - 80%

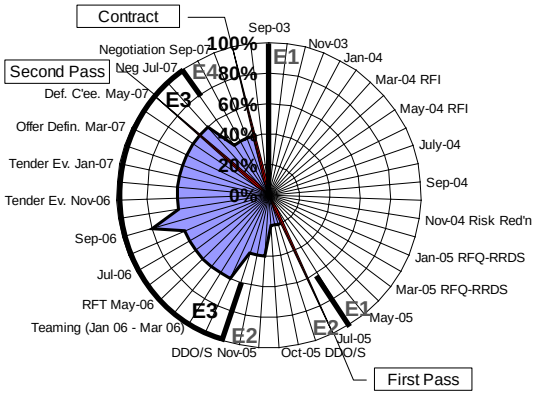


Putting structure to the political issues and players.

12. Client Decree Discordare - 80%

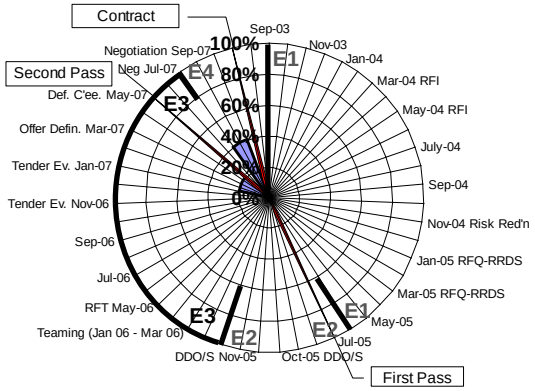


12. Contractor Decree Discordare - 80%

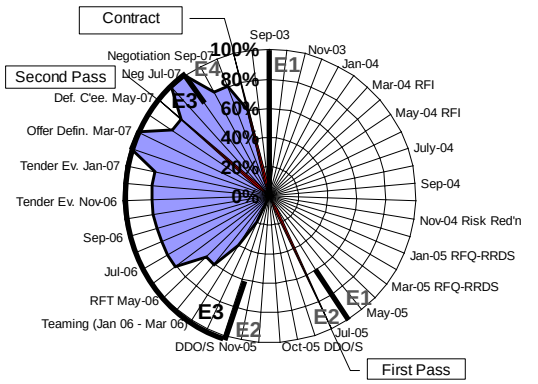


A party believes that another party plays the dual roles of team-player and supplier/system selector.

39. Client Snake - 60%

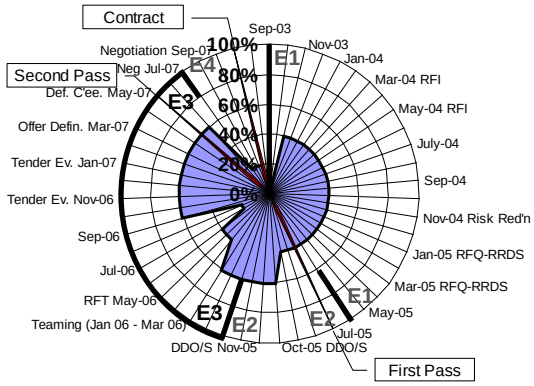


39. Contractor Snake - 100%

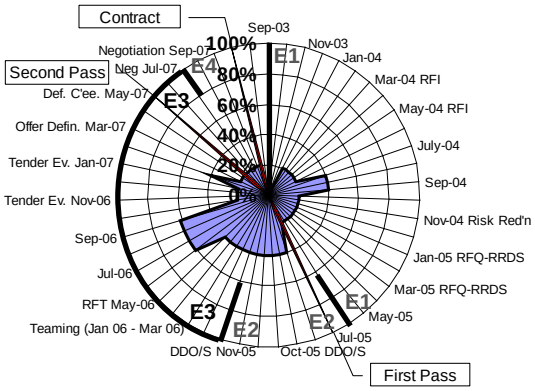


Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

08. Client Vanity Fair - 80%

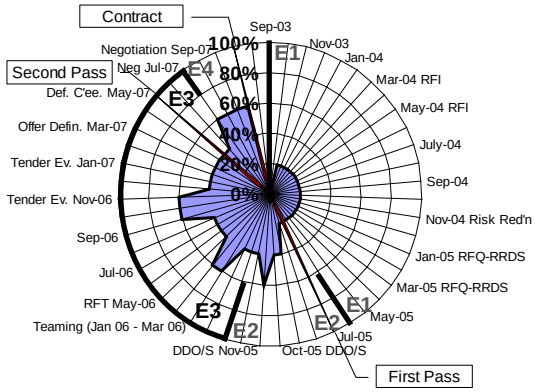


08. Contractor Vanity Fair - 80%

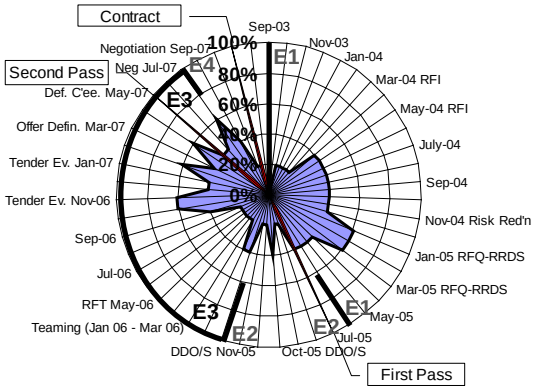


A party feels pressure to participate because of the project size and/or its market stature.

15. Client Finding Nemo - 80%

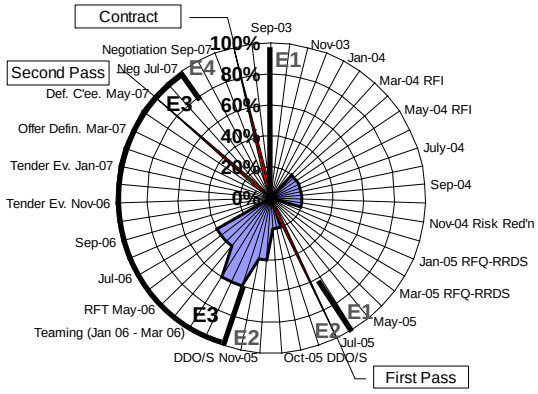


15. Contractor Finding Nemo - 80%

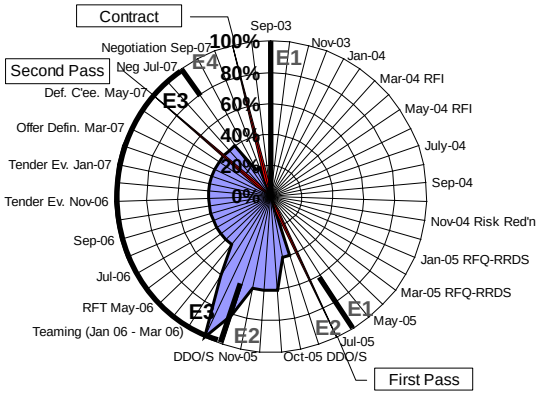


A party knows that there is a game at play but has difficulty defining its structure and parameters.

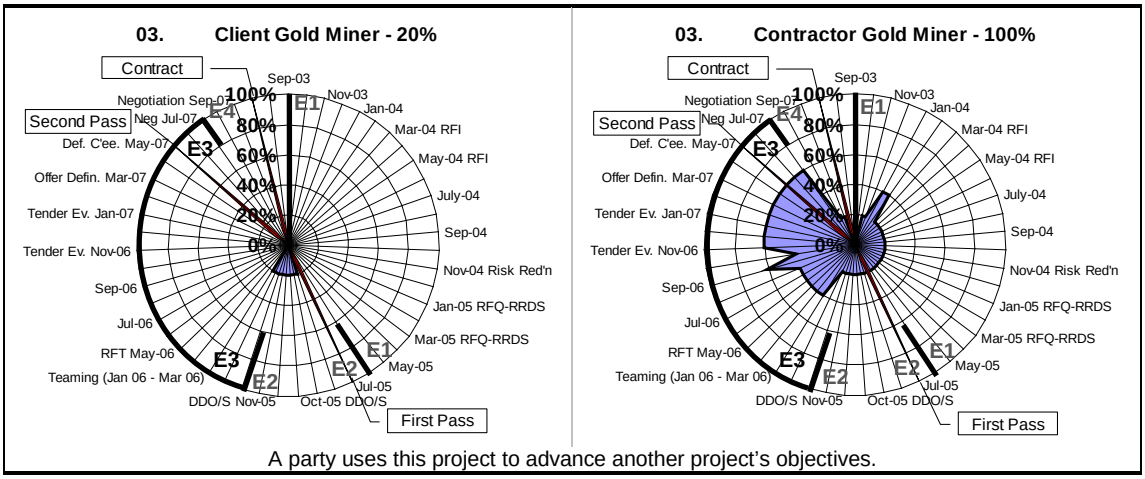
26. Client Speed Dating - 80%



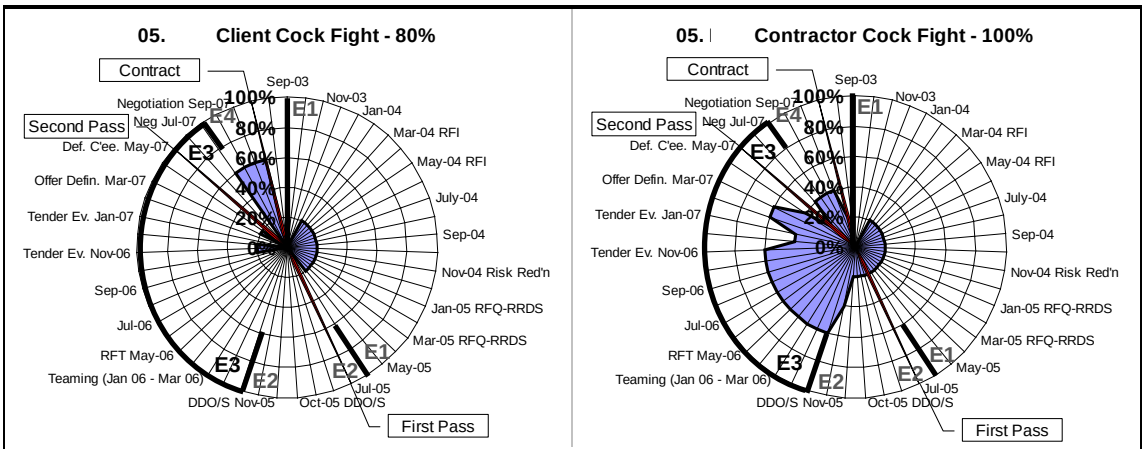
26. Contractor Speed Dating - 100%



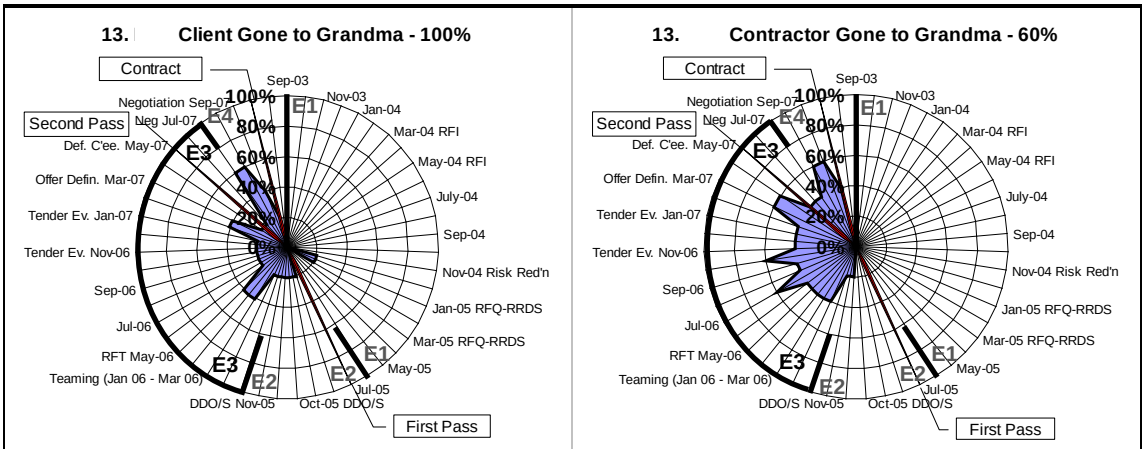
Potential participants must ‘mate’ before entering the game.



A party uses this project to advance another project's objectives.

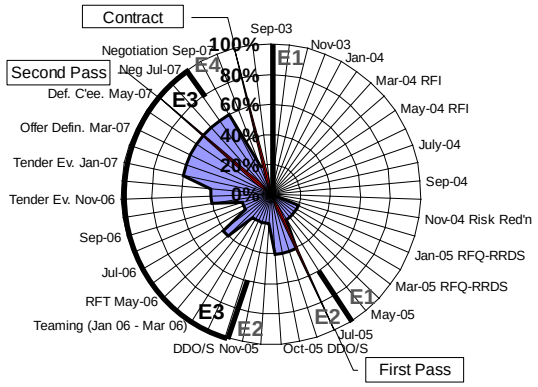


Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.



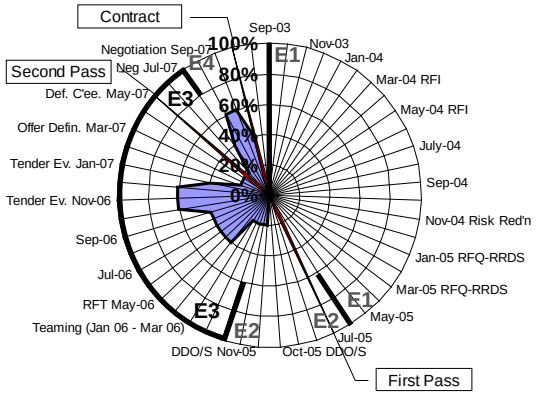
A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.

71. Client With Friends Like These - 100%

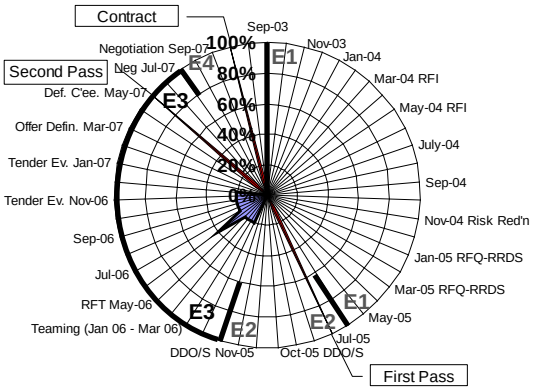


A significant project risk is being generated within our own (macro) organisation.

18. Client Selective Hearing - 100%

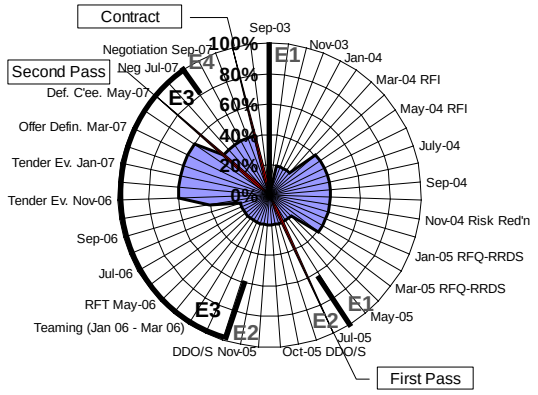


18. Contractor Selective Hearing - 40%

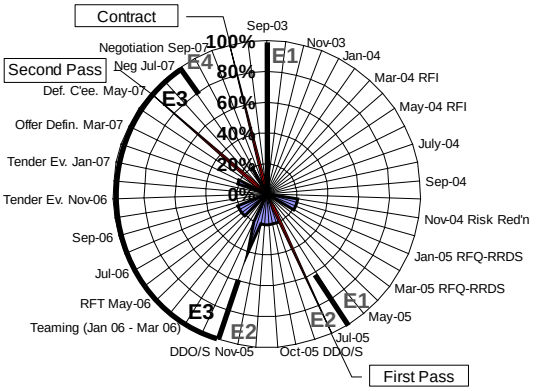


A party chooses to be 'led' to a fundamentally different interpretation of the game at play.

21. Client Once Bitten Twice Shy - 80%

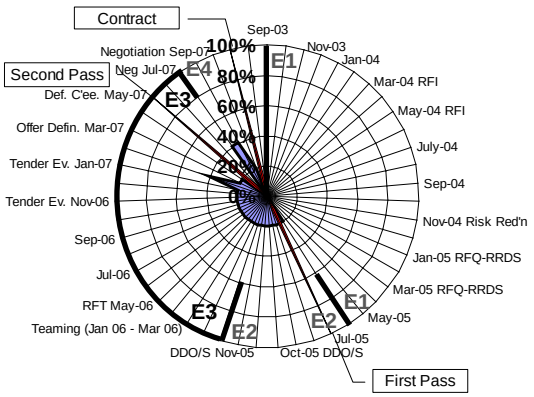


21. Contractor Once Bitten Twice Shy - 40%

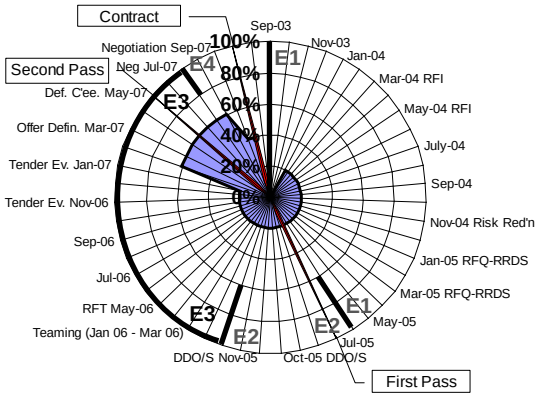


Previous contractual experiences have led to ambivalent or negative feelings.

23. Client Pin the Tail on the Donkey - 80%

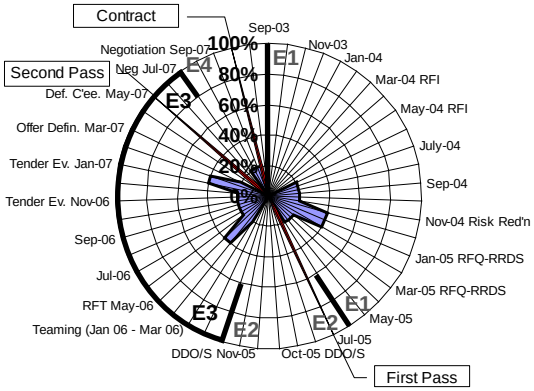


23. Contractor Pin the Tail on the Donkey - 60%

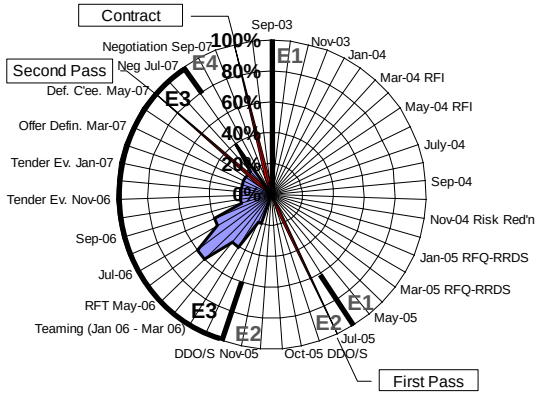


Both parties have a fundamentally different perception of the game at play.

25. Client Ring-a-Ring-a-Rusey - 80%

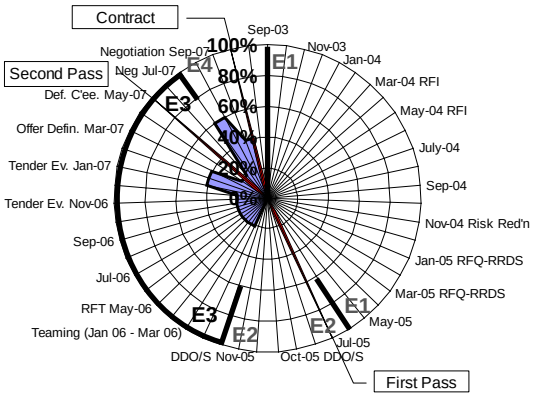


25. Contractor Ring-a-Ring-a-Rusey - 60%

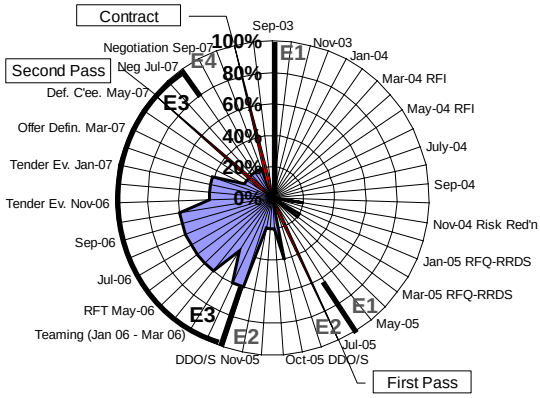


A party resents being gamed.

27. Client Haughty Opportunist - 80%

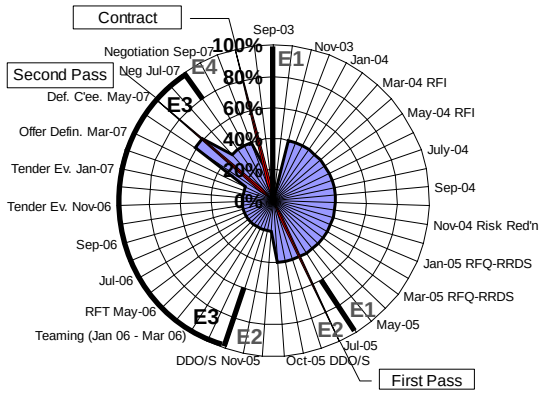


27. Contractor Haughty Opportunist - 80%

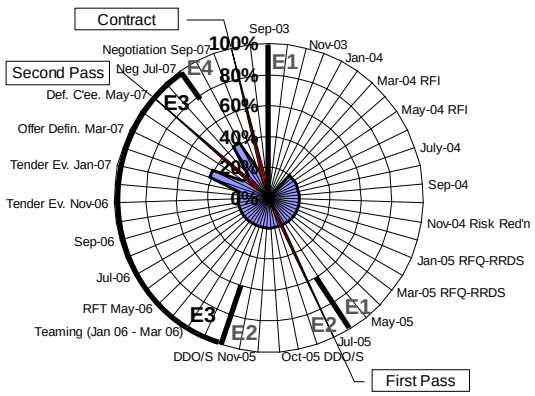


A temporal situation fortuitously affords one party enhanced power.

29. Client Turf Wars - 80%

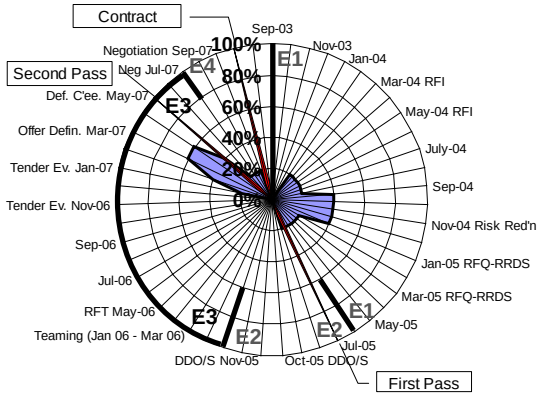


29. Contractor Turf Wars - 60%

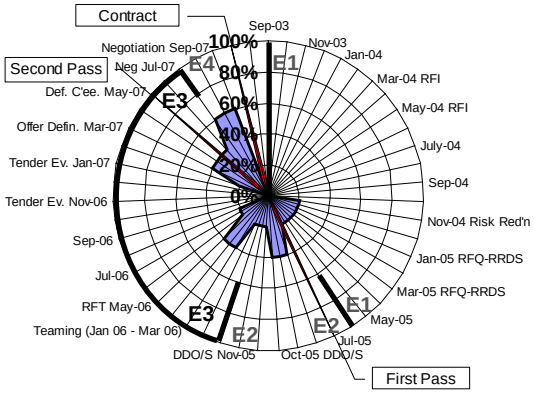


Bureaucrats compete for involvement.

30. Client Machiavelli's Ministrations - 100%

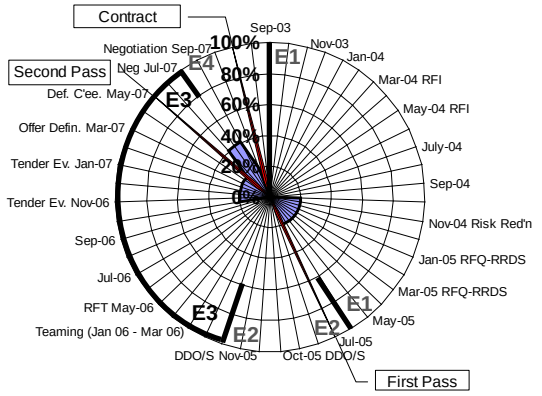


30. Contractor Machiavelli's Ministrations - 80%

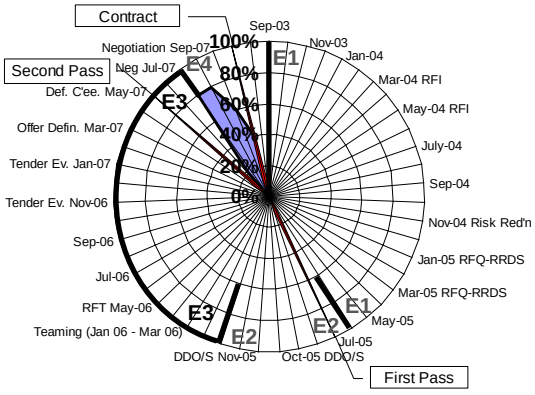


A powerful stakeholder changes the game.

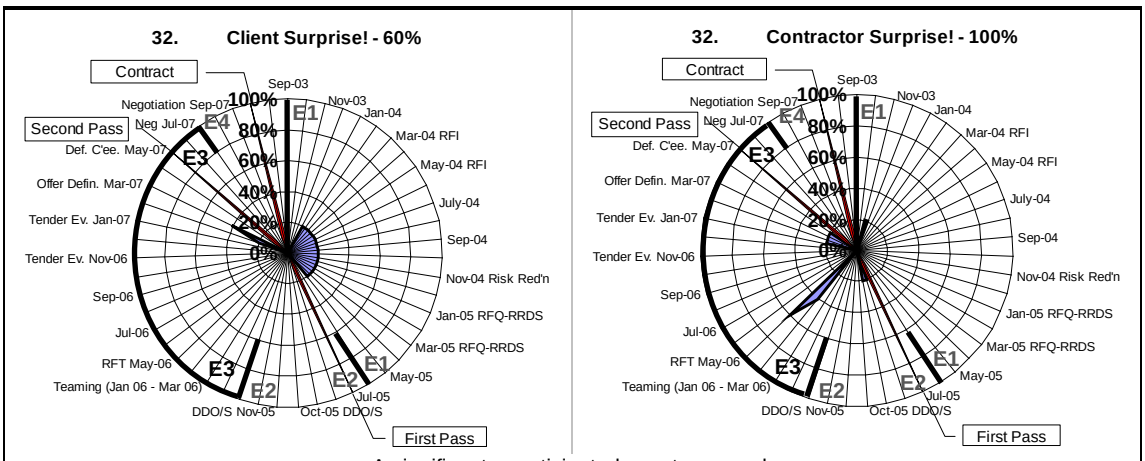
31. Client Popcorn Machine - 100%



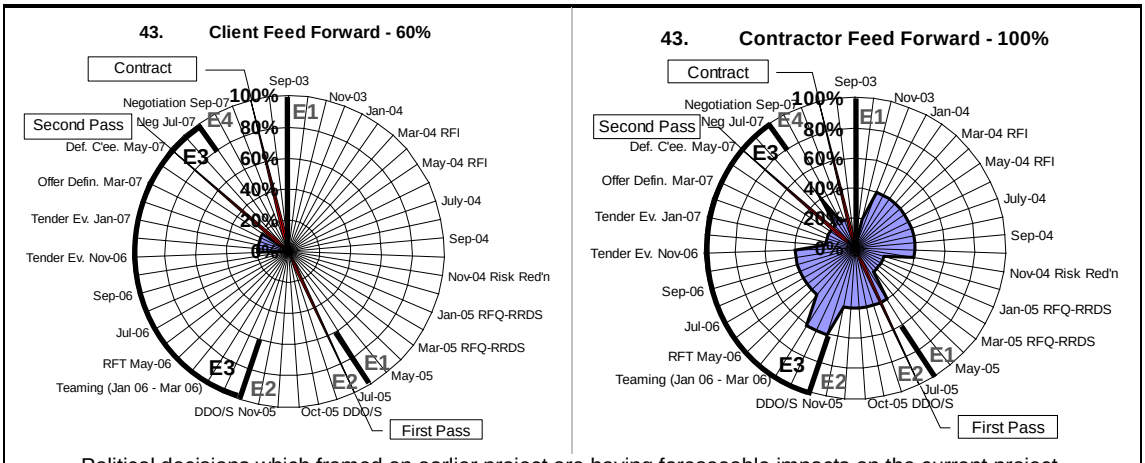
31. Contractor Popcorn Machine - 80%



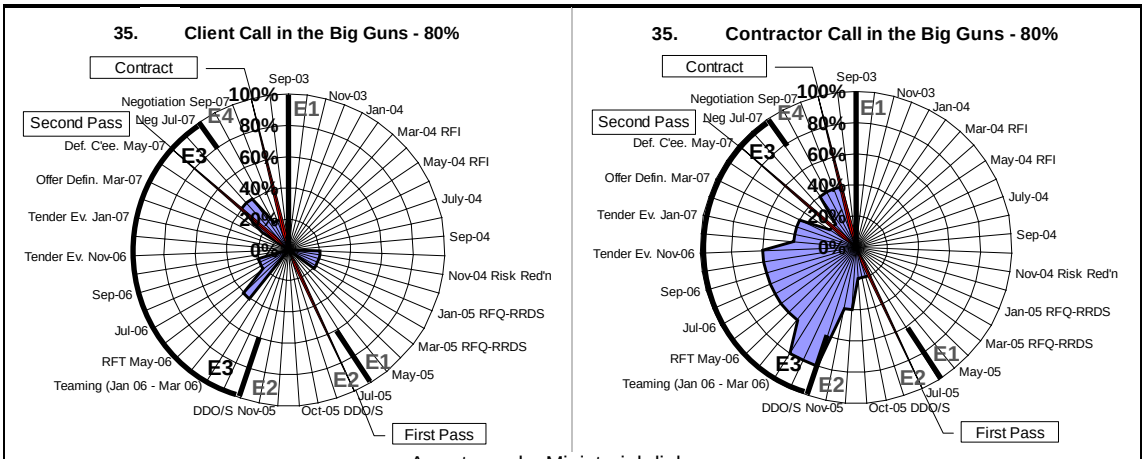
A negotiator has an unstable authority base.



A significant unanticipated event occurred.

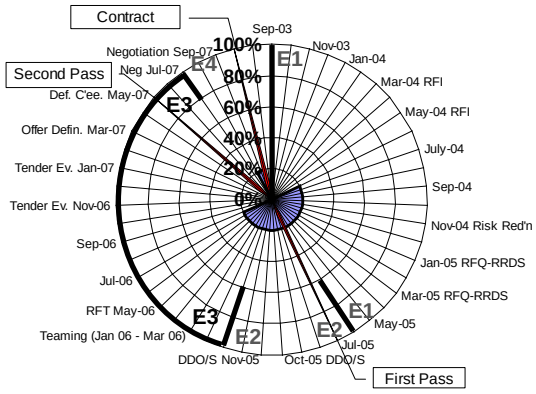


Political decisions which framed an earlier project are having foreseeable impacts on the current project.

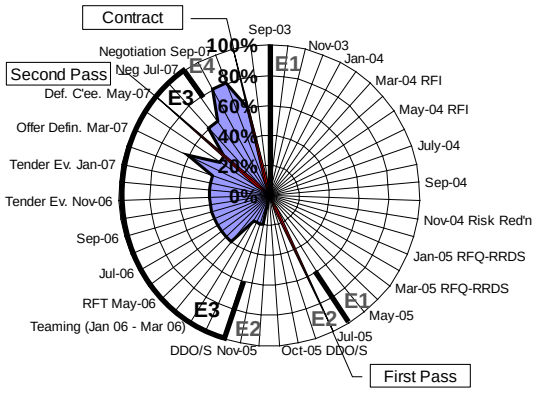


A party seeks Ministerial dialogue.

44. Client Lemons for Sale - 80%

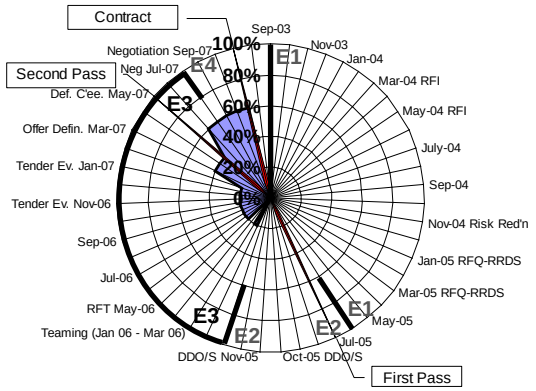


44. Contractor Lemons for Sale - 80%

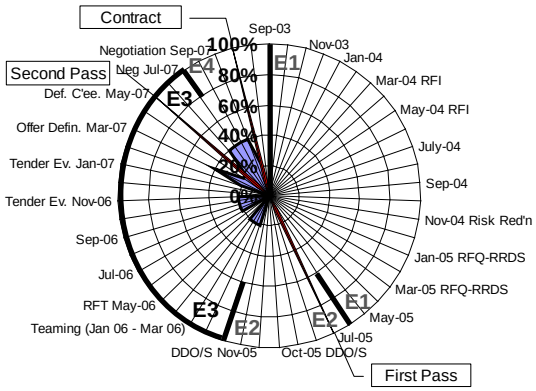


A contractor closely monitors the client for any potential contract breach which could sustain a transfer of risk.

48. Client Wedging - 100%

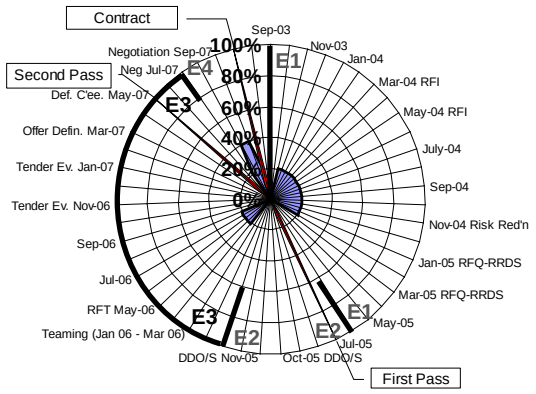


48. Contractor Wedging - 80%

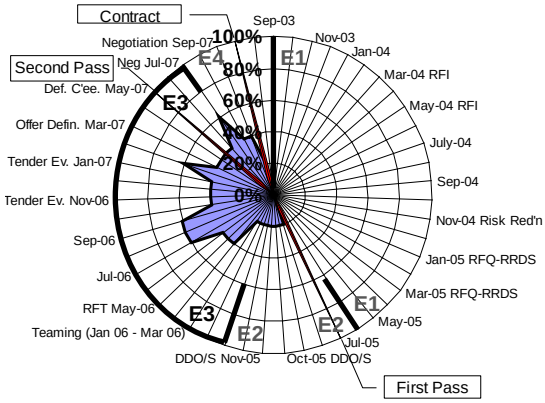


A small negotiation win on one issue can be used to leverage positions on related issues.

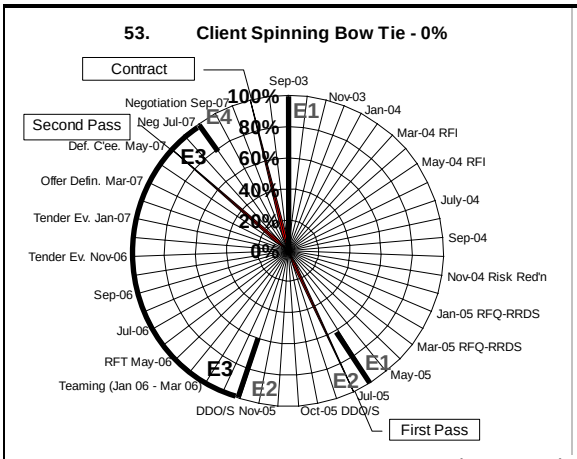
52. Client Who Rules the Waves - 100%

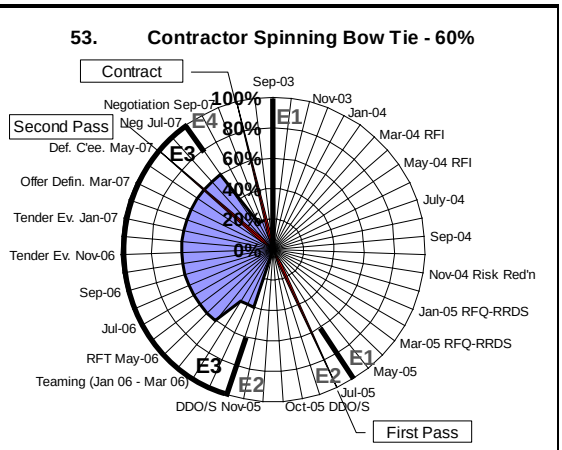


52. Contractor Who Rules the Waves - 60%

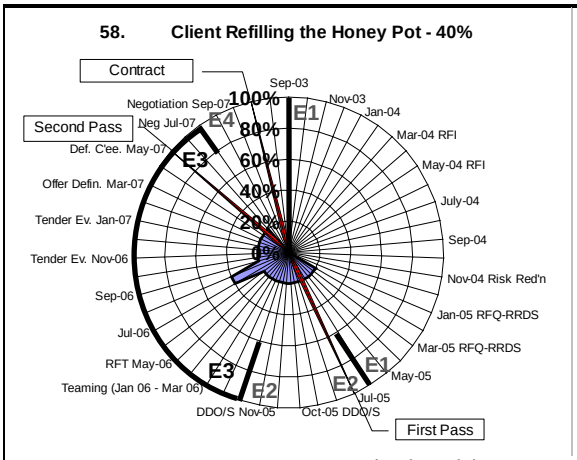


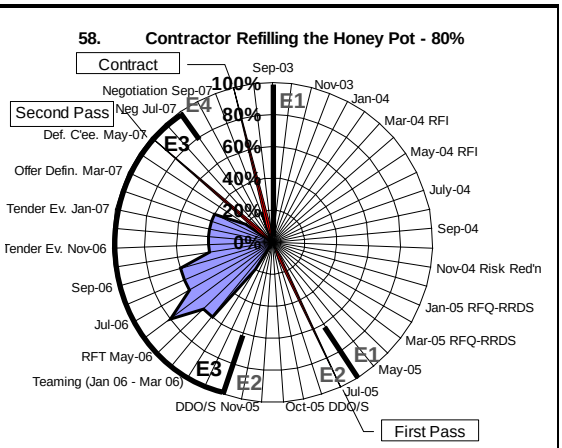
Regardless of the client's specification, it must be done our way.





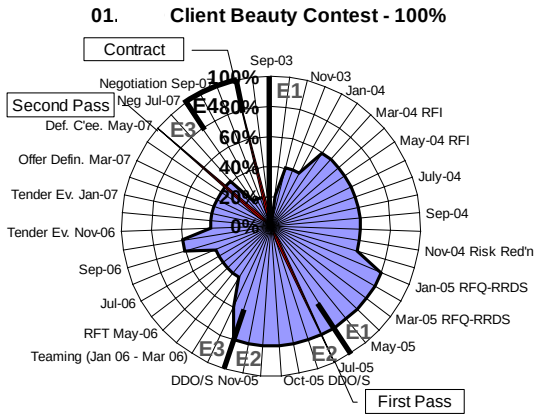
I don’t trust the middle-man.

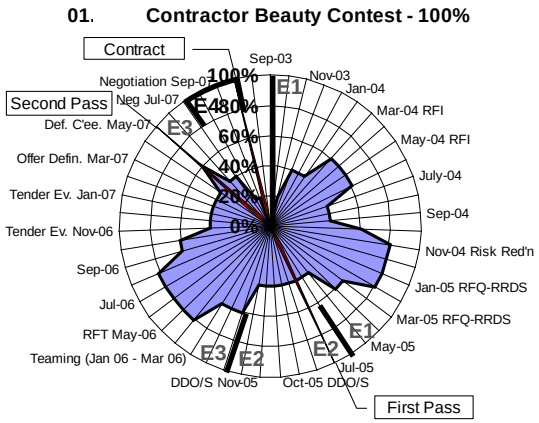




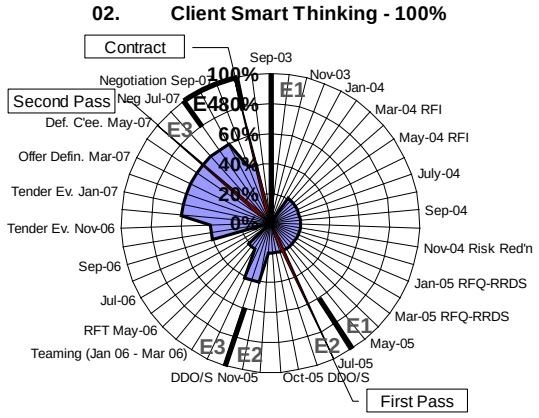
Enticed participants need constant maintenance.

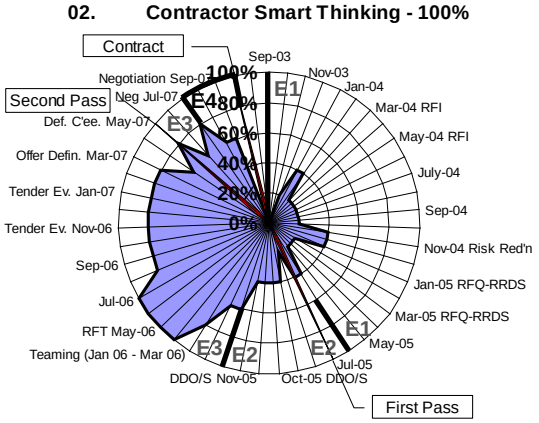
Epoch 4



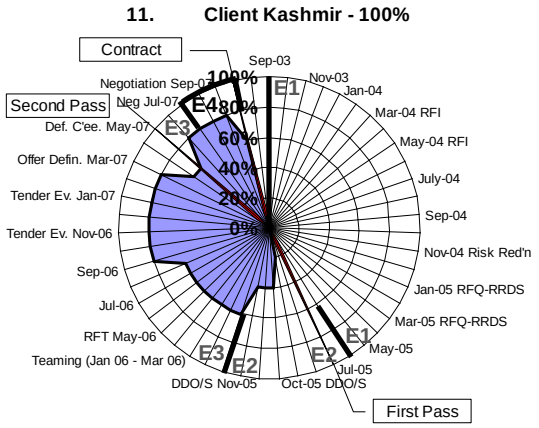


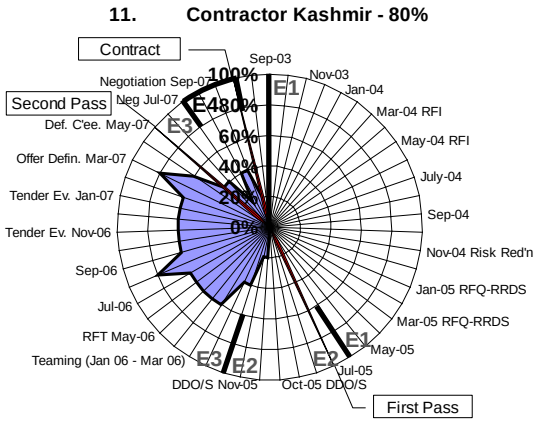
A party's behaviour concentrates on its presentation values.





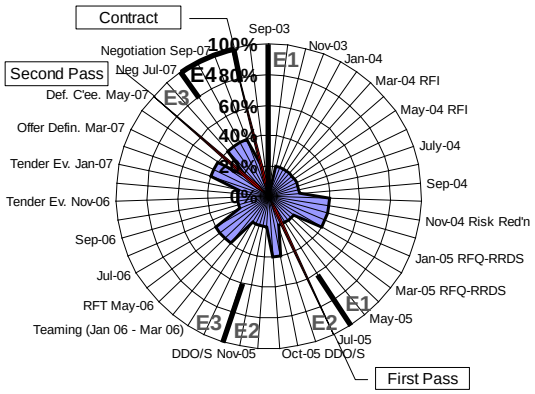
Attention is focused on a party's business-model (and potential risks).



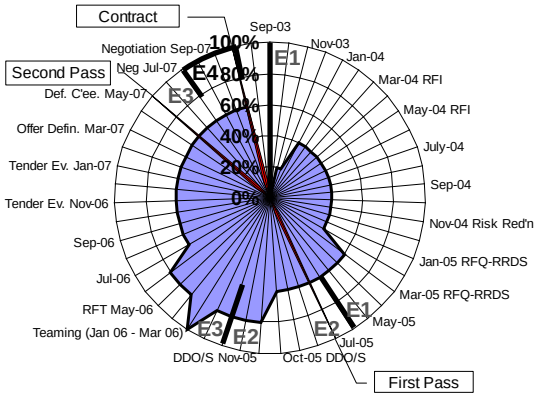


A party behaves apprehensively as it perceives that others may appropriate its current &/or future contract share.

24. Client Auntie Mame - 60%

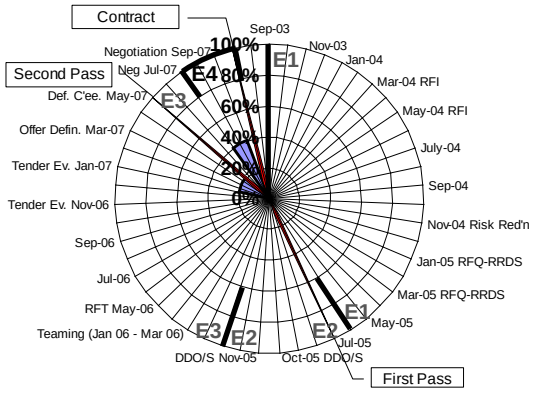


24. Contractor Auntie Mame - 100%

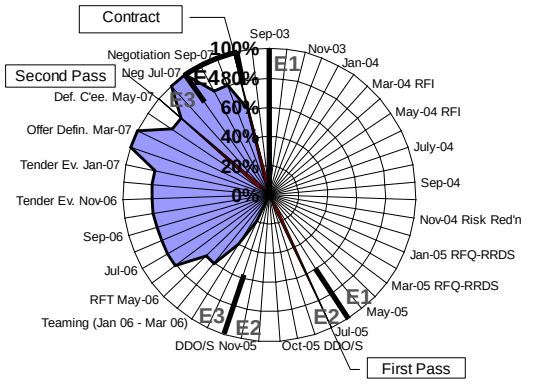


Obtaining high-value insights from a non-contracting party.

39. Client Snake - 60%

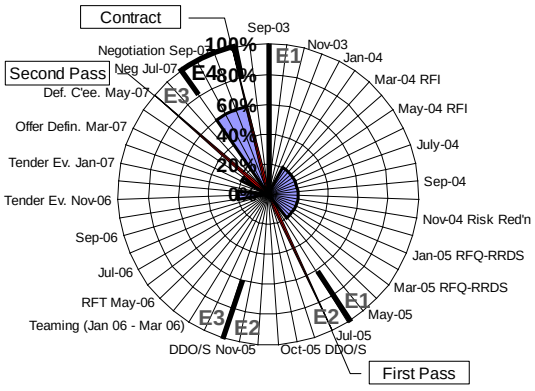


39. Contractor Snake - 100%

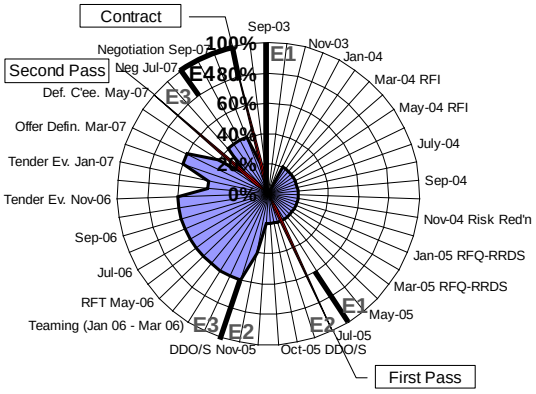


Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

05. Client Cock Fight - 80%

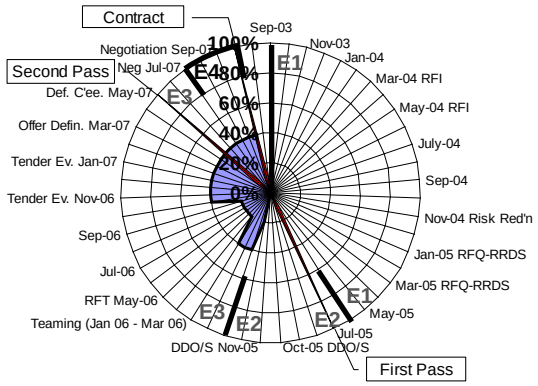


05. Contractor Cock Fight - 100%

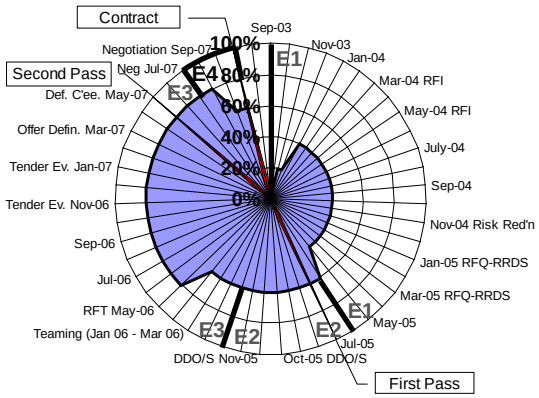


Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.

64. Client Sweet Seduction - 60%

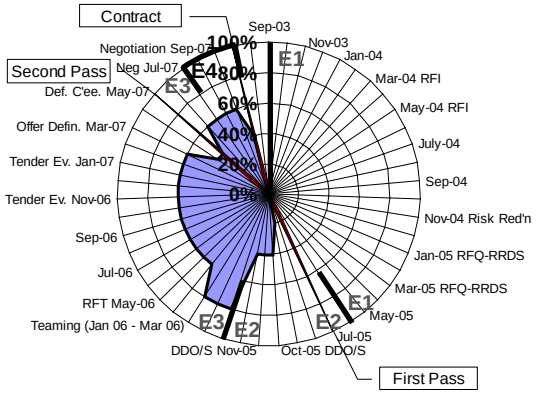


64. Contractor Sweet Seduction - 80%

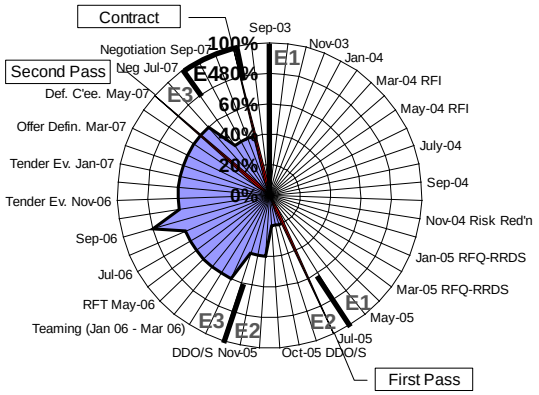


Probing for potential intelligence sources.

12. Client Decree Discordare - 80%

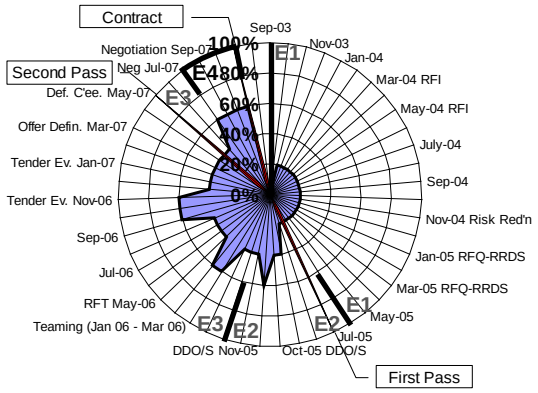


12. Contractor Decree Discordare - 80%

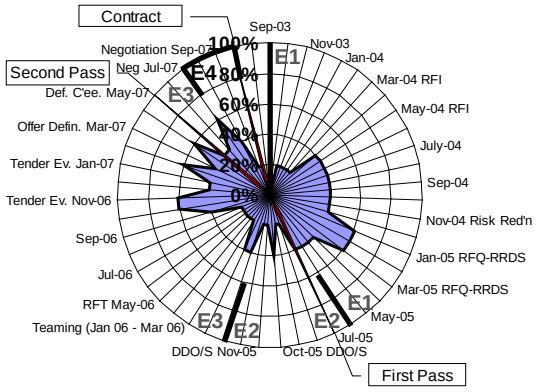


A party believes that another party plays the dual roles of team-player and supplier/system selector.

15. Client Finding Nemo - 80%

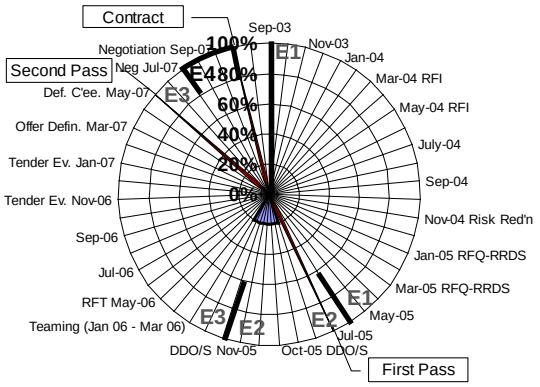


15. Contractor Finding Nemo - 80%

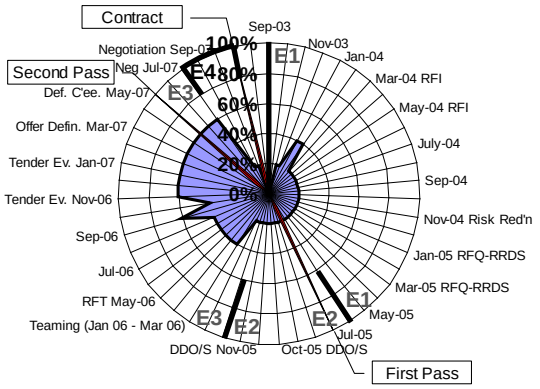


A party knows that there is a game at play but has difficulty defining its structure and parameters.

03. Client Gold Miner - 20%

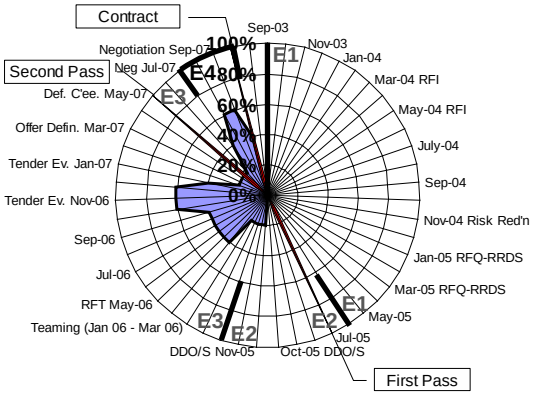


03. Contractor Gold Miner - 100%

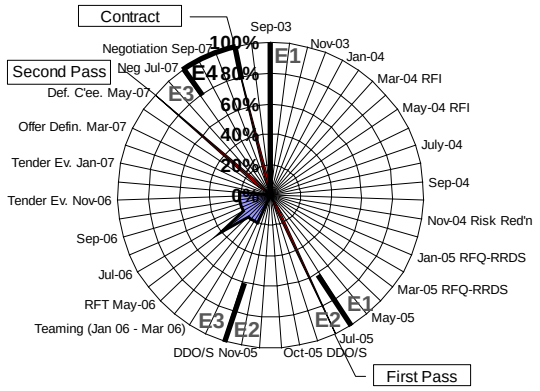


A party uses this project to advance another project's objectives.

18. Client Selective Hearing - 100%

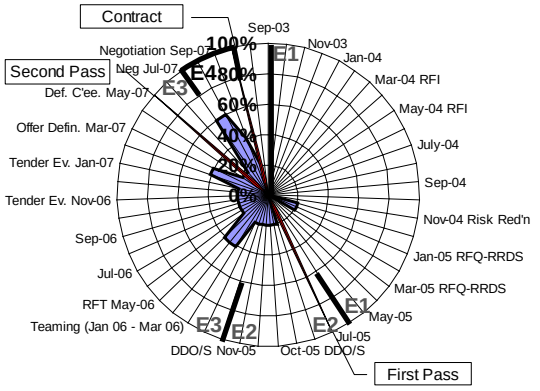


18. Contractor Selective Hearing - 40%

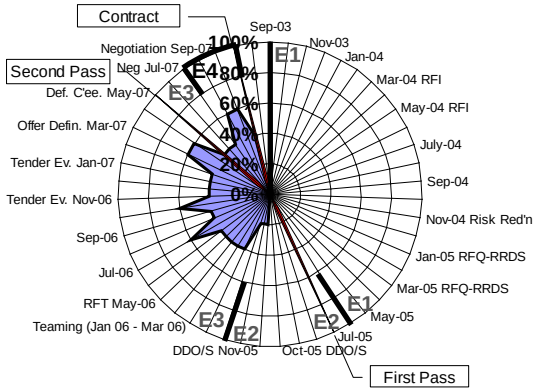


A party chooses to be 'led' to a fundamentally different interpretation of the game at play.

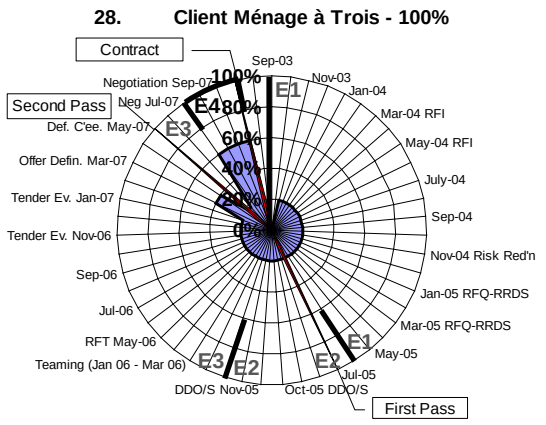
13. Client Gone to Grandma - 100%

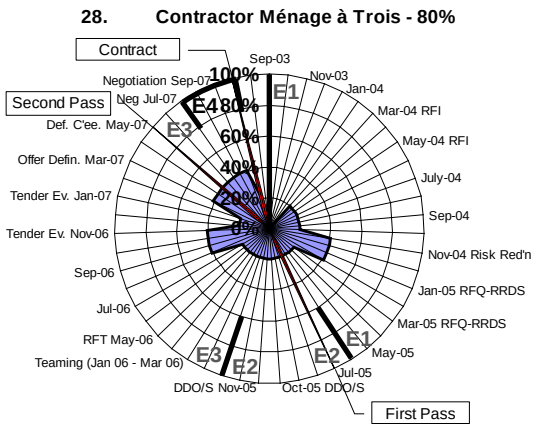


13. Contractor Gone to Grandma - 60%

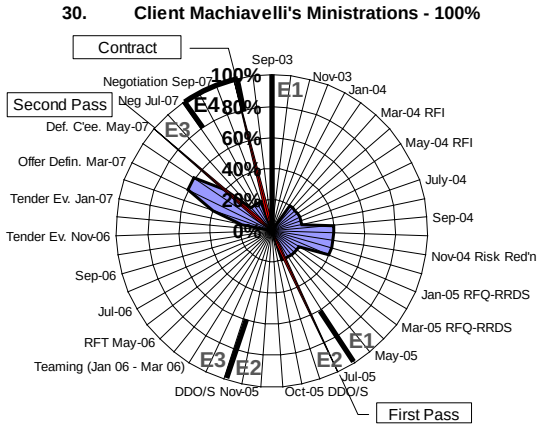


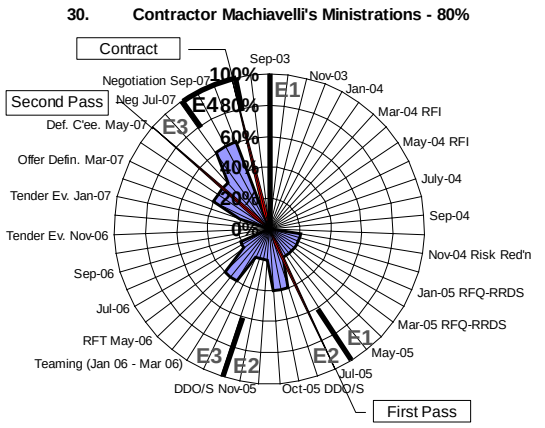
A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.



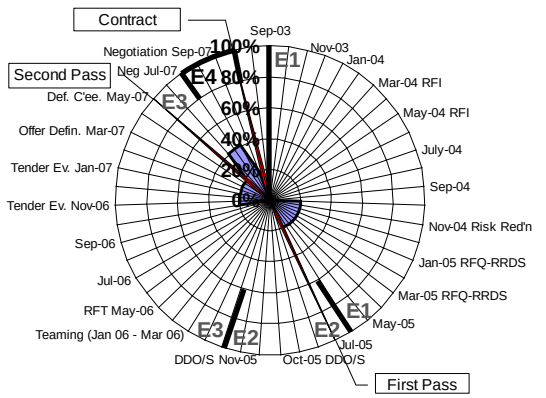


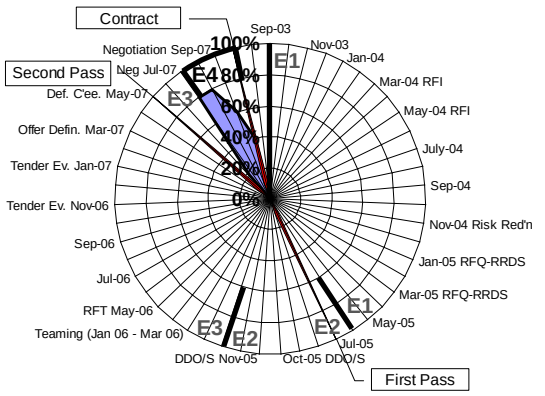
A client and subcontractor are negotiating.





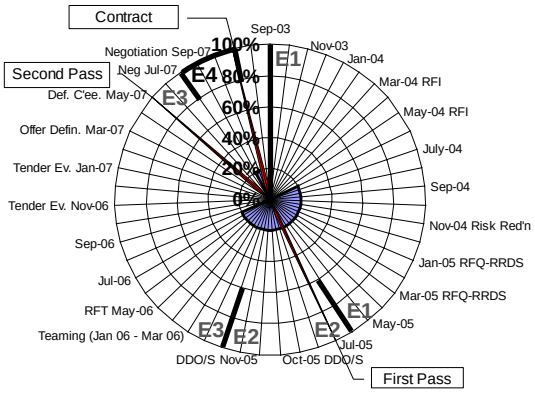
A powerful stakeholder changes the game.



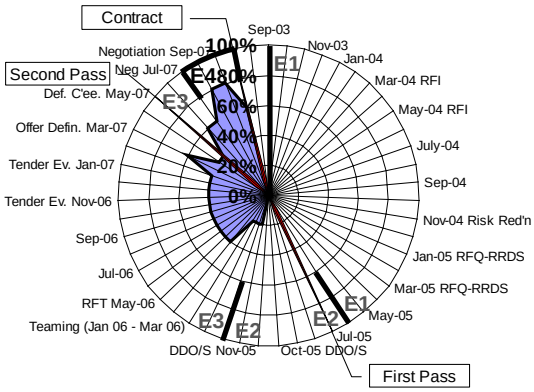


A negotiator has an unstable authority base.

44. Client Lemons for Sale - 80%

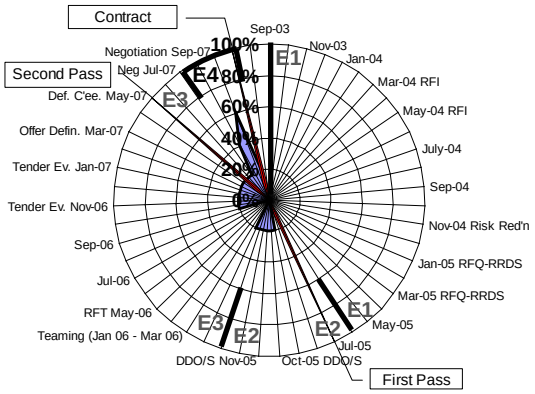


44. Contractor Lemons for Sale - 80%

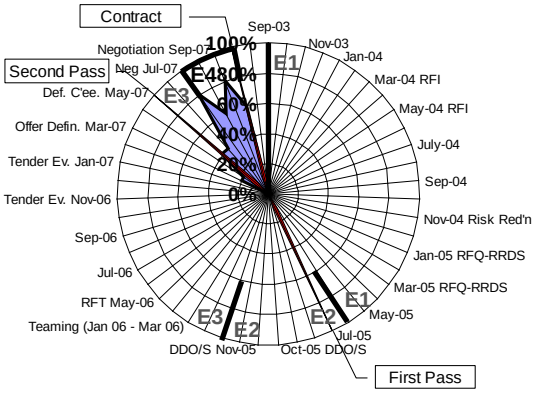


A contractor closely monitors the client for any potential contract breach which could sustain a transfer of risk.

45. Client Shotgun Marriage - 80%

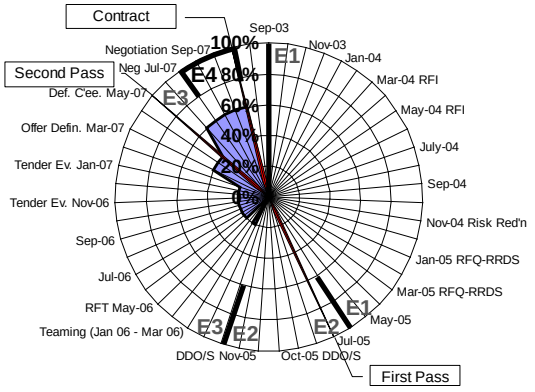


45. Contractor Shotgun Marriage - 100%

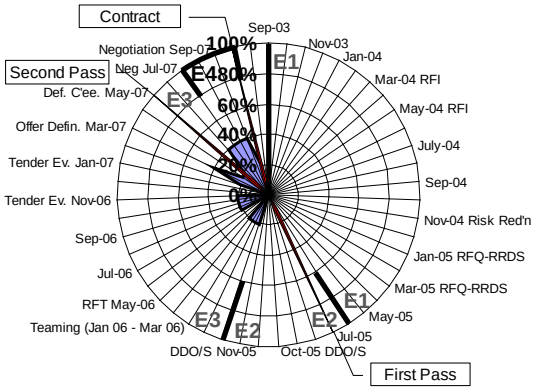


Political pressure to consummate a contract or agree to terms.

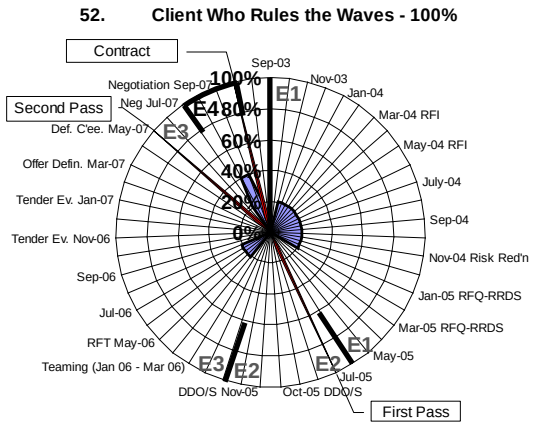
48. Client Wedging - 100%

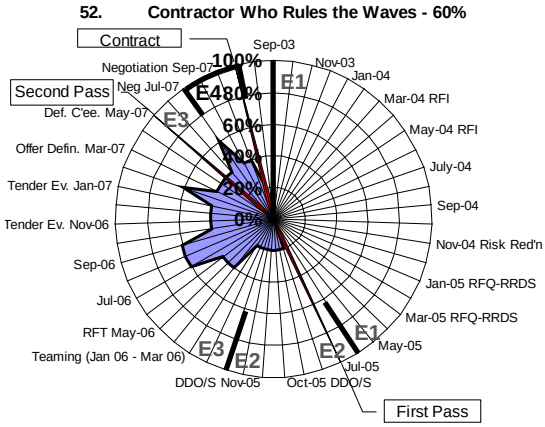


48. Contractor Wedging - 80%

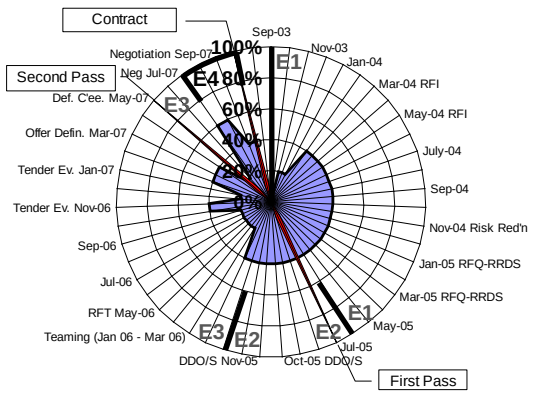


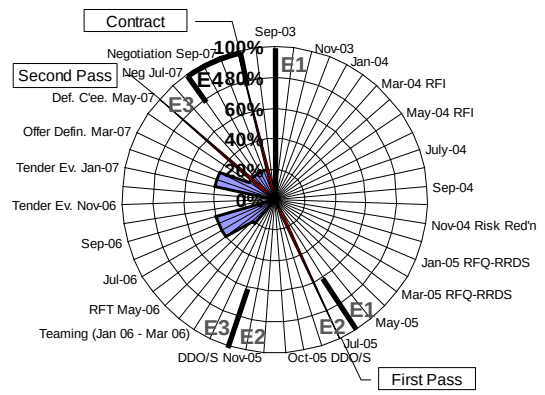
A small negotiation win on one issue can be used to leverage positions on related issues.



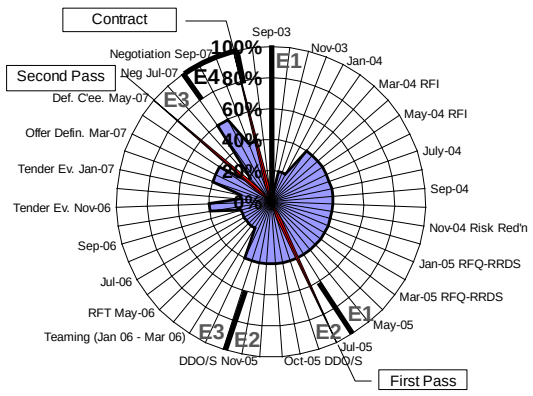


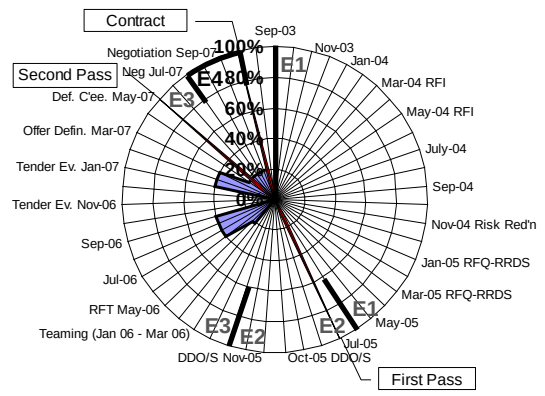
Regardless of the client's specification, it must be done our way.





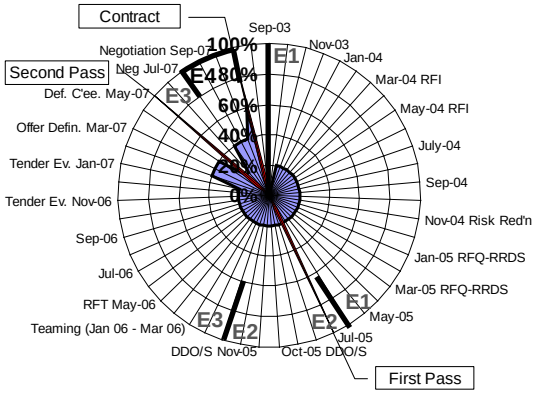
A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.



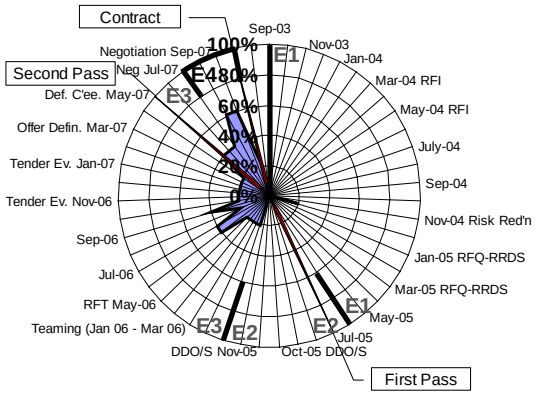


A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.

09. Client Winner's Curse - 80%

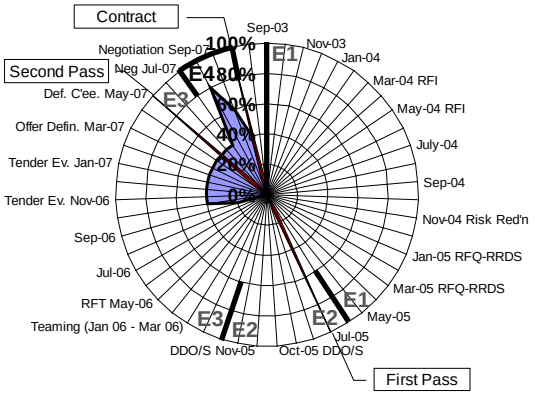


09. Contractor Winner's Curse - 80%

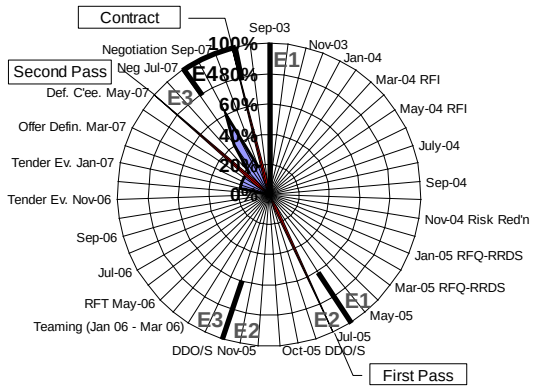


A party realises that it will suffer because it offered a fixed-price to deliver an ill-defined or ill-understood requirement.

17. Client The Scorpion - 80%

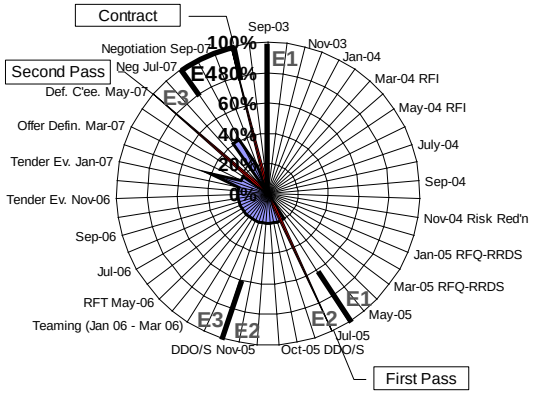


17. Contractor The Scorpion - 60%

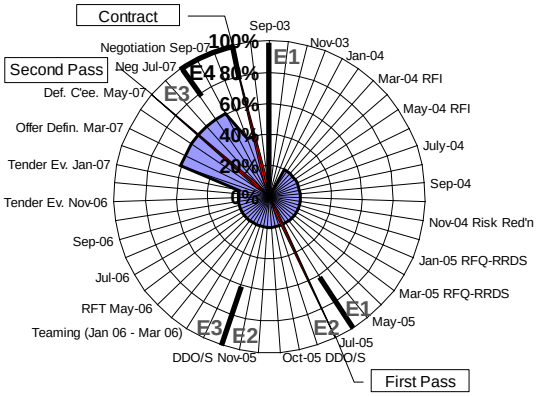


The project is implanted with a 'toxic' human agent whose presence unites opposing parties or drives them apart.

23. Client Pin the Tail on the Donkey - 80%

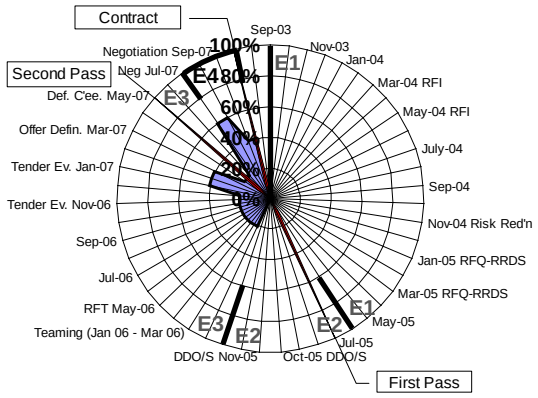


23. Contractor Pin the Tail on the Donkey - 60%

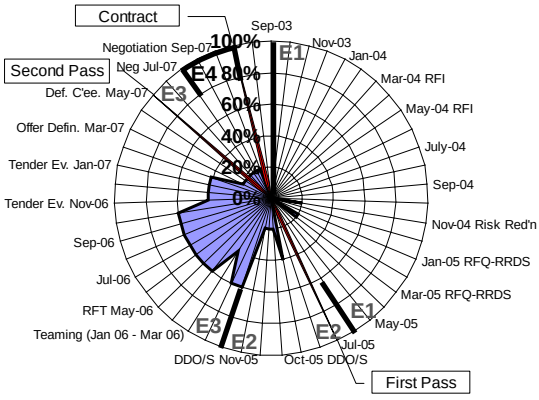


Both parties have a fundamentally different perception of the game at play.

27. Client Haughty Opportunist - 80%

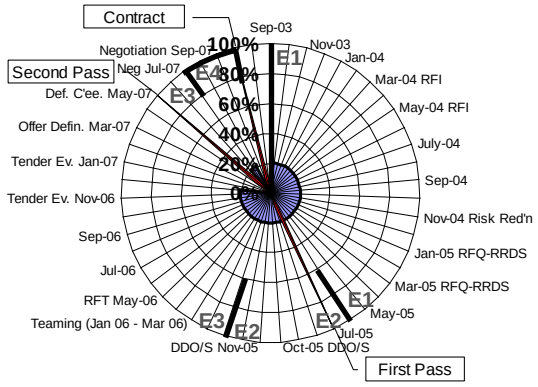


27. Contractor Haughty Opportunist - 80%

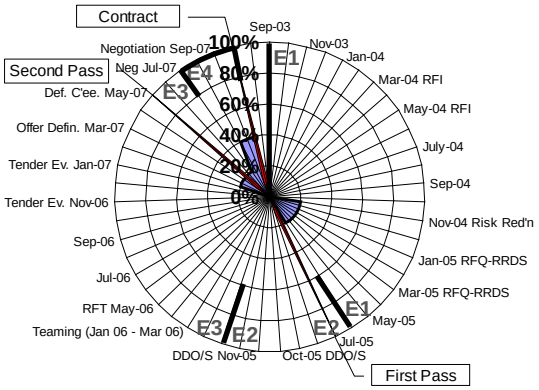


A temporal situation fortuitously affords one party enhanced power.

62. Client Real Power - 40%



62. Contractor Real Power - 60%

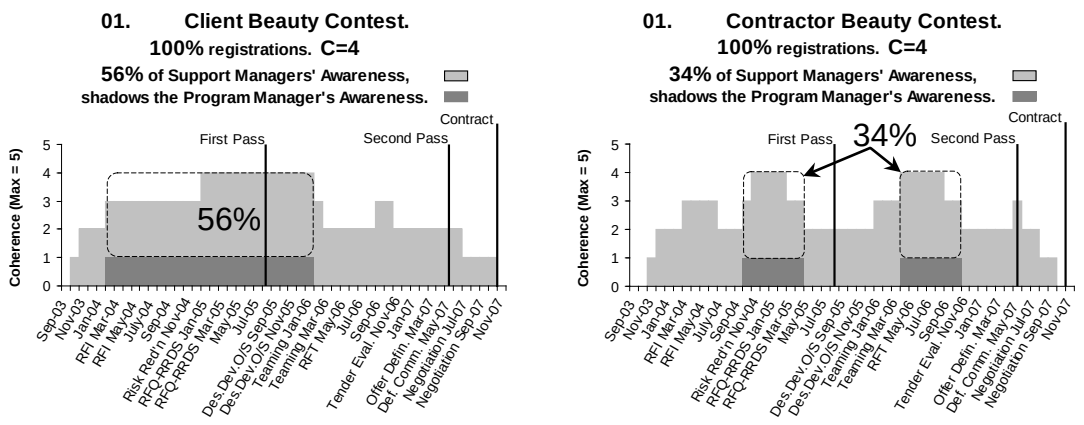


The political office is called upon to reduce artificial complexity generated by the bureaucracy.

ANNEXURE C. MANAGEMENT AWARENESS

For each SMI, the percent of the Support Managers' awareness, which is contemporaneous with their Program Manager's awareness.

Legend: C = Maximum number of concurrent observations.

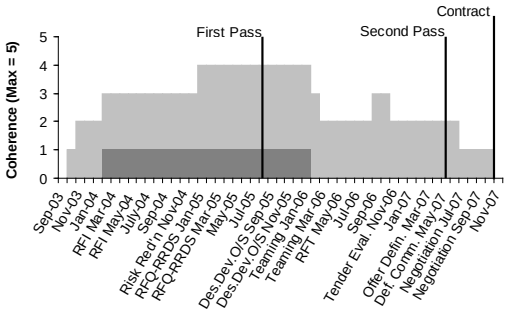


A party's behaviour concentrates on its presentation values.

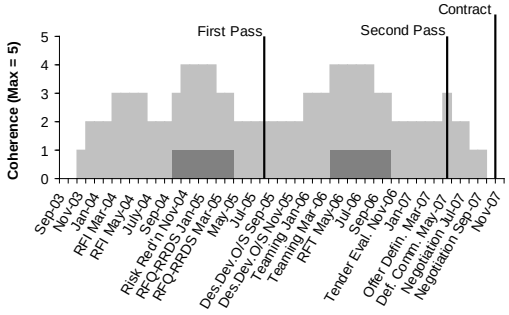
Case S:

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

01. Client Beauty Contest.
100% registrations. C=4
56% of Support Managers' Awareness, shadows the Program Manager's Awareness.

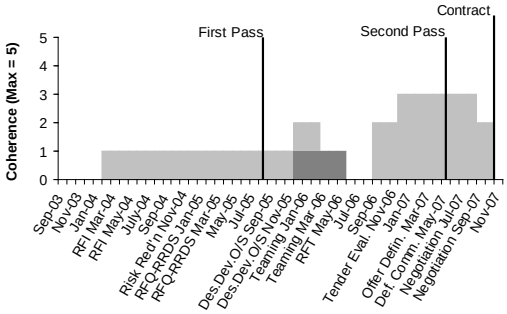


01. Contractor Beauty Contest.
100% registrations. C=4
34% of Support Managers' Awareness, shadows the Program Manager's Awareness.

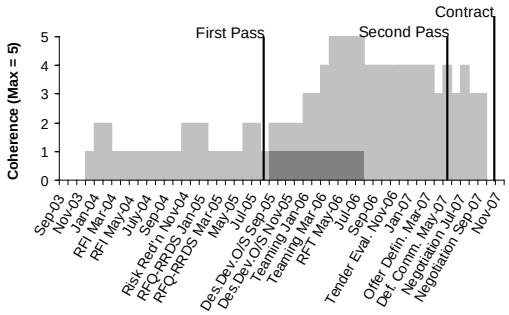


A party's behaviour concentrates on its presentation values.

02. Client Smart Thinking.
100% registrations. C=3
5% of Support Managers' Awareness, shadows the Program Manager's Awareness.

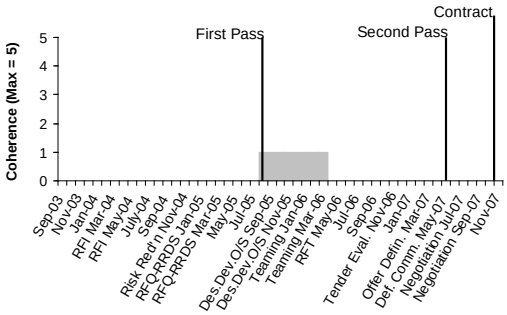


02. Contractor Smart Thinking.
100% registrations. C=5
25% of Support Managers' Awareness, shadows the Program Manager's Awareness.

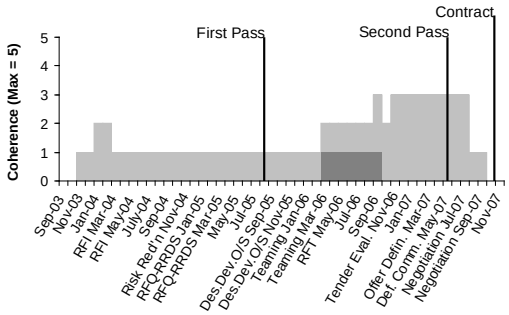


Attention is focused on a party's business-model (and potential risks).

03. Client Gold Miner.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



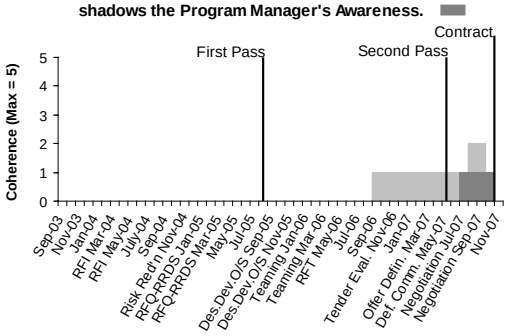
03. Contractor Gold Miner.
100% registrations. C=3
12% of Support Managers' Awareness, shadows the Program Manager's Awareness.



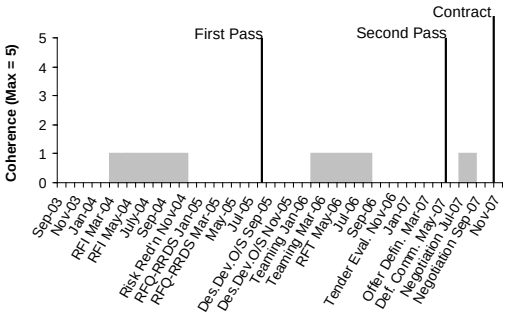
A party uses this project to advance another project's objectives.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

04. Client Cargo Cult.
40% registrations. C=2
17% of Support Managers' Awareness, shadows the Program Manager's Awareness.

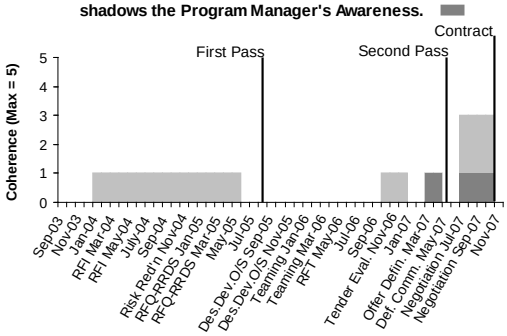


04. Contractor Cargo Cult.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

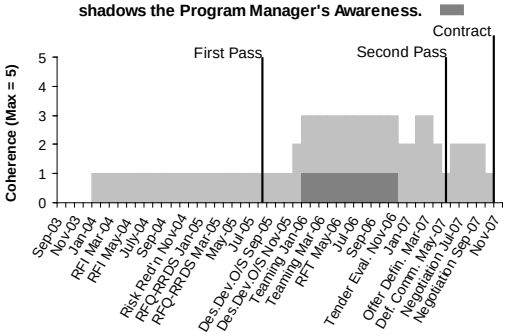


A party's behaviours result from a history of receiving guaranteed non-competitive work.

05. Client Cock Fight.
80% registrations. C=3
29% of Support Managers' Awareness, shadows the Program Manager's Awareness.

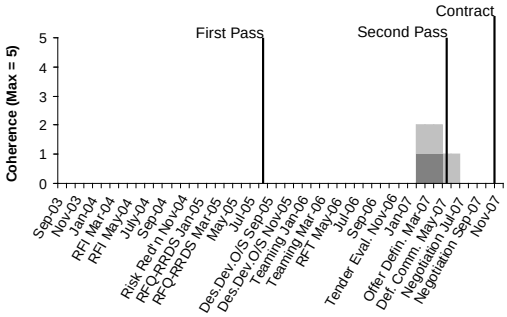


05. Contractor Cock Fight.
100% registrations. C=3
32% of Support Managers' Awareness, shadows the Program Manager's Awareness.

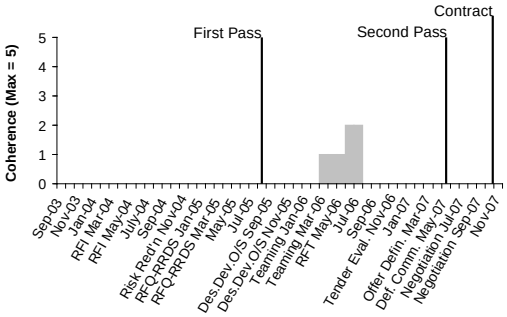


Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.

06. Client Fool's Gold.
40% registrations. C=2
60% of Support Managers' Awareness, shadows the Program Manager's Awareness.



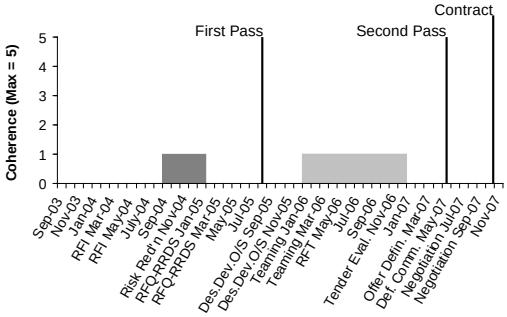
06. Contractor Fool's Gold.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



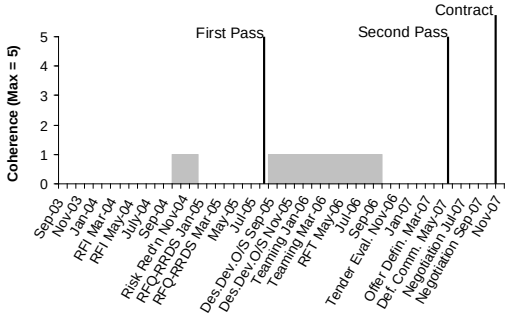
A party is willing to offer anything that is requested, regardless of the commercial implications.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

07. Client Masquerade.
60% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

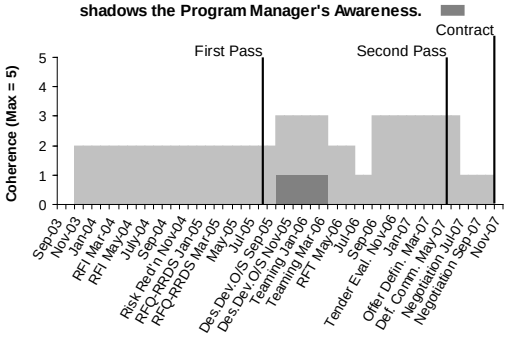


07. Contractor Masquerade.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

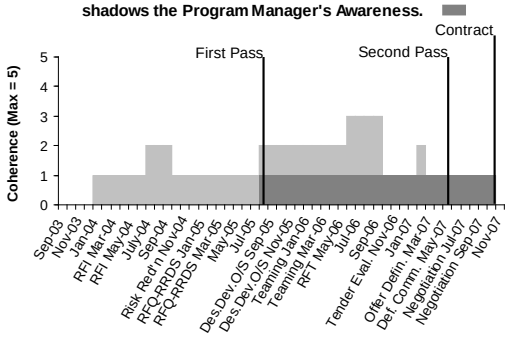


A party displays a 'crafted' pretence for a period of time (particularly in the presence of competitors).

08. Client Vanity Fair.
80% registrations. C=3
12% of Support Managers' Awareness, shadows the Program Manager's Awareness.

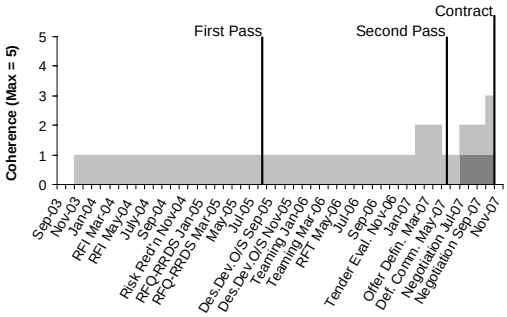


08. Contractor Vanity Fair.
80% registrations. C=3
46% of Support Managers' Awareness, shadows the Program Manager's Awareness.

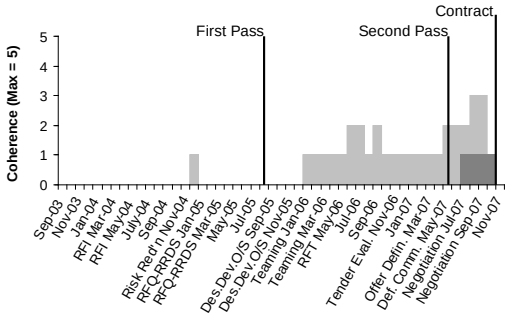


A party feels pressure to participate because of the project size and/or its market stature.

09. Client Winner's Curse.
80% registrations. C=3
10% of Support Managers' Awareness, shadows the Program Manager's Awareness.



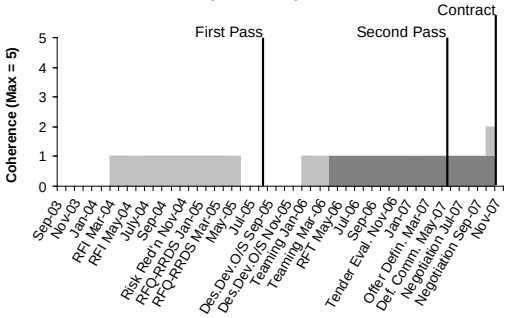
09. Contractor Winner's Curse.
80% registrations. C=3
17% of Support Managers' Awareness, shadows the Program Manager's Awareness.



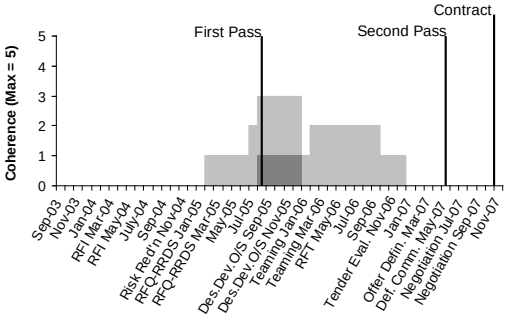
A party realises that it will suffer because it offered a fixed-price to deliver an ill-defined or ill-understood requirement.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

10. Client Jungle Jitters.
80% registrations. C=2
5% of Support Managers' Awareness, shadows the Program Manager's Awareness.

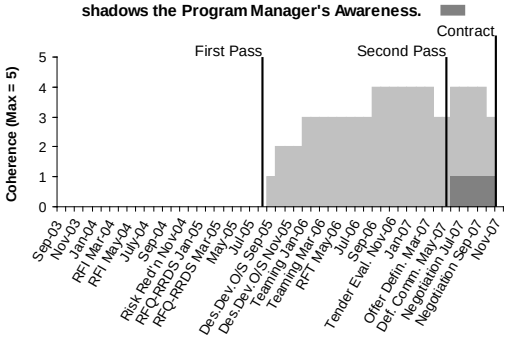


10. Contractor Jungle Jitters.
100% registrations. C=3
27% of Support Managers' Awareness, shadows the Program Manager's Awareness.

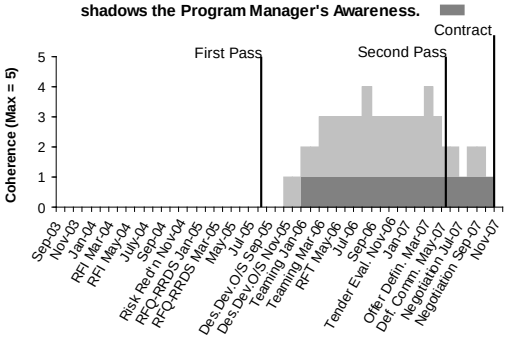


A party is keen for the work but apprehensive about untested relationships.

11. Client Kashmir.
100% registrations. C=4
18% of Support Managers' Awareness, shadows the Program Manager's Awareness.

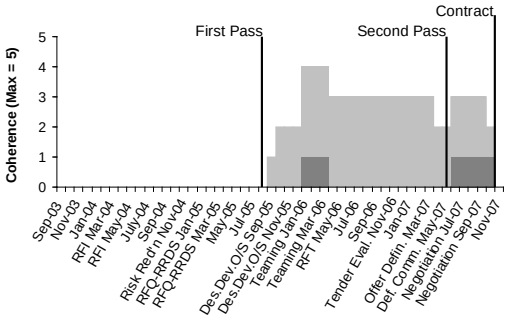


11. Contractor Kashmir.
80% registrations. C=4
95% of Support Managers' Awareness, shadows the Program Manager's Awareness.

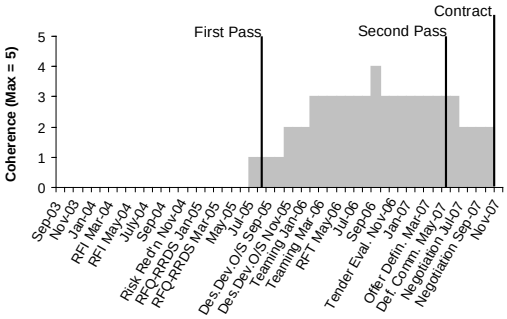


A party behaves apprehensively as it perceives that others may appropriate its current &/or future contract share.

12. Client Decree Discordare.
80% registrations. C=4
28% of Support Managers' Awareness, shadows the Program Manager's Awareness.



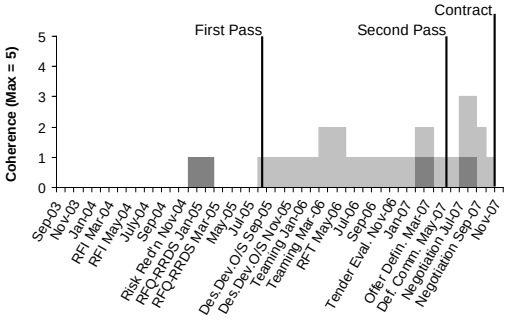
12. Contractor Decree Discordare.
80% registrations. C=4
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



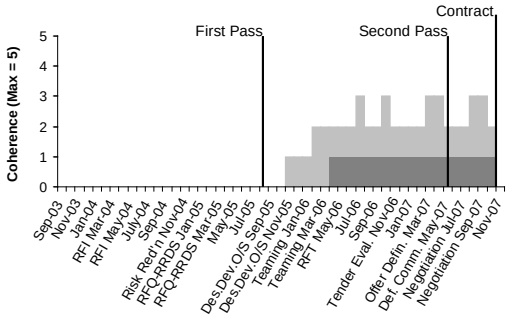
A party believes that another party plays the dual roles of team-player and supplier/system selector.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

13. Client Gone to Grandma.
100% registrations. C=3
18% of Support Managers' Awareness, shadows the Program Manager's Awareness.

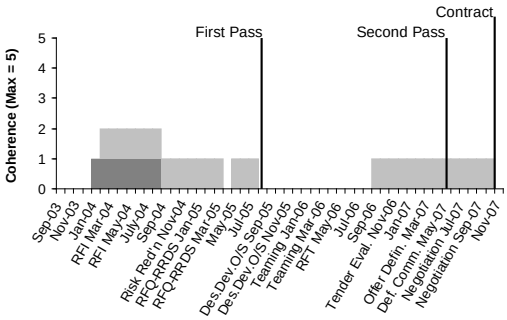


13. Contractor Gone to Grandma.
60% registrations. C=3
78% of Support Managers' Awareness, shadows the Program Manager's Awareness.

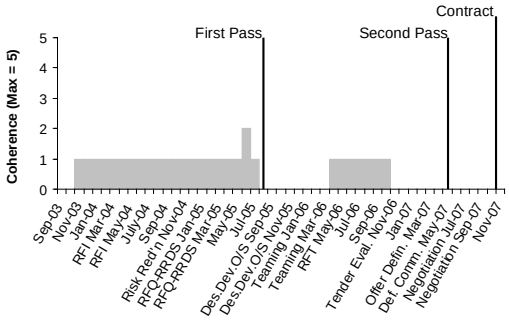


A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.

14. Client Transponders.
80% registrations. C=2
23% of Support Managers' Awareness, shadows the Program Manager's Awareness.

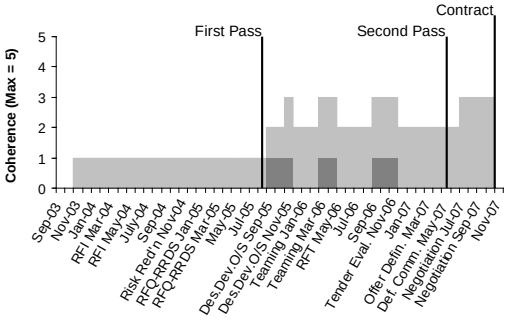


14. Contractor Transponders.
60% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

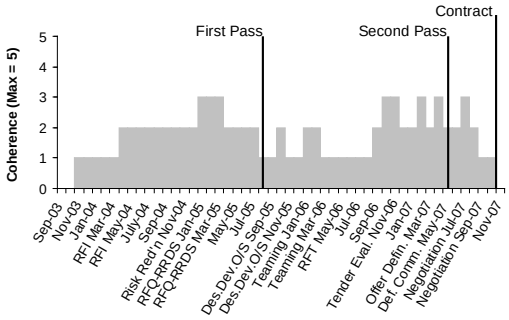


Individuals seek attention by hovering around the project or communicating their importance.

15. Client Finding Nemo.
80% registrations. C=3
18% of Support Managers' Awareness, shadows the Program Manager's Awareness.



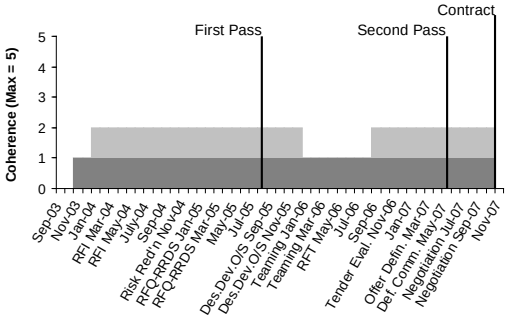
15. Contractor Finding Nemo.
80% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



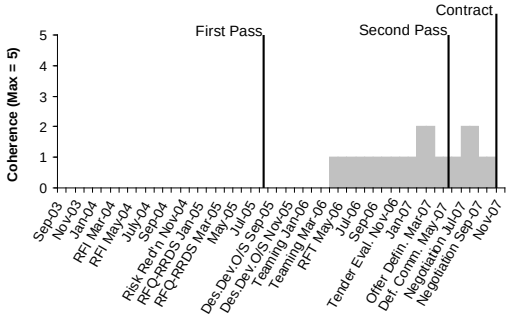
A party knows that there is a game at play but has difficulty defining its structure and parameters.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

16. Client Star-Gazing 'Iron Colonel'.
60% registrations. C=2
100% of Support Managers' Awareness, shadows the Program Manager's Awareness.

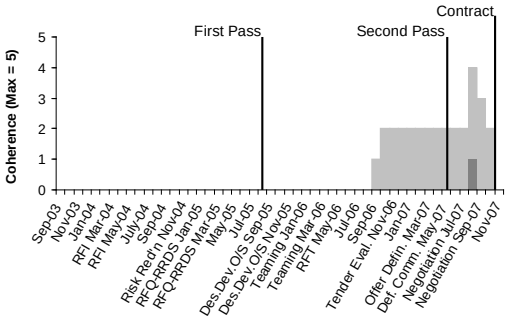


16. Contractor Star-Gazing 'Iron Colonel'.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

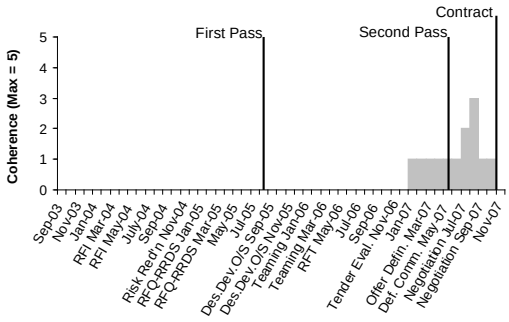


A non-aligned bureaucrat focuses on procedural detail to avoid decisions which might degrade promotion prospects.

17. Client The Scorpion.
80% registrations. C=4
10% of Support Managers' Awareness, shadows the Program Manager's Awareness.

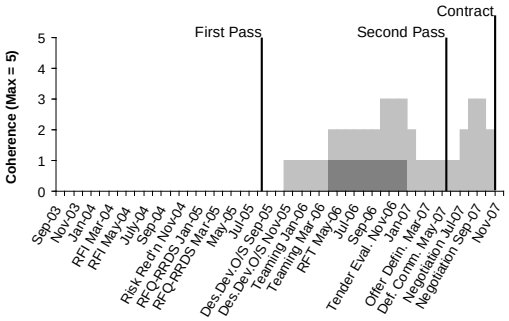


17. Contractor The Scorpion.
60% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

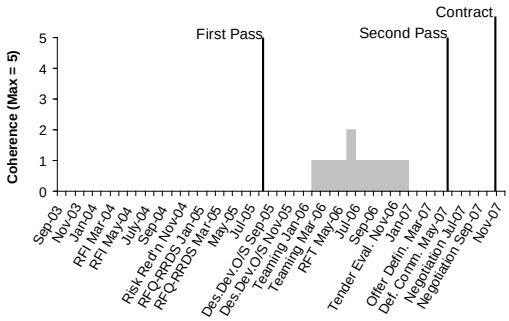


The project is implanted with a 'toxic' human agent whose presence unites opposing parties or drives them apart.

18. Client Selective Hearing.
100% registrations. C=3
35% of Support Managers' Awareness, shadows the Program Manager's Awareness.



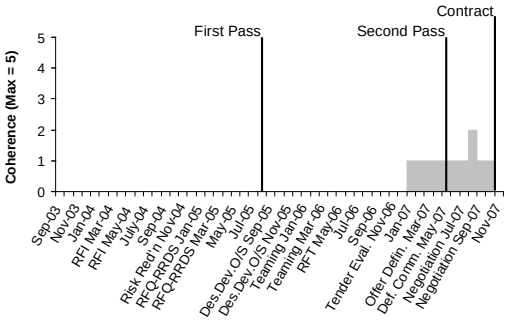
18. Contractor Selective Hearing.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



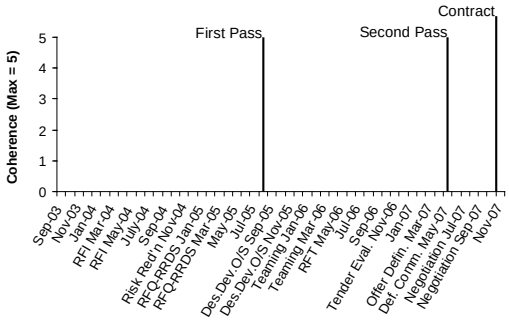
A party chooses to be 'led' to a fundamentally different interpretation of the game at play.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

19. Client Eats Roots and Leaves.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

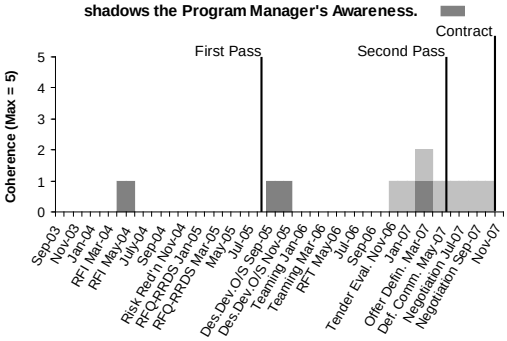


19. Contractor Eats Roots & Leaves.
0% registrations. C=0
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

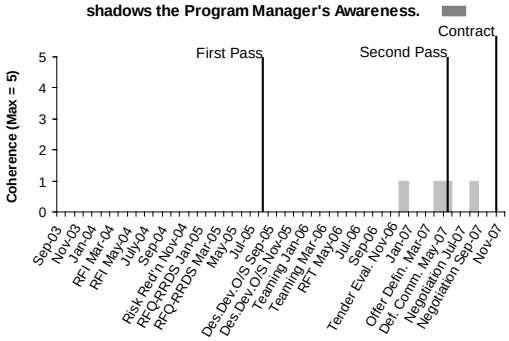


A transient bureaucrat institutes change and avoids on-going accountability by leaving.

20. Client Squawking Crow.
60% registrations. C=2
17% of Support Managers' Awareness, shadows the Program Manager's Awareness.

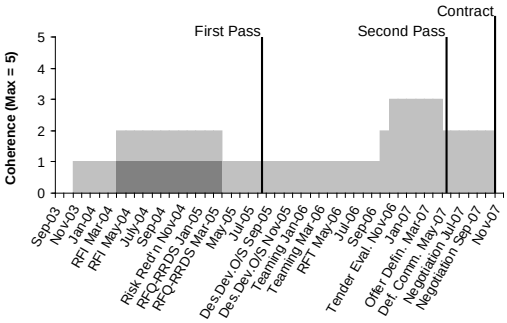


20. Contractor Squawking Crow.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

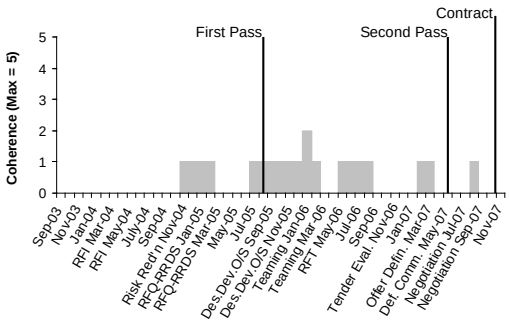


A transient bureaucrat seeks to discredit the process.

21. Client Once Bitten Twice Shy.
80% registrations. C=3
18% of Support Managers' Awareness, shadows the Program Manager's Awareness.



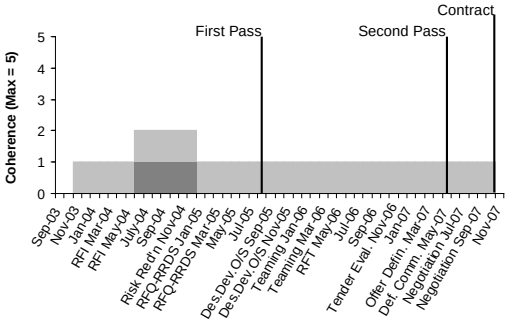
21. Contractor Once Bitten Twice Shy.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



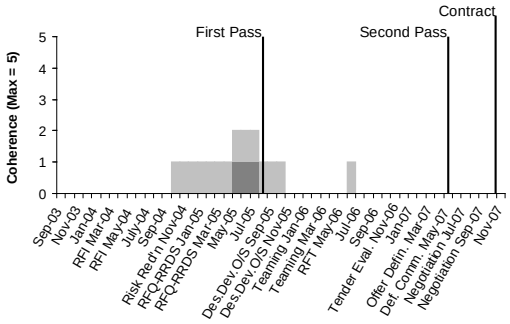
Previous contractual experiences have led to ambivalent or negative feelings.

ELECTED RECALLED **CLIENT** AWARENESS | ELECTED RECALLED **CONTRACTOR** AWARENESS

22. Client Unrequited Love.
40% registrations. C=2
15% of Support Managers' Awareness, shadows the Program Manager's Awareness.

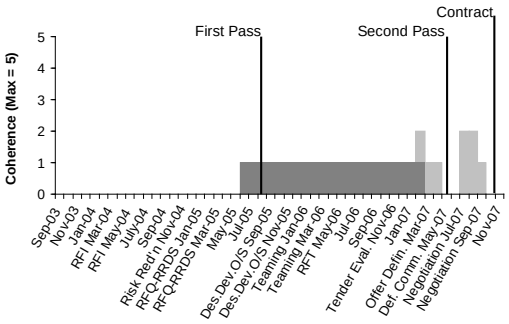


22. Contractor Unrequited Love.
60% registrations. C=2
21% of Support Managers' Awareness, shadows the Program Manager's Awareness.

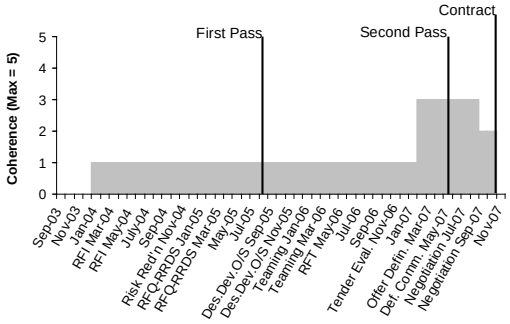


Past superior performance appears to be of academic value only.

23. Client Pin the Tail on the Donkey.
80% registrations. C=2
13% of Support Managers' Awareness, shadows the Program Manager's Awareness.



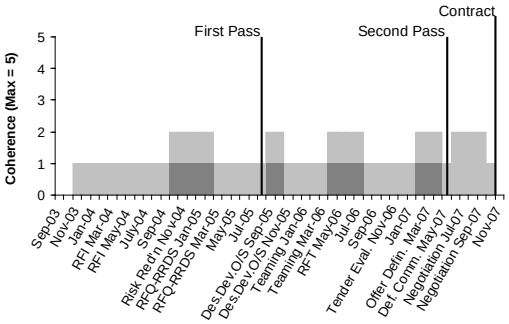
23. Contractor Pin the Tail on the Donkey.
60% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



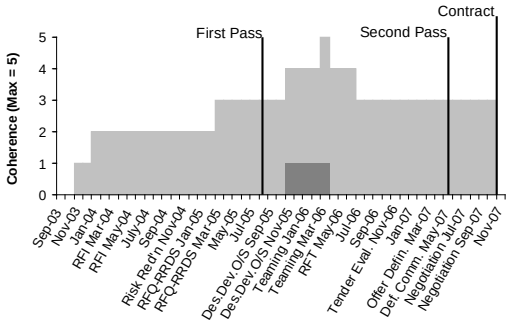
Both parties have a fundamentally different perception of the game at play.

ELECTED RECALLED **CLIENT** AWARENESS | ELECTED RECALLED **CONTRACTOR** AWARENESS

24. Client Auntie Mame.
60% registrations. C=2
27% of Support Managers' Awareness, shadows the Program Manager's Awareness.



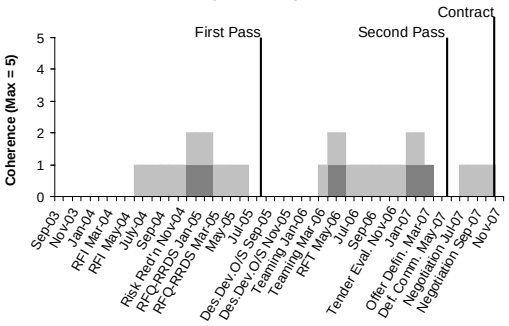
24. Contractor Auntie Mame.
100% registrations. C=5
12% of Support Managers' Awareness, shadows the Program Manager's Awareness.



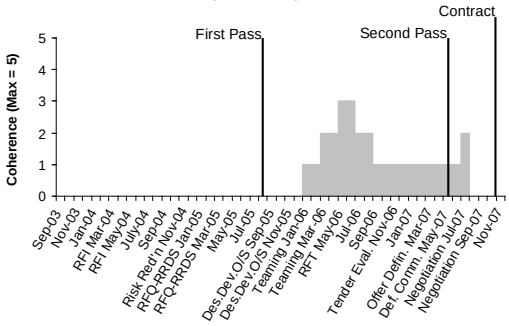
Obtaining high-value insights from a non-contracting party.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

25. Client Ring-a-Ring-a-Rusey.
80% registrations. C=2
24% of Support Managers' Awareness, shadows the Program Manager's Awareness.

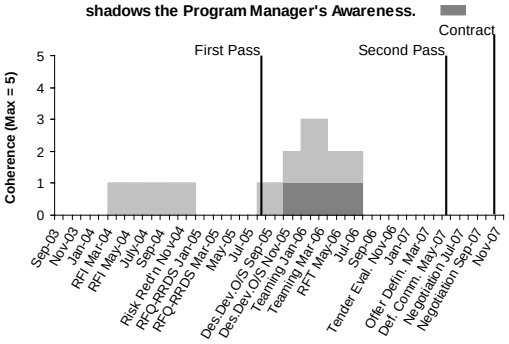


25. Contractor Ring-a-Ring-a-Rusey.
60% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

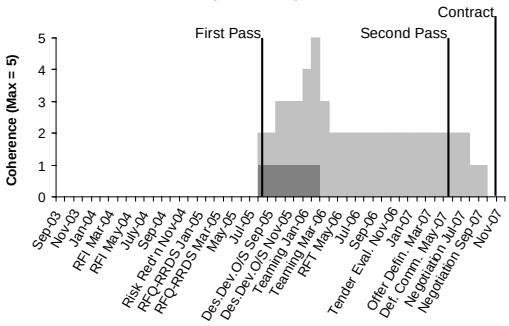


A party resents being gamed.

26. Client Speed Dating.
80% registrations. C=3
48% of Support Managers' Awareness, shadows the Program Manager's Awareness.

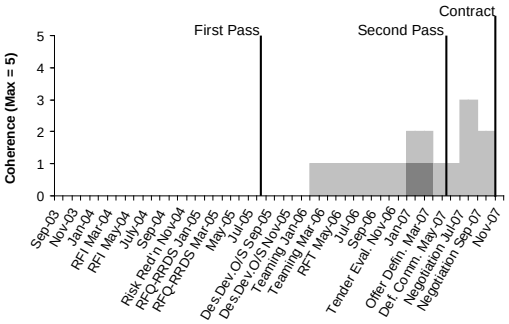


26. Contractor Speed Dating.
100% registrations. C=5
29% of Support Managers' Awareness, shadows the Program Manager's Awareness.

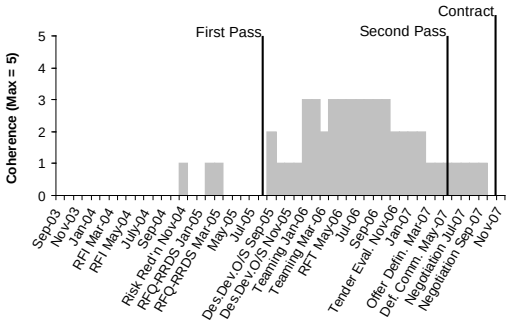


Potential participants must 'mate' before entering the game.

27. Client Haughty Opportunist.
80% registrations. C=3
11% of Support Managers' Awareness, shadows the Program Manager's Awareness.



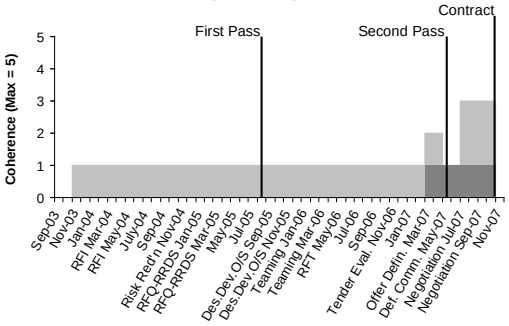
27. Contractor Haughty Opportunist.
80% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



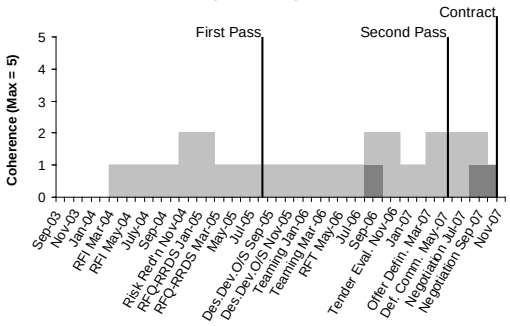
A temporal situation fortuitously affords one party enhanced power.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

28. Client Ménage à Trois.
100% registrations. C=3
20% of Support Managers' Awareness, shadows the Program Manager's Awareness.

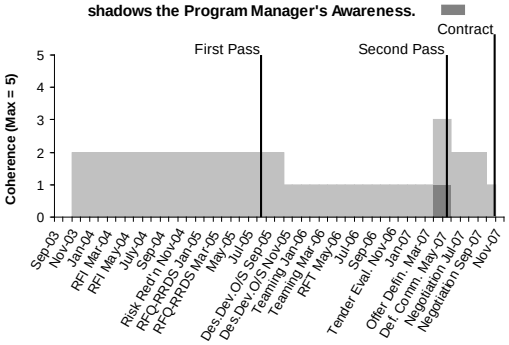


28. Contractor Ménage à Trois.
80% registrations. C=2
7% of Support Managers' Awareness, shadows the Program Manager's Awareness.

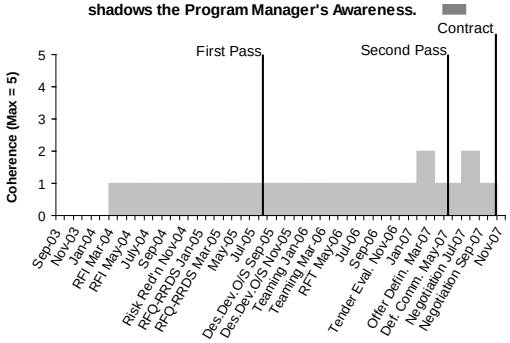


A client and subcontractor are negotiating.

29. Client Turf Wars.
80% registrations. C=3
5% of Support Managers' Awareness, shadows the Program Manager's Awareness.

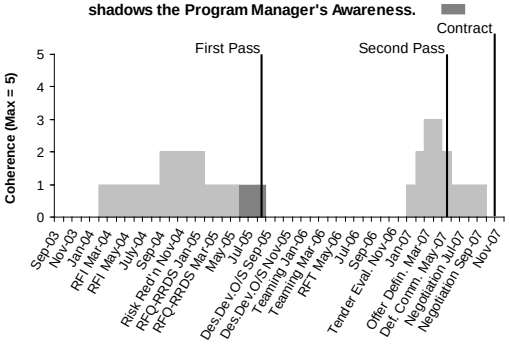


29. Contractor Turf Wars.
60% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

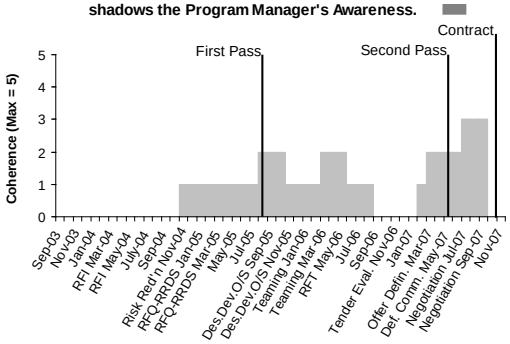


Bureaucrats compete for involvement.

30. Client Machiavelli's Ministrations.
100% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



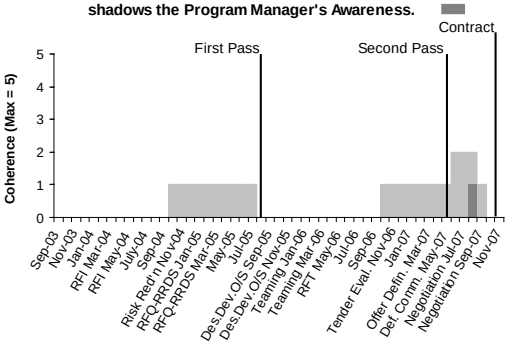
30. Contractor Machiavelli's Ministrations.
80% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



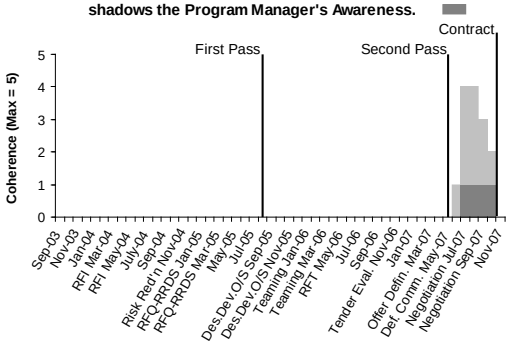
A powerful stakeholder changes the game.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

31. Client Popcorn Machine.
100% registrations. C=2
4% of Support Managers' Awareness, shadows the Program Manager's Awareness.

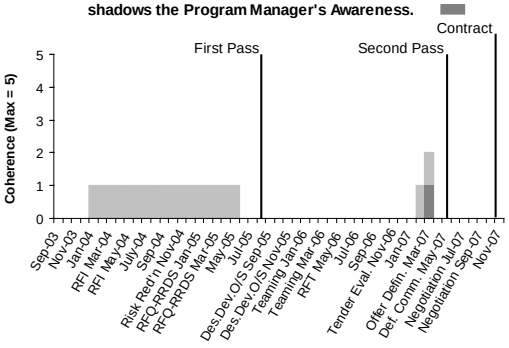


31. Contractor Popcorn Machine.
80% registrations. C=4
90% of Support Managers' Awareness, shadows the Program Manager's Awareness.

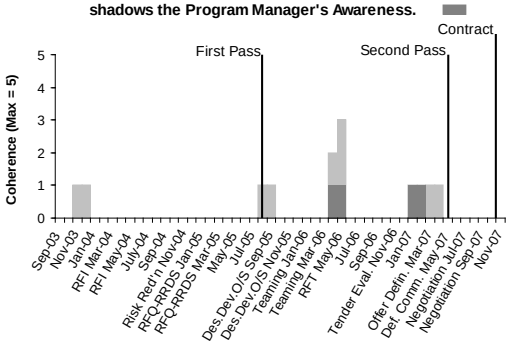


A negotiator has an unstable authority base.

32. Client Surprise!
60% registrations. C=2
5% of Support Managers' Awareness, shadows the Program Manager's Awareness.

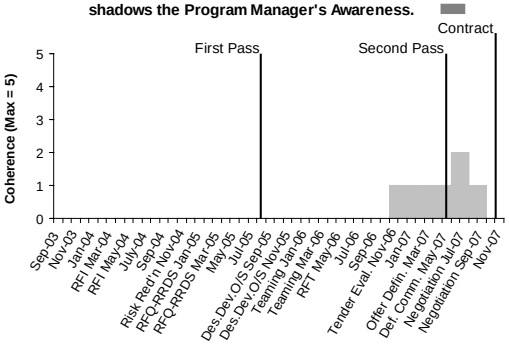


32. Contractor Surprise!
100% registrations. C=3
33% of Support Managers' Awareness, shadows the Program Manager's Awareness.

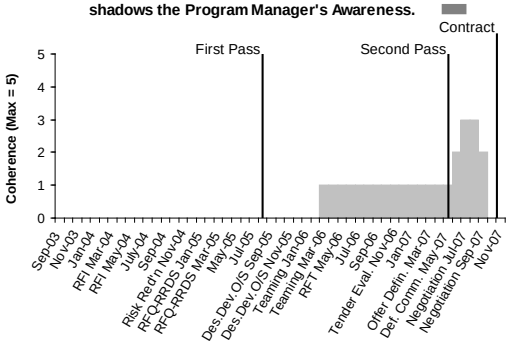


A significant unanticipated event occurred.

33. Client Agent 86.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



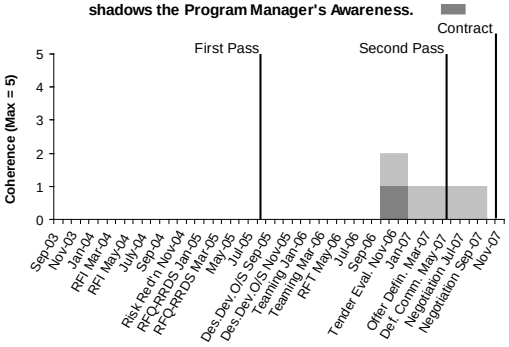
33. Contractor Agent 86.
60% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



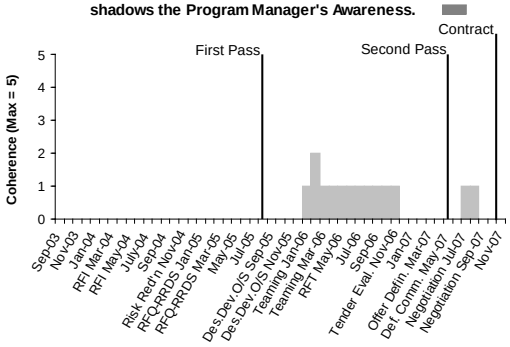
A surreal personality is active in the project.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

34. Client Yes Minister.
40% registrations. C=2
25% of Support Managers' Awareness, shadows the Program Manager's Awareness.

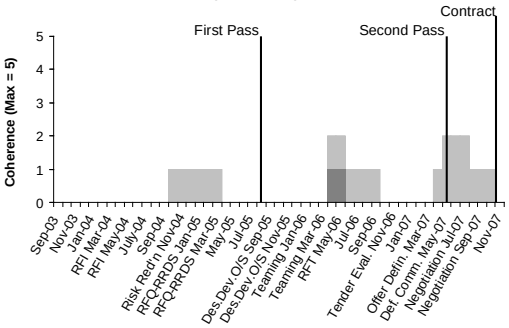


34. Contractor Yes Minister.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

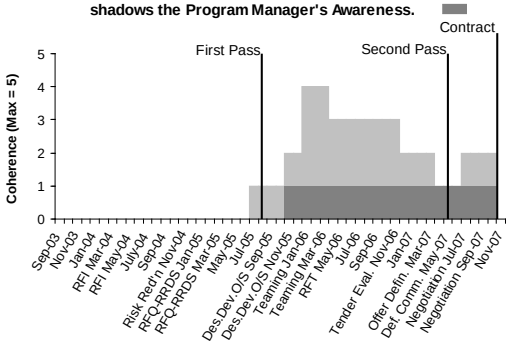


A superficial game is used to draw attention away from the main game.

35. Client Call in the Big Guns.
80% registrations. C=2
9% of Support Managers' Awareness, shadows the Program Manager's Awareness.

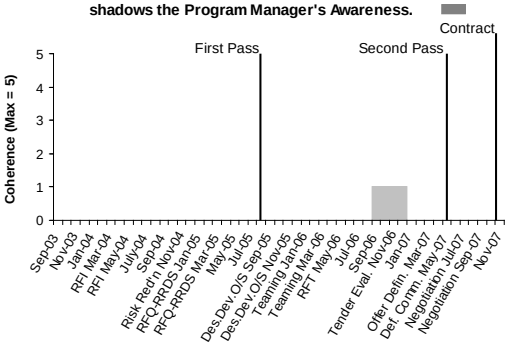


35. Contractor Call in the Big Guns.
80% registrations. C=4
90% of Support Managers' Awareness, shadows the Program Manager's Awareness.

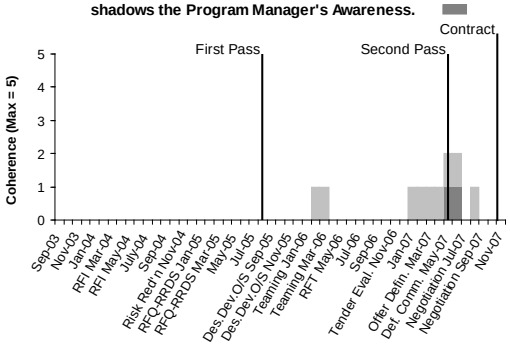


A party seeks Ministerial dialogue.

36. Client Spoil Sport.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



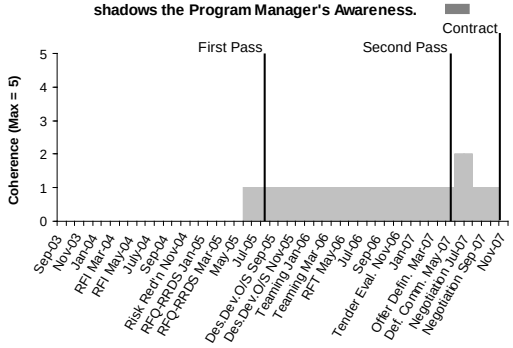
36. Contractor Spoil Sport.
60% registrations. C=2
22% of Support Managers' Awareness, shadows the Program Manager's Awareness.



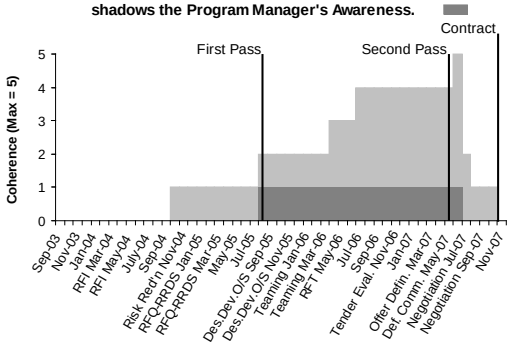
A losing party or contractor seeks to de-stabilise the nascent marriage.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

37. Client Gut Ache.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

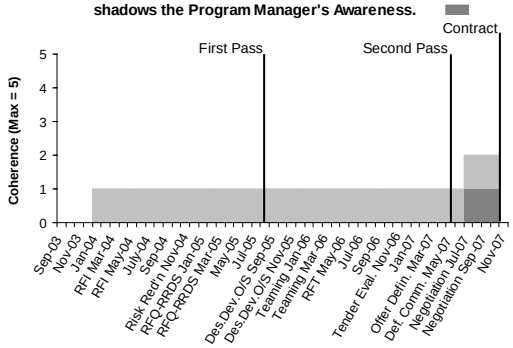


37. Contractor Gut Ache.
100% registrations. C=5
77% of Support Managers' Awareness, shadows the Program Manager's Awareness.

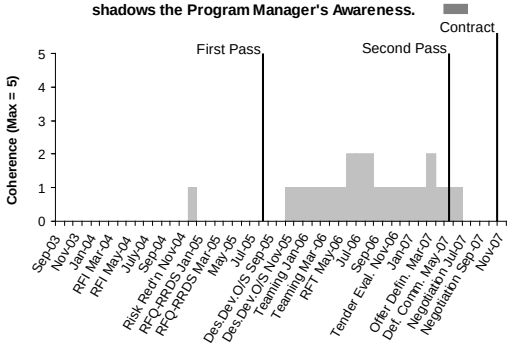


An aura of doubt pervades the process even though everything appears to be technically correct.

38. Client Dr Salk.
40% registrations. C=2
9% of Support Managers' Awareness, shadows the Program Manager's Awareness.

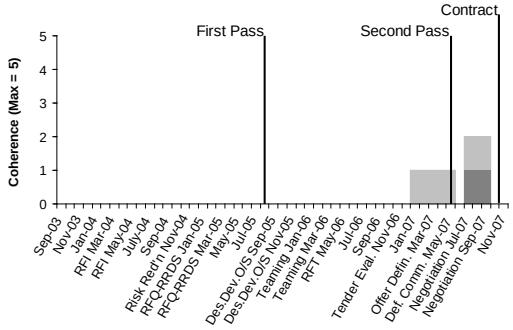


38. Contractor Dr Salk.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

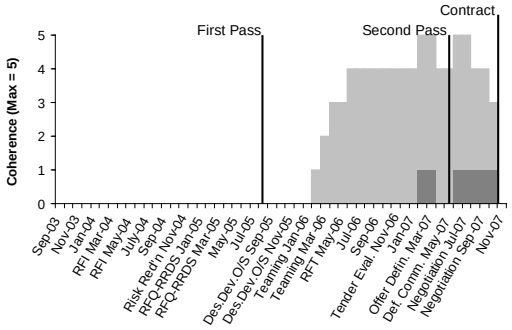


A game is initiated to thwart the emergence of another game.

39. Client Snake.
60% registrations. C=2
38% of Support Managers' Awareness, shadows the Program Manager's Awareness.



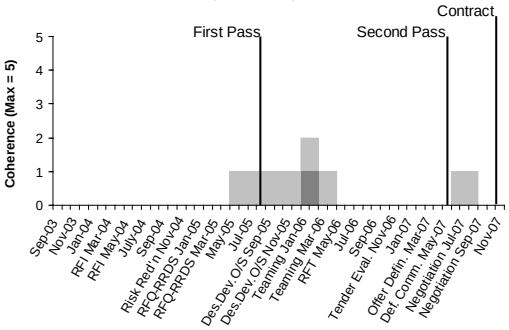
39. Contractor Snake.
100% registrations. C=5
33% of Support Managers' Awareness, shadows the Program Manager's Awareness.



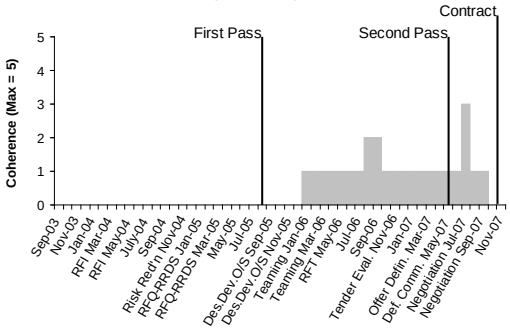
Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

40. Client Disneyland
80% registrations. C=2
13% of Support Managers' Awareness, shadows the Program Manager's Awareness.

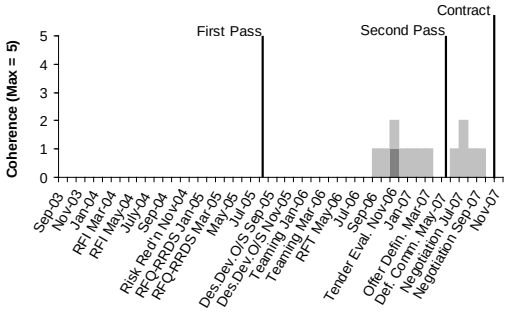


40. Contractor Disneyland.
60% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

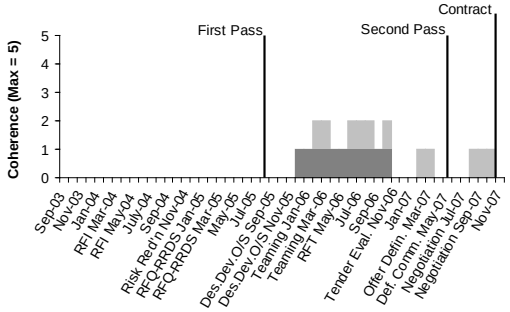


The entered environment appears to be carefully orchestrated resulting in a perceived power imbalance.

41. Client Pennies from Heaven.
80% registrations. C=2
8% of Support Managers' Awareness, shadows the Program Manager's Awareness.

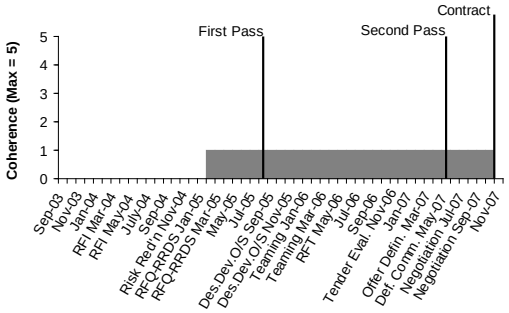


41. Contractor Pennies from Heaven.
60% registrations. C=2
55% of Support Managers' Awareness, shadows the Program Manager's Awareness.

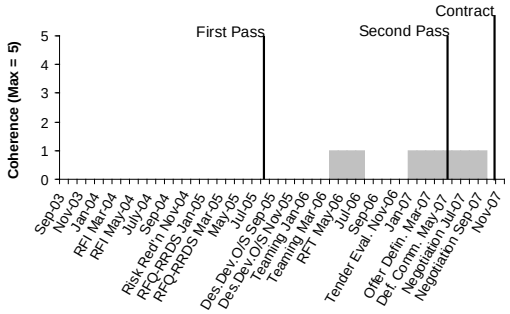


Unsolicited quality information is received from or about the other side or competitor.

42. Client Emporer's Clothes.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



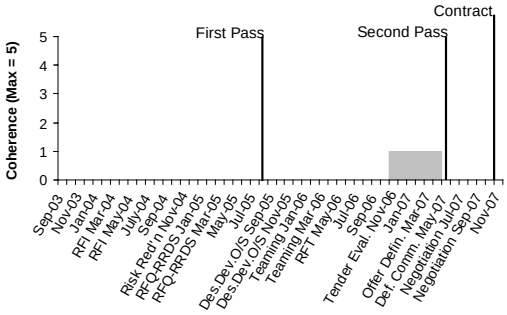
42. Contractor Emperor's Clothes.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



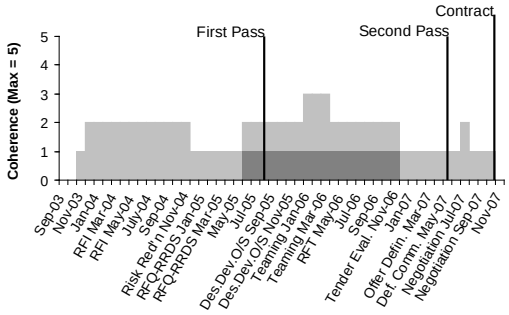
A misperception is institutionalised.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

43. Client Feed Forward.
60% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

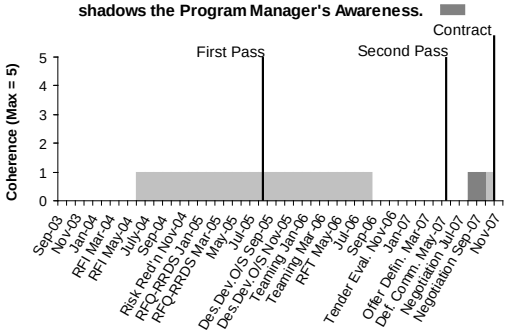


43. Contractor Feed Forward.
100% registrations. C=3
33% of Support Managers' Awareness, shadows the Program Manager's Awareness.

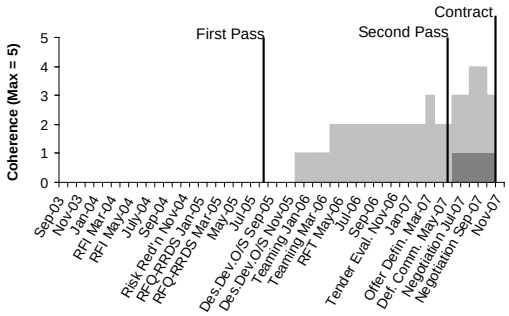


Political decisions which framed an earlier project are having foreseeable impacts on the current project.

44. Client Lemons for Sale.
80% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

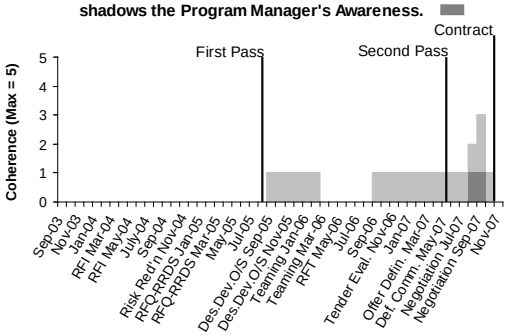


44. Contractor Lemons for Sale.
80% registrations. C=4
27% of Support Managers' Awareness, shadows the Program Manager's Awareness.

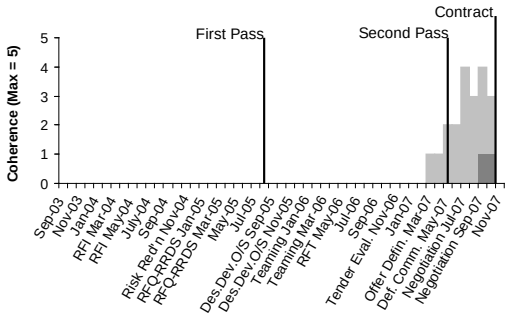


A contractor closely monitors the client for any potential contract breach which could sustain a transfer of risk.

45. Client Shotgun Marriage.
80% registrations. C=3
14% of Support Managers' Awareness, shadows the Program Manager's Awareness.



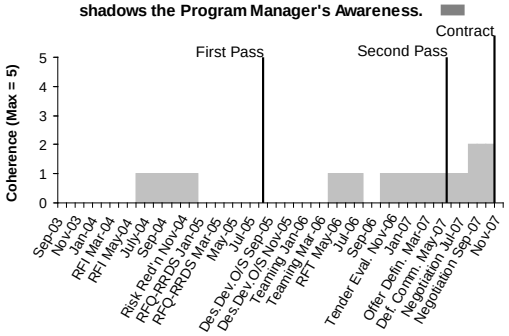
45. Contractor Shotgun Marriage.
100% registrations. C=4
28% of Support Managers' Awareness, shadows the Program Manager's Awareness.



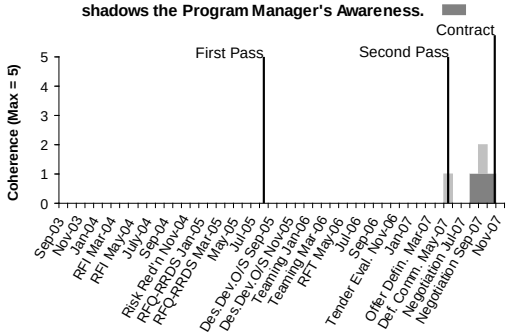
Political pressure to consummate a contract or agree to terms.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

46. Client Dirty Tricks.
100% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

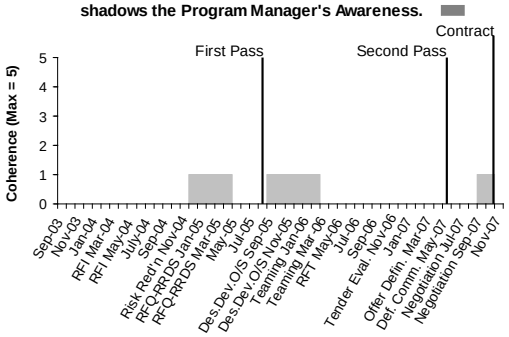


46. Contractor Dirty Tricks.
60% registrations. C=2
50% of Support Managers' Awareness, shadows the Program Manager's Awareness.

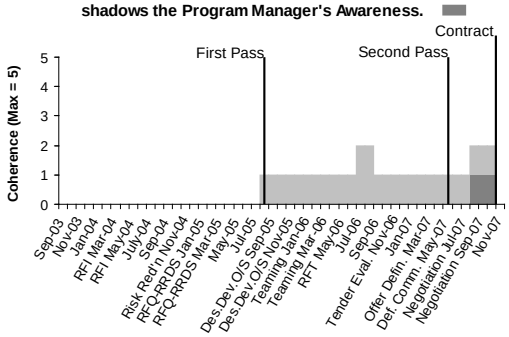


Misinformation is supplied to the highest political level.

47. Client I Had a Dream.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

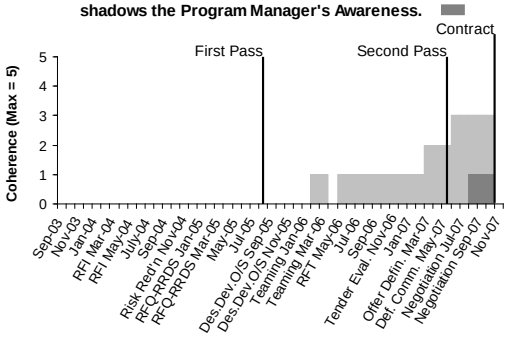


47. Contractor I Had a Dream.
60% registrations. C=2
10% of Support Managers' Awareness, shadows the Program Manager's Awareness.

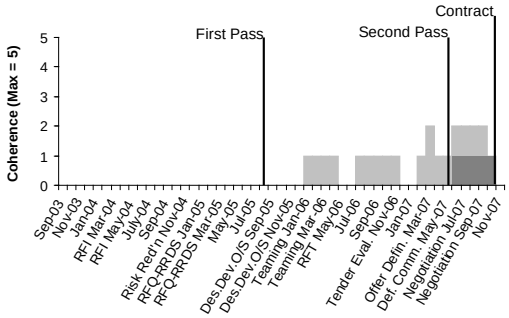


Receiving impeccable non-attributable political direction.

48. Client Wedging.
100% registrations. C=3
20% of Support Managers' Awareness, shadows the Program Manager's Awareness.



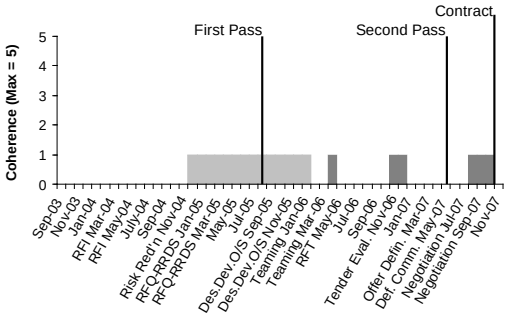
48. Contractor Wedging.
80% registrations. C=2
22% of Support Managers' Awareness, shadows the Program Manager's Awareness.



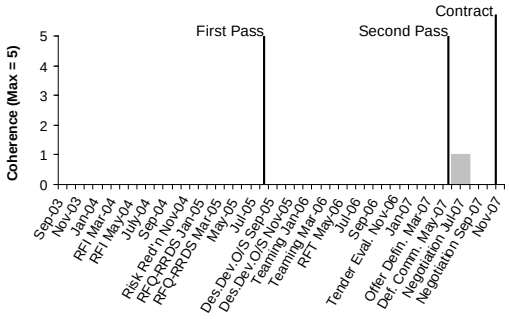
A small negotiation win on one issue can be used to leverage positions on related issues.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

49. Client White Ants.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

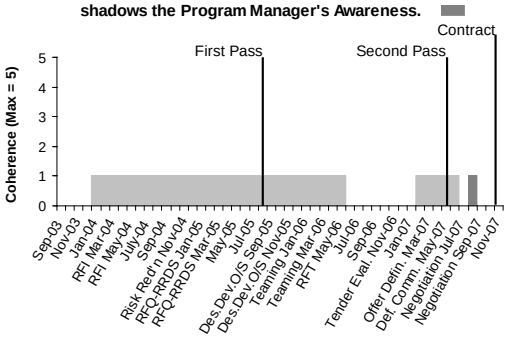


49. Contractor White Ants.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

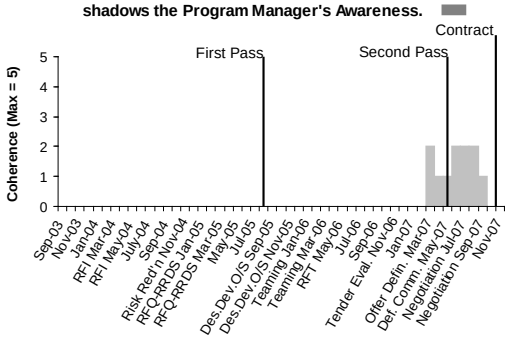


Team members independently seek change from the political office.

50. Client Pissing in the Wind.
80% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

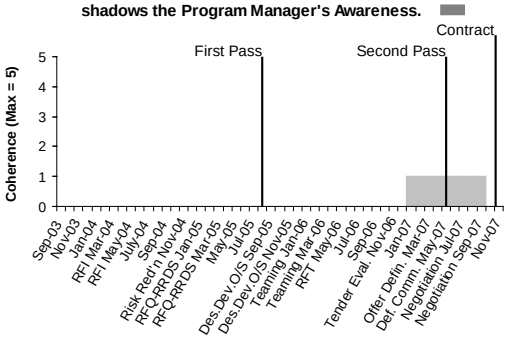


50. Contractor Pissing in the Wind.
60% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

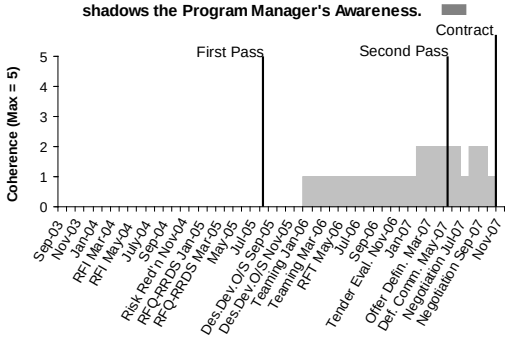


One party's negotiator does not have his principal's approved baseline positions.

51. Client P Platers.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



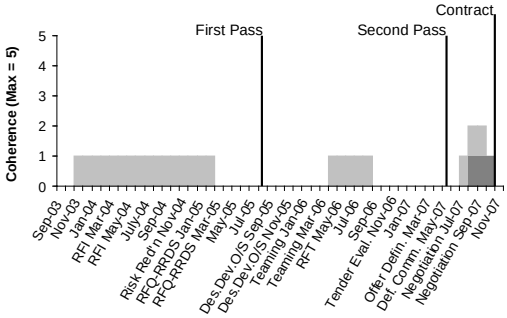
51. Contractor P Platers.
60% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



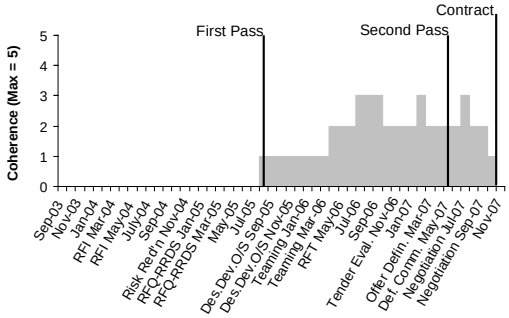
A negotiation team is comprised of rookies.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

52. Client Who Rules the Waves?
100% registrations. C=2
8% of Support Managers' Awareness, shadows the Program Manager's Awareness.

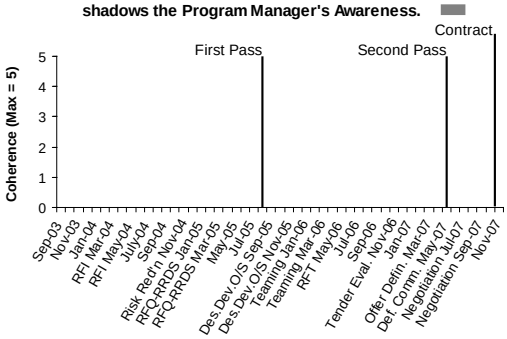


52. Contractor Who Rules the Waves?
60% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

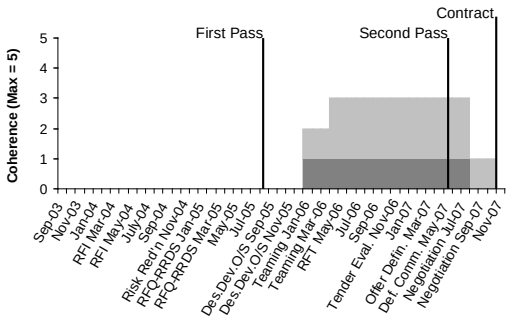


Regardless of the client's specification, it must be done our way.

53. Client Spinning Bow Tie.
0% registrations. C=0
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

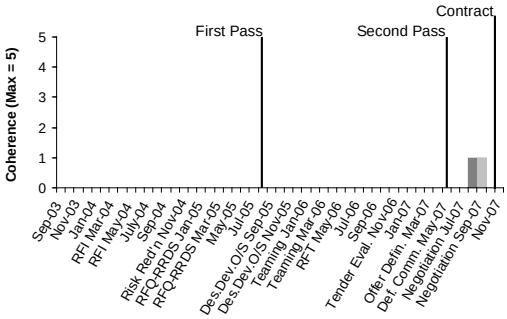


53. Contractor Spinning Bow Tie.
60% registrations. C=3
92% of Support Managers' Awareness, shadows the Program Manager's Awareness.

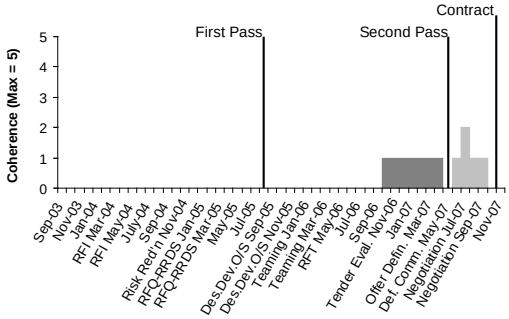


I don't trust the middle-man.

54. Client Mother's Choice.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



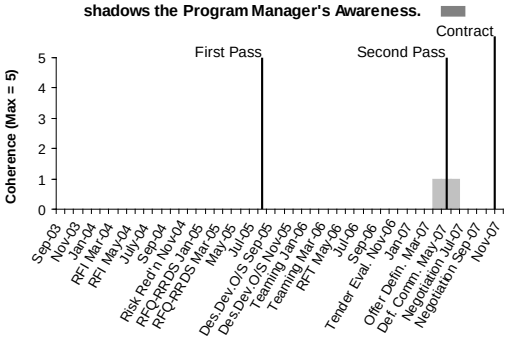
54. Contractor Mother's Choice.
60% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



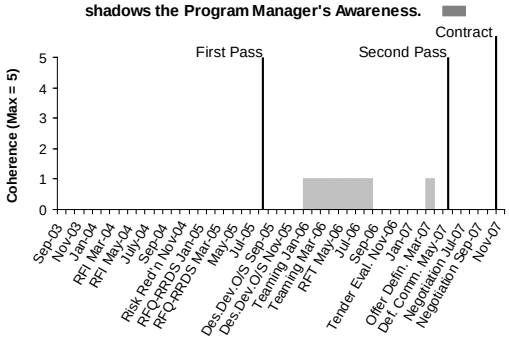
Client suggests the contractor abandons a proposed subcontractor.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

55. Client Keeping up Appearances.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

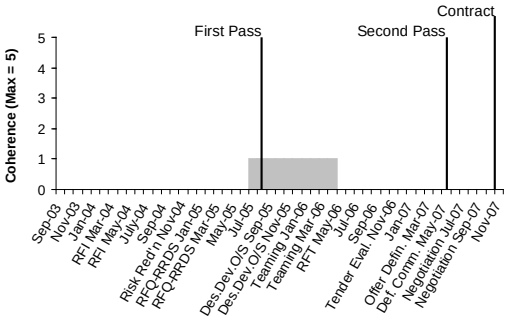


55. Contractor Keeping up Appearances.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

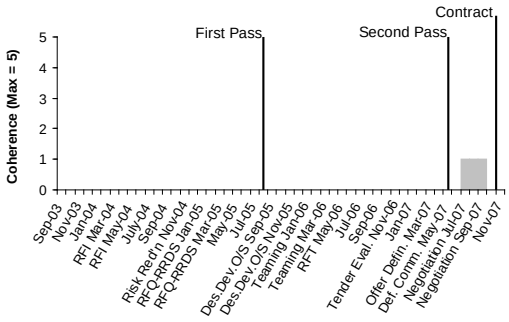


The tendering process progresses conscientiously while a latent political decision has already been made.

56. Client Free Lunch.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

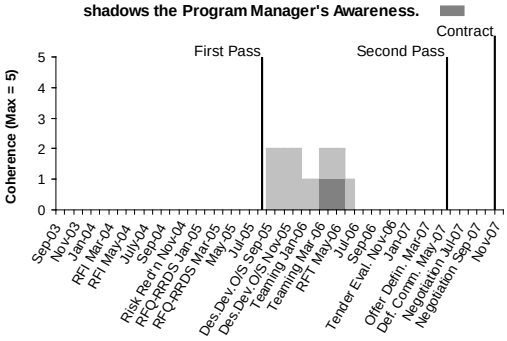


56. Contractor Free Lunch.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

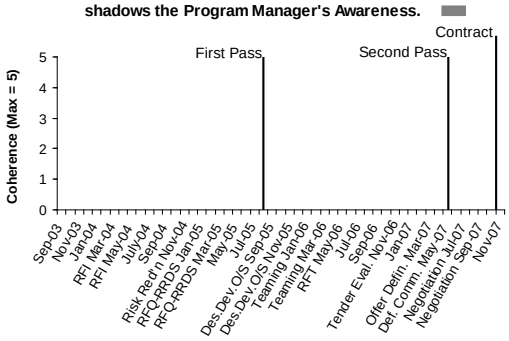


A buyer uses incentives to urge a seller to participate.

57. Client Included Out.
60% registrations. C=2
21% of Support Managers' Awareness, shadows the Program Manager's Awareness.



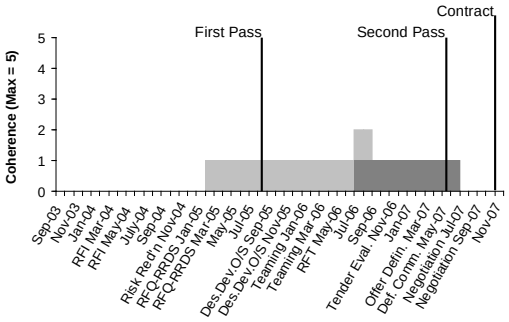
57. Contractor Included Out.
0% registrations. C=0
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



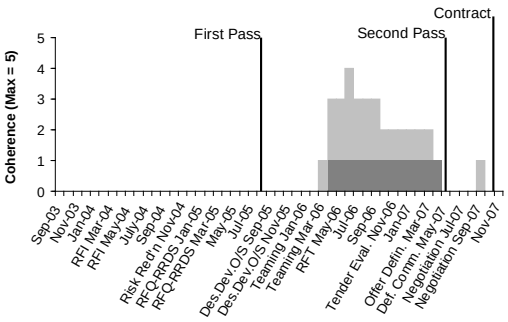
Some potential suppliers receive disproportionate welcoming attention.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

58. Client Refilling the Honey Pot.
40% registrations. C=2
11% of Support Managers' Awareness, shadows the Program Manager's Awareness.

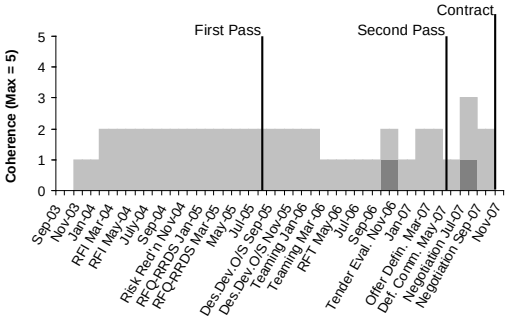


58. Contractor Refilling the Honey Pot.
80% registrations. C=4
90% of Support Managers' Awareness, shadows the Program Manager's Awareness.

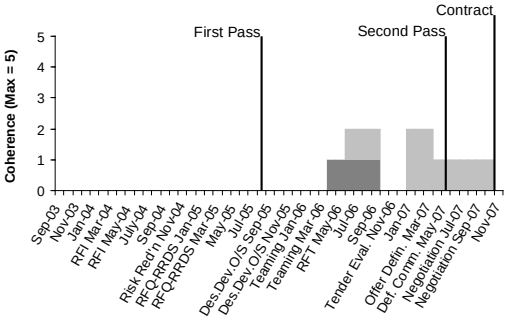


Enticed participants need constant maintenance.

59. Client Seeds of Doubt.
100% registrations. C=3
8% of Support Managers' Awareness, shadows the Program Manager's Awareness.

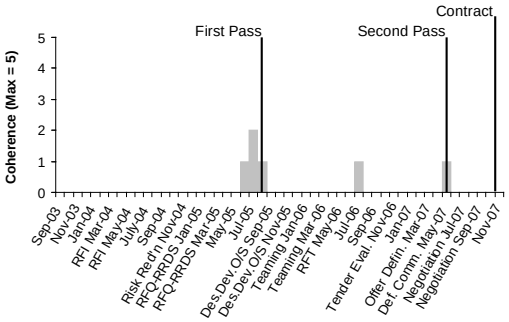


59. Contractor Seeds of Doubt.
80% registrations. C=2
24% of Support Managers' Awareness, shadows the Program Manager's Awareness.

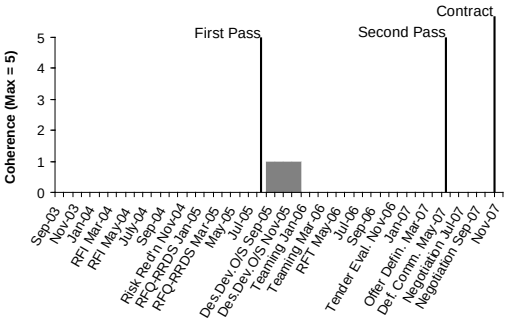


A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.

60. Client A Moment of Truth.
40% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



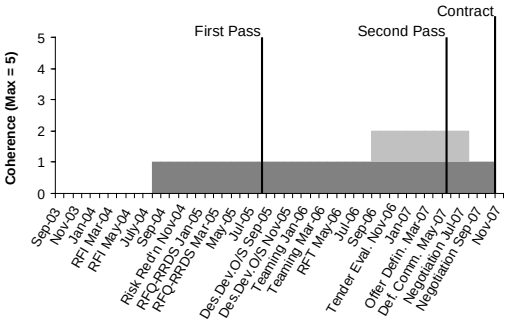
60. Contractor A Moment of Truth.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



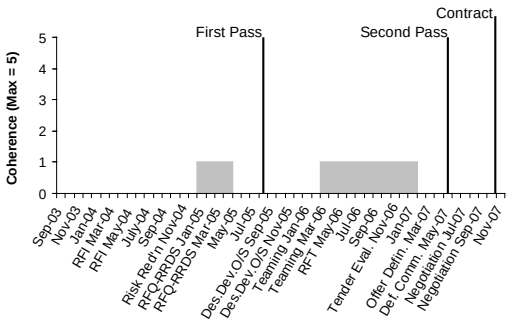
Impeccable official information of strategic importance.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

61. Client Stalking Horse.
40% registrations. C=2
100% of Support Managers' Awareness, shadows the Program Manager's Awareness.

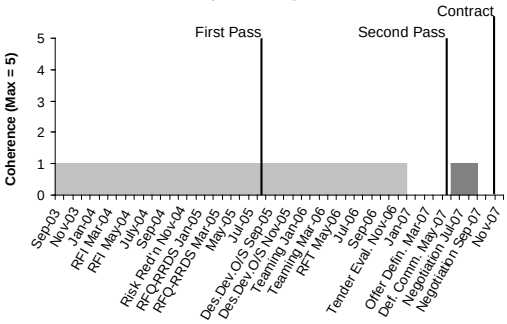


61. Contractor Stalking Horse.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

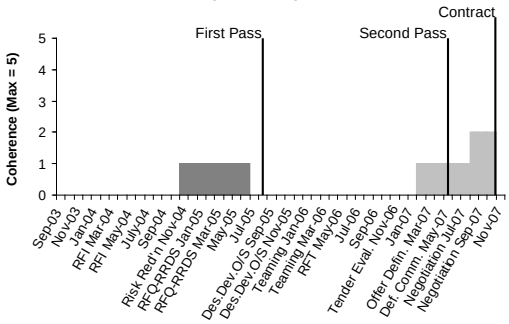


Tenderers believe they are being used as a political 'stalking horse'.

62. Client Real Power.
40% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

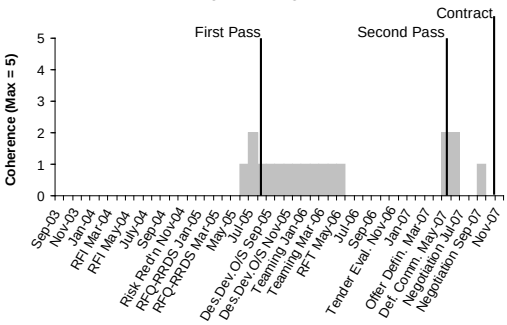


62. Contractor Real Power.
60% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

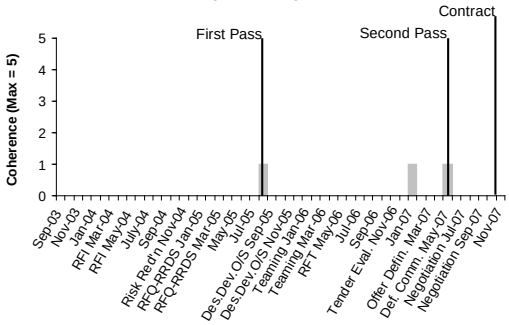


The political office is called upon to reduce artificial complexity generated by the bureaucracy.

63. Client To Play the King.
80% registrations. C=2
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



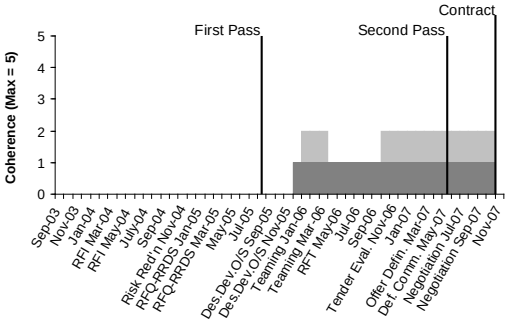
63. Contractor To Play the King.
20% registrations. C=1
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



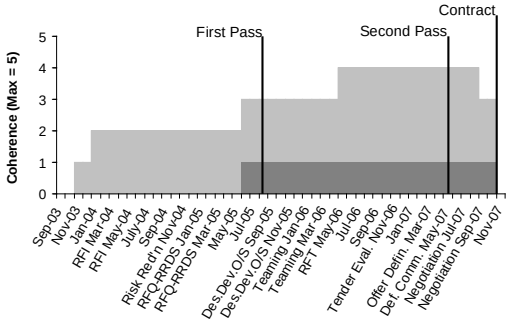
The risks are so high that the decisions can only be carried by politicians.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

64. Client Sweet Seduction.
60% registrations. C=2
100% of Support Managers' Awareness, shadows the Program Manager's Awareness.

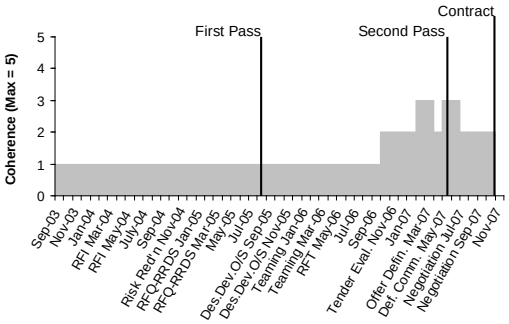


64. Contractor Sweet Seduction.
80% registrations. C=4
67% of Support Managers' Awareness, shadows the Program Manager's Awareness.

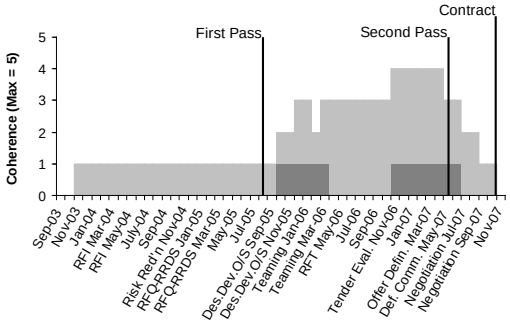


Probing for potential intelligence sources.

65. Client Who's Who in the Zoo.
80% registrations. C=3
0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

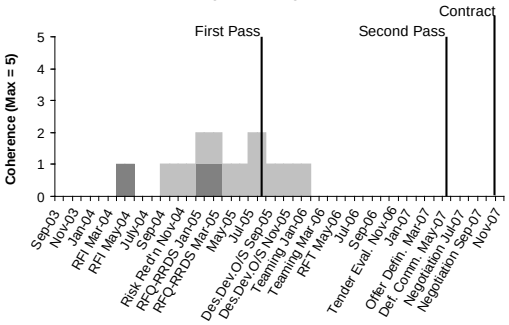


65. Contractor Who's Who in the Zoo.
80% registrations. C=4
38% of Support Managers' Awareness, shadows the Program Manager's Awareness.



Putting structure to the political issues and players.

66. Client The Cook and the Chef.
60% registrations. C=2
16% of Support Managers' Awareness, shadows the Program Manager's Awareness.



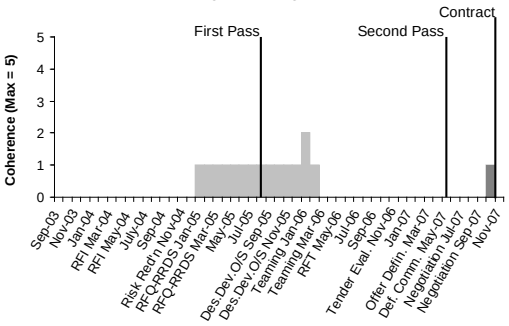
Political manipulation of the acquisition strategy.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS

67. Client Tectonics.

60% registrations. C=2

0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

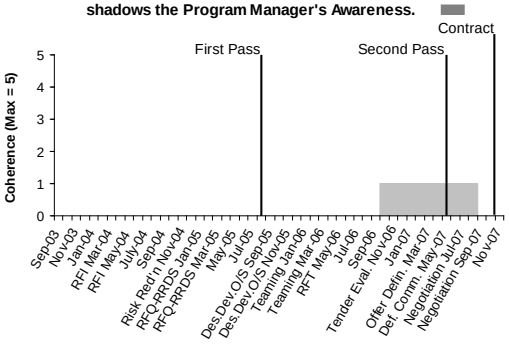


Corporate mergers and acquisitions could impact the political preferences.

68. Client Probity Police.

20% registrations. C=1

0% of Support Managers' Awareness, shadows the Program Manager's Awareness.

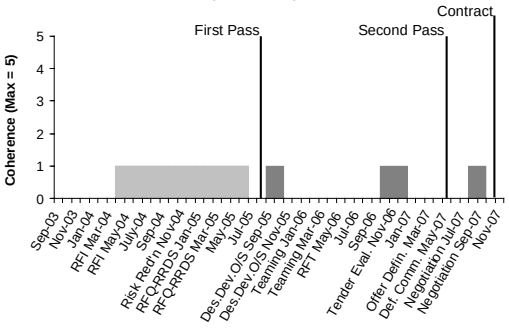


The level of probity becomes a self-serving process without adding value to the program.

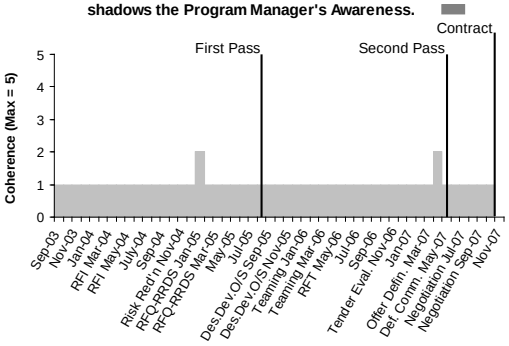
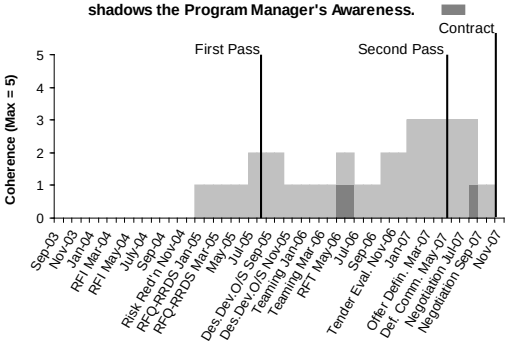
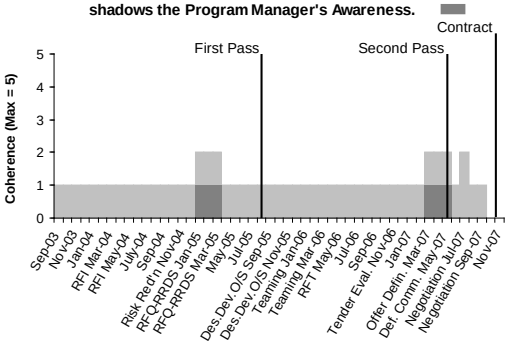
69. Client The Bureaucrat's Bureaucrat.

40% registrations. C=1

0% of Support Managers' Awareness, shadows the Program Manager's Awareness.



Black-Letter interpretations are impeding the acceptance of innovative solutions.

ELECTED RECALLED **CLIENT** AWARENESS	ELECTED RECALLED **CONTRACTOR** AWARENESS
70. Client Power Politics. **60% registrations. C=2** **0% of Support Managers' Awareness, shadows the Program Manager's Awareness.**  One or more dominating personalities bias the decision-making process.	
71. Client With Friends Like These. **100% registrations. C=3** **7% of Support Managers' Awareness, shadows the Program Manager's Awareness.**  A significant project risk is being generated within our own (macro) organisation.	
72. Client Steadfast 'Iron-Colonel'. **80% registrations. C=2** **12% of Support Managers' Awareness, shadows the Program Manager's Awareness.**  Relentless discourse to achieve the best solution for the war-fighters.	

ANNEXURE D.
COMPARISONS OF SENSE-MAKING ITEMS BETWEEN CLIENT AND CONTRACTOR ACROSS EPOCHS.

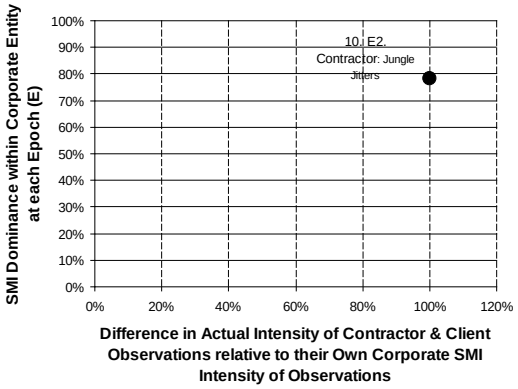
Explanation of Data Graphics:

The X-Y chart compares pairs of values.

The values relate to:

a. Y-axis: The intensity of articulated sense-making items.
b. Y-axis: The intensity of an articulated sense-making item relative to the sense-making item with the highest intensity for that organisation within a defined epoch. A threshold value of 40% is applied.
c. X-axis: The absolute difference between organisations for a particular articulated sense-making item relative to the intensity reported by any one organisation (Client or Contractor) for that sense-making item.
d. The Contractor is plotted with a dark line. The Client is plotted with a lighter shade.
e. Values below the 40% Y-axis threshold (including no registrations) are excluded. If these are intermediate values then the remaining data points are connected with a broken line.

10. E_n Jungle Jitters: A party is keen for the work but apprehensive about untested relationships.



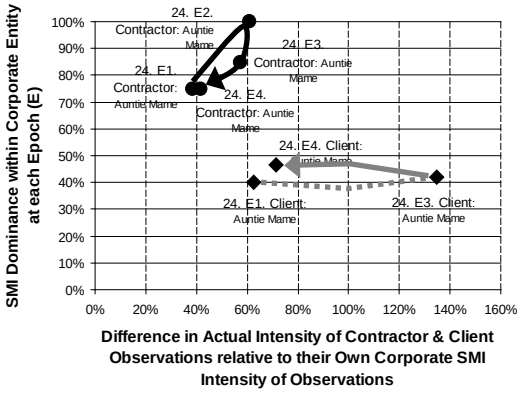
Sense-making item [sense-making item (SMI)] ID, E_n (Epoch Number), Idiom and Explanation.

X-axis: The absolute difference between organisations for a particular articulated sense-making item relative to the intensity reported by the organisation of interest (the Contractor in this example).

Special Instance: When one organisation has no registration of awareness (the Client in this case), the other organisation will have an X value of 100%.

Y-axis: The intensity of an articulated sense-making item relative to the sense-making item with the highest intensity for that organisation within a defined epoch (E_n). The maximum will always be 100%. The Client and the Contractor will normally have different actual maxima.

24. E_n Auntie Mame: Obtaining high-value insights from a non-contracting party.

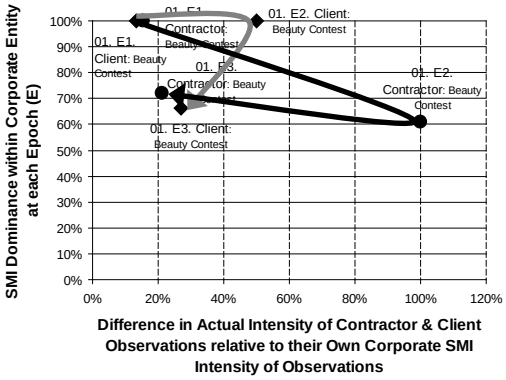


Values for all epochs are displayed concurrently.

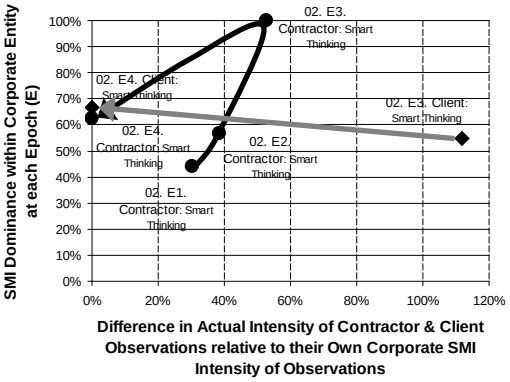
Both Client and Contractor data are displayed.

Insignificant values are removed and the remaining data points are connected with broken lines.

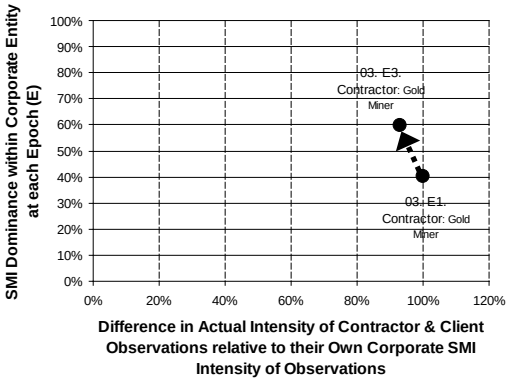
01. Beauty Contest: A party's behaviour concentrates on its presentation values.



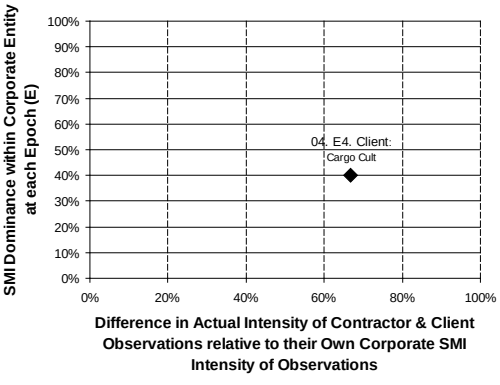
02. Smart Thinking: Attention is focused on a party's business-model (and potential risks).



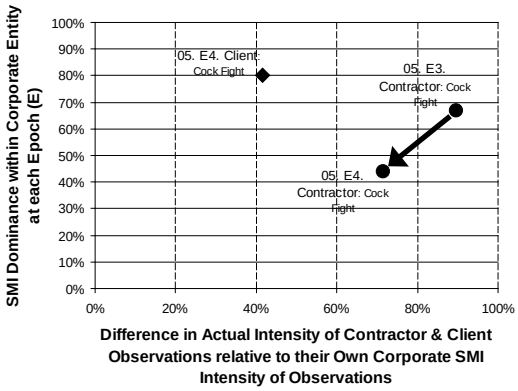
03. Gold Miner: A party uses this project to advance another project's objectives.



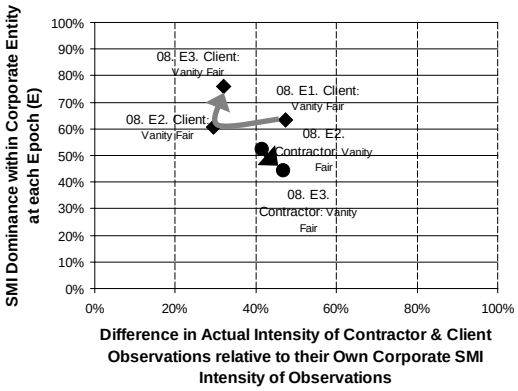
04. Cargo Cult: A party's behaviours result from a history of receiving guaranteed non-competitive work.



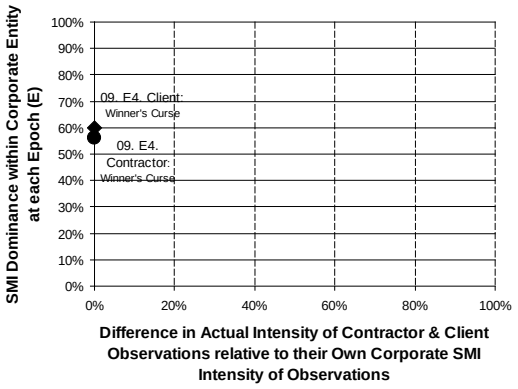
05. Cock Fight: Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.



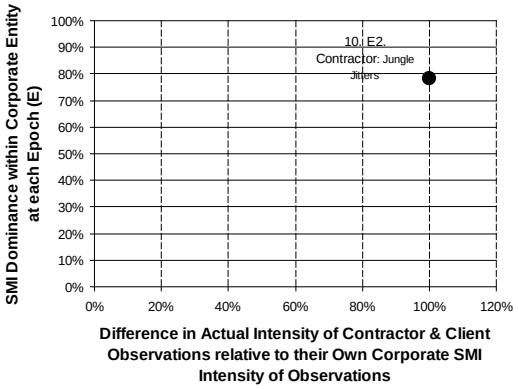
08. Vanity Fair: A party feels pressure to participate because of the project size and/or its market stature.



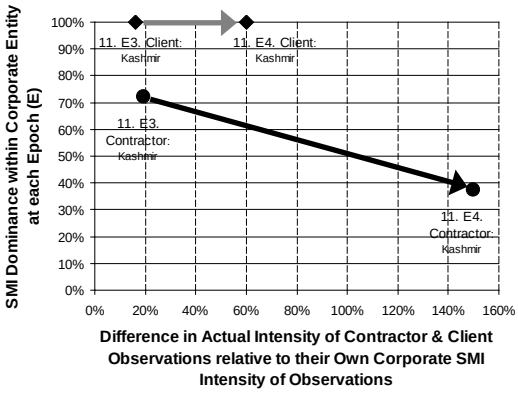
09. Winner's Curse: A party realises that it will suffer because it offered a fixed-price to deliver an ill-defined or ill-understood requirement.



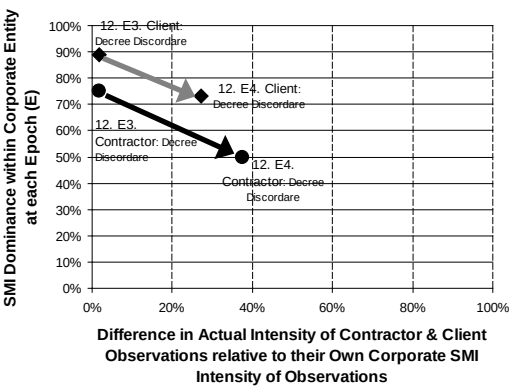
10. Jungle Jitters: A party is keen for the work but apprehensive about untested relationships.



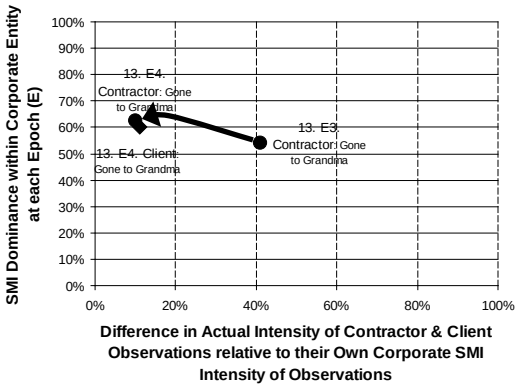
11. Kashmir: A party behaves apprehensively as it perceives that other involved contractors may try to appropriate its current &/or future contract share.



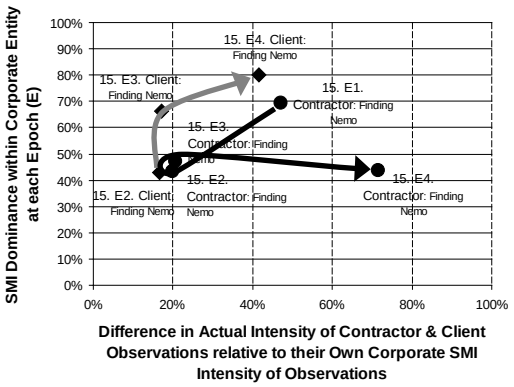
12. Decree Discordare: A party believes that another party plays the dual (ambiguous) roles of a team-player while retaining final decision-rights.



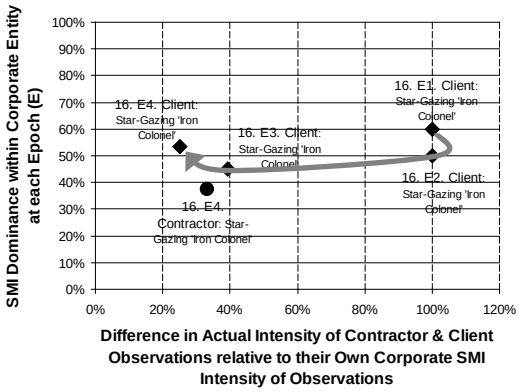
13. Gone to Grandma: A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.



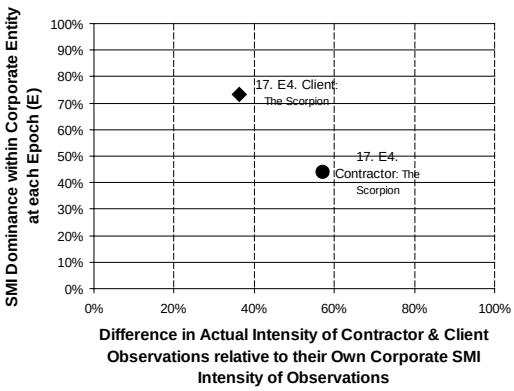
15. Finding Nemo: A party knows that there is a game at play but has difficulty defining its parameters and structure.



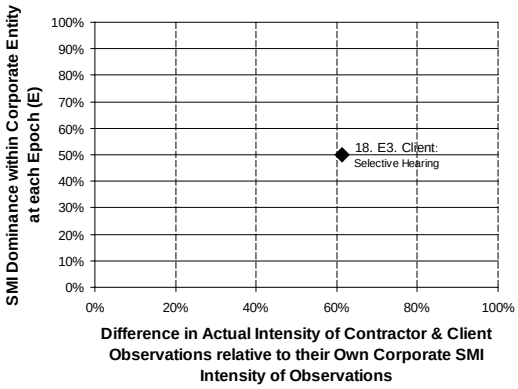
16. Star-Gazing 'Iron Colonel': A non-aligned bureaucrat focuses on procedural detail to avoid contentious issues which might degrade promotion prospects.



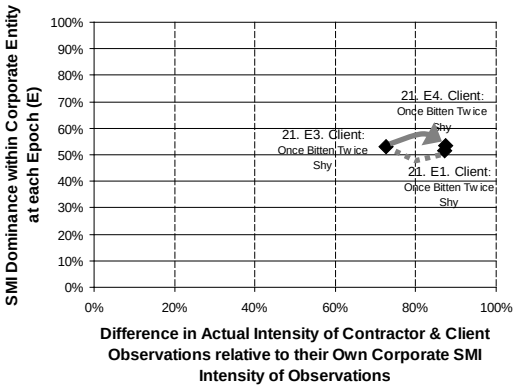
17. The Scorpion: The project is implanted with a toxic human agent (common foe) whose presence unites opposing parties or drives them apart.



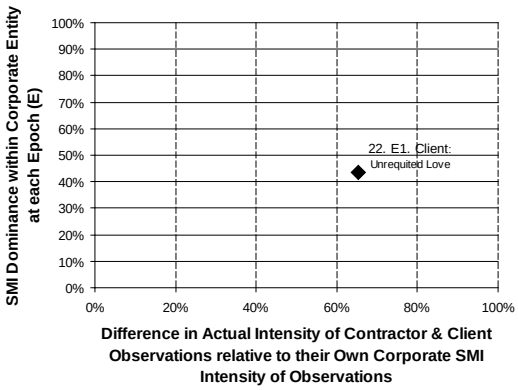
18. Selective Hearing: A party chooses to be 'led' to a fundamentally different interpretation of the game at play.



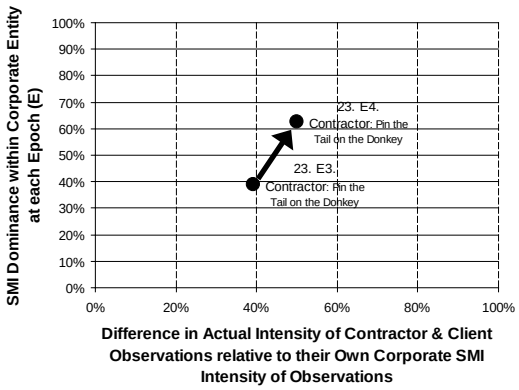
21. Once Bitten, Twice Shy: Previous experiences have led to ambivalent or negative feelings.



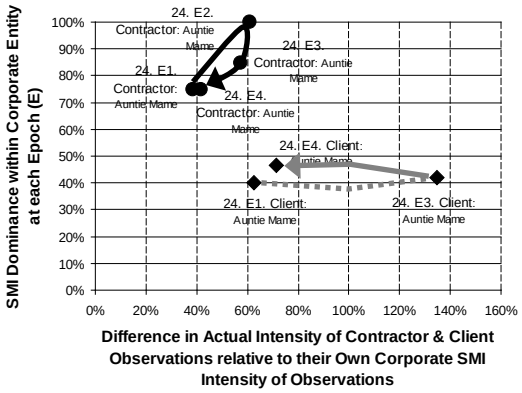
22. Unrequited Love: Past superior performance appears to be of academic value only.



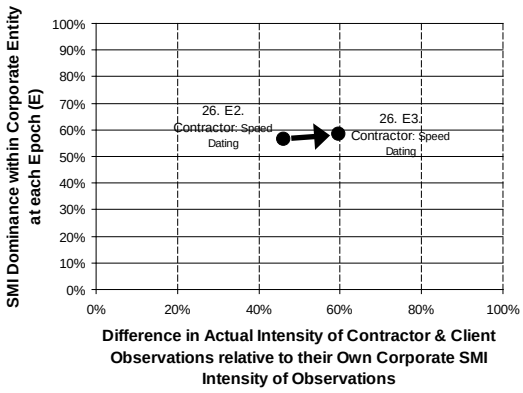
23. Pin the Tail on the Donkey: Both parties have a fundamentally different sense-making itemion of the game at play.



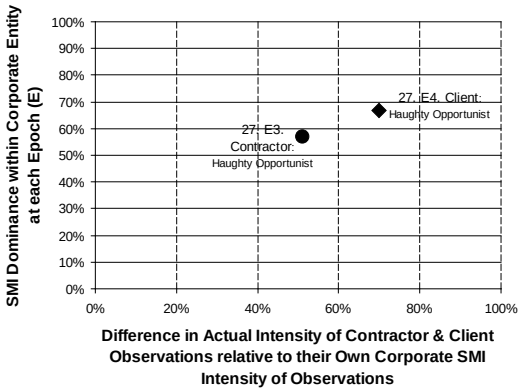
24. Auntie Mame: Obtaining high-value insights from a non-contracting party.



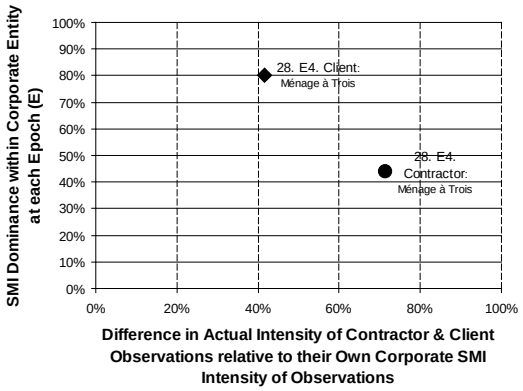
26. Speed Dating (in a shrinking sample): Potential participants must mate before entering the game.



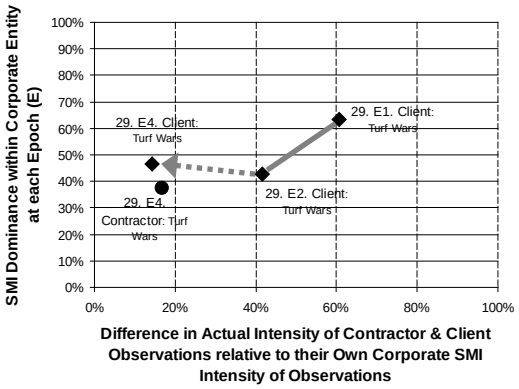
27. Haughty Opportunist: A temporal situation fortuitously affords one party enhanced power.



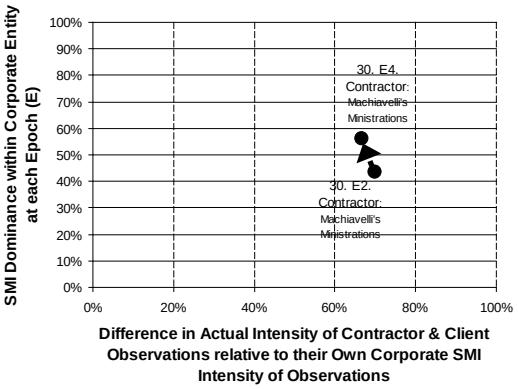
28. Ménage à Trois: A client and subcontractor are negotiating.



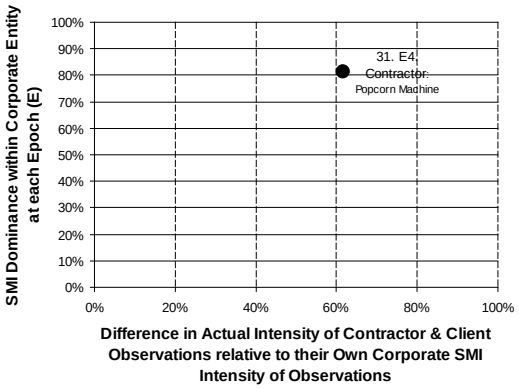
29. Turf Wars: Bureaucrats compete for involvement.



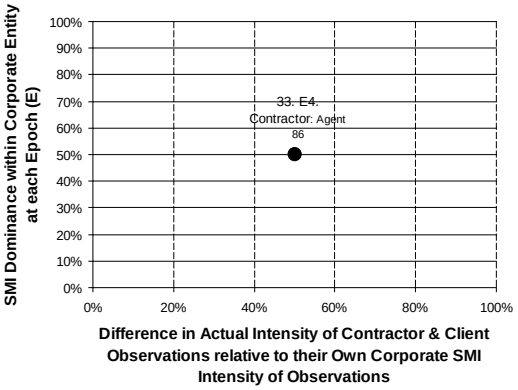
30. Machiavelli's Ministrations: A powerful stakeholder changes the game.



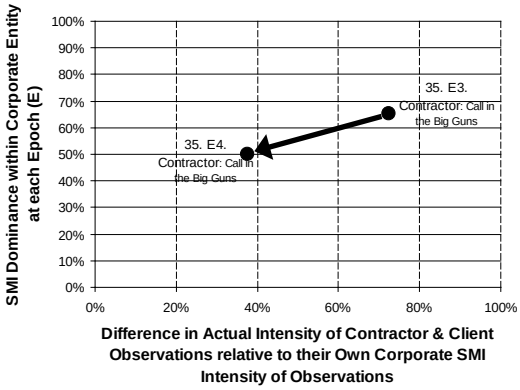
31. Popcorn Machine: A negotiator has an unstable authority base.



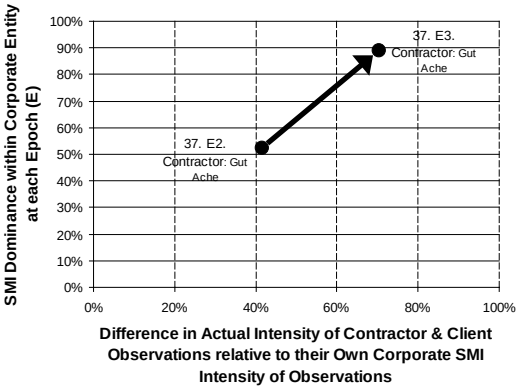
33. Agent 86: A surreal personality is active in the project.



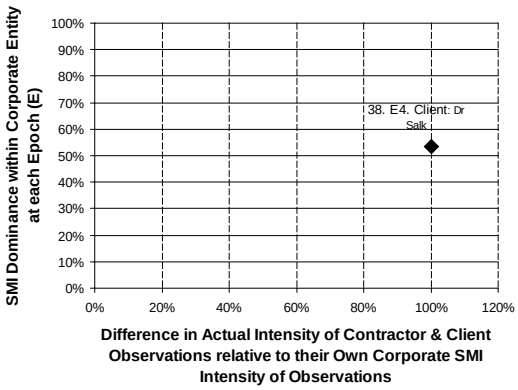
35. Call in the Big Guns: A party seeks Ministerial dialog.



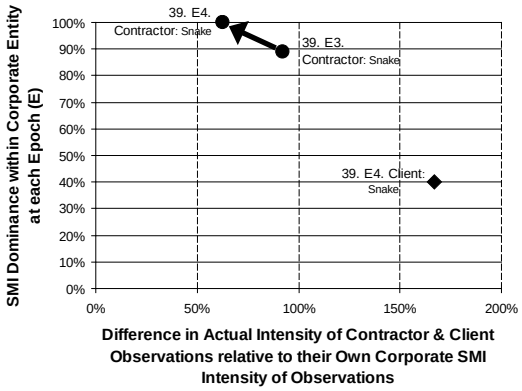
37. Gut Ache: An aura of doubt pervades the process even though everything appears to be technically correct.



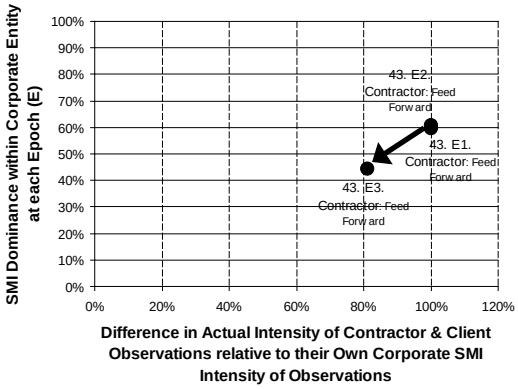
38. Dr Salk: A game is initiated to thwart the emergence of another game.



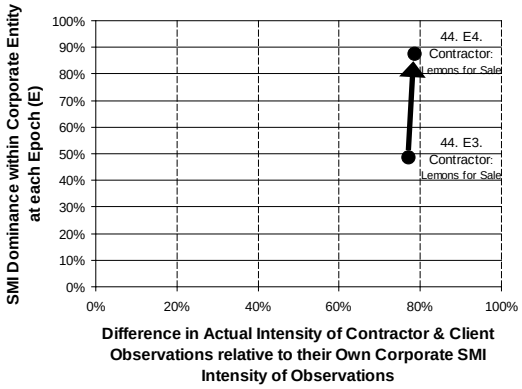
39. Snake: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).



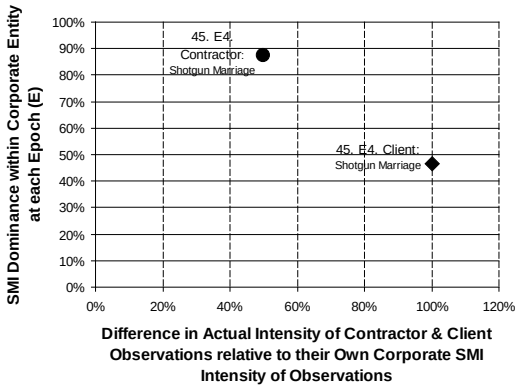
43. Feed Forward: Political decisions which framed an earlier project are having foreseeable impacts on the current project.



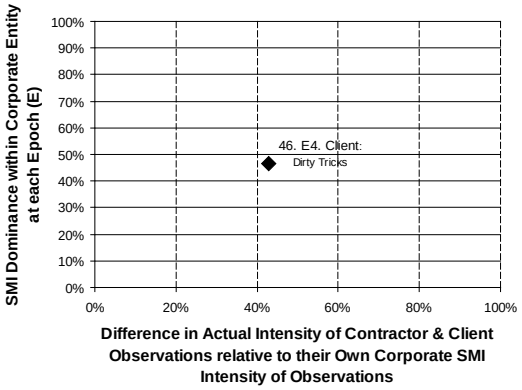
44. Lemons for Sale: A contractor closely monitors the client for any potential contract breach which could sustain a transfer of risk.



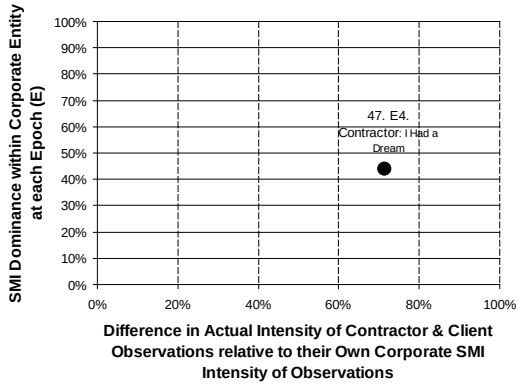
45. Shotgun Marriage: Political pressure to consummate a contract or agree to terms.



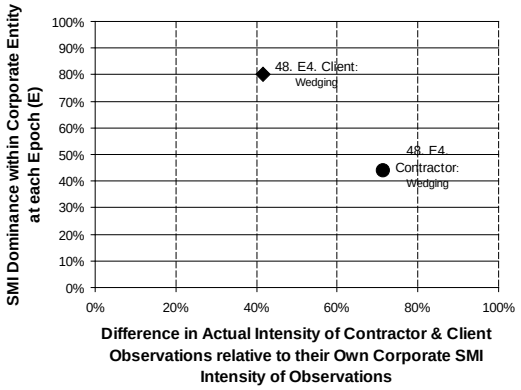
46. Dirty Tricks: Misinformation is supplied to the highest political level.



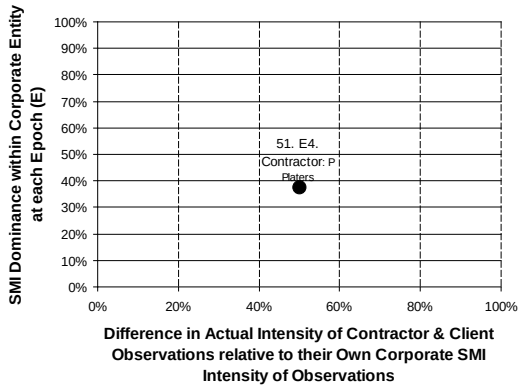
47. I Had a Dream: Receiving impeccable non-attributable political direction.



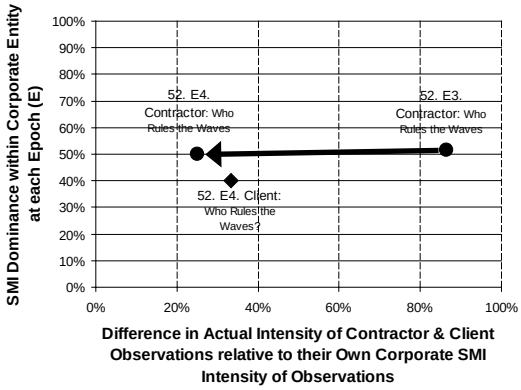
48. Wedging: A small negotiation win on one issue can be used to leverage positions on related issues.



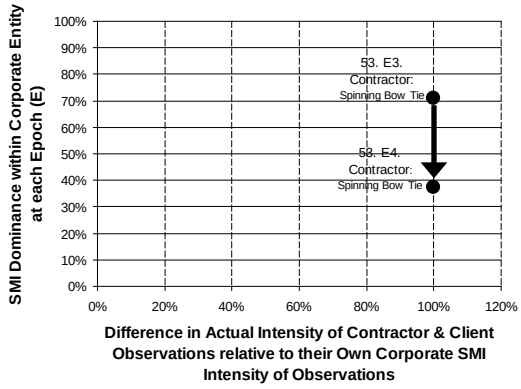
51. P Platers: A negotiation team is comprised of rookies.



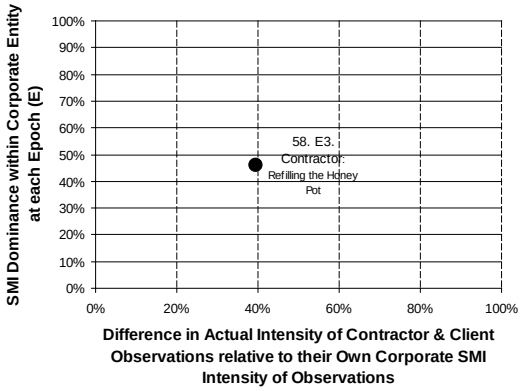
52. Who Rules the Waves?: Regardless of the client's specification, it must be done our way.



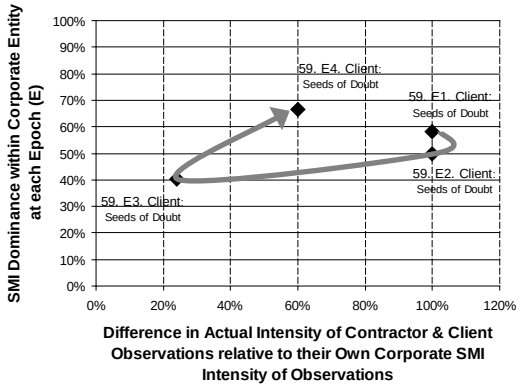
53. Spinning Bow Tie: I don't trust the middle-man.



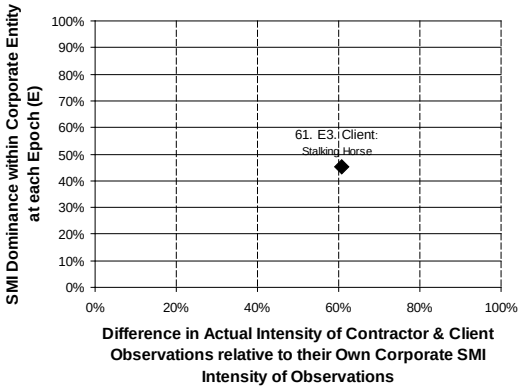
58. Refilling the Honey Pot: Enticed participants need constant maintenance.



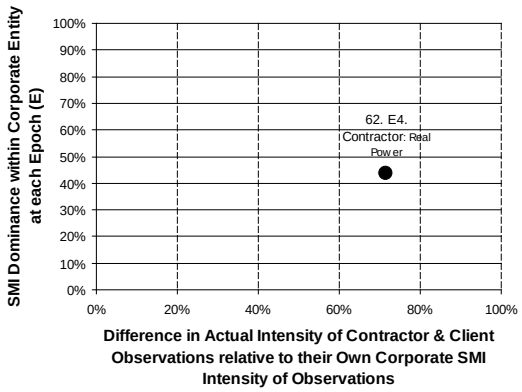
59. Seeds of Doubt: A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.



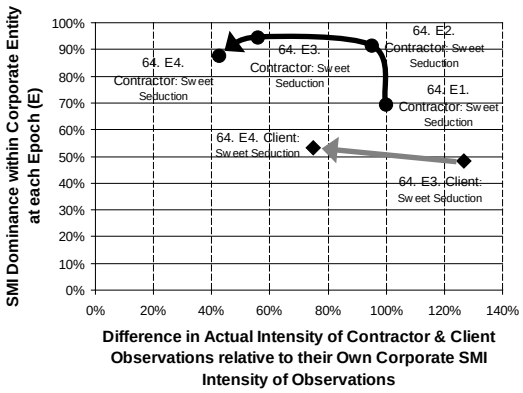
61. Stalking Horse: Tenderers believe they are being used as a political 'stalking horse'.



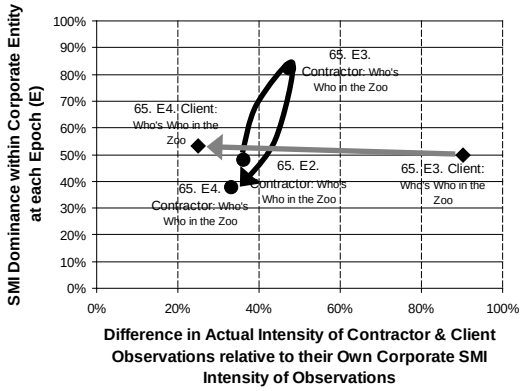
62. Real Power: The political office is called upon to reduce artificial complexity generated by the bureaucracy.



64. Sweet Seduction: Probing for potential intelligence sources.



65. Who's Who in the Zoo: Putting structure to the political issues and players.

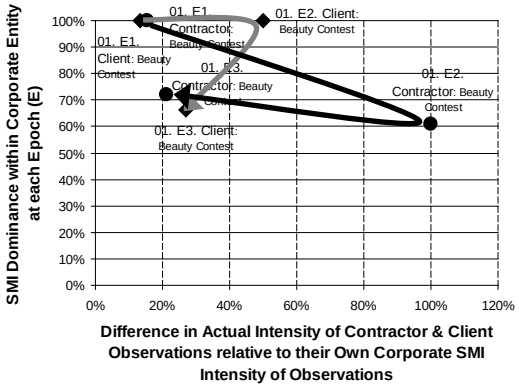


The following tableaux, sort the graphs by (1) Epoch and (2) Relative Strength of Awareness.

Case S

Epoch 1 – Client – Awareness Order

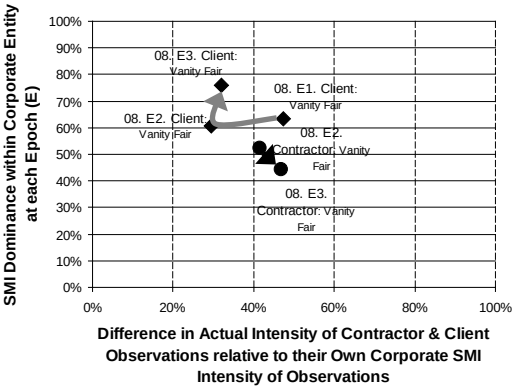
01. E1 Beauty Contest: A party's behaviour concentrates on its presentation values.



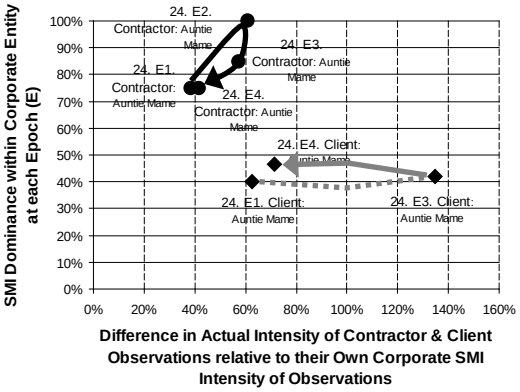
Epoch 1 – Contractor – Awareness Order

01. E1 Beauty Contest: A party's behaviour concentrates on its presentation values.

08. E1 Vanity Fair: A party feels pressure to participate because of the project size and/or its market stature.



24. E1 Auntie Mame: Obtaining high-value insights from a non-contracting party.



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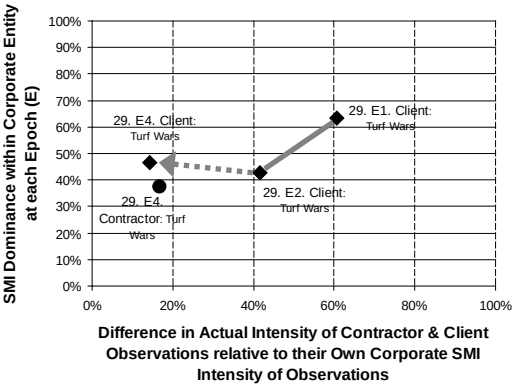

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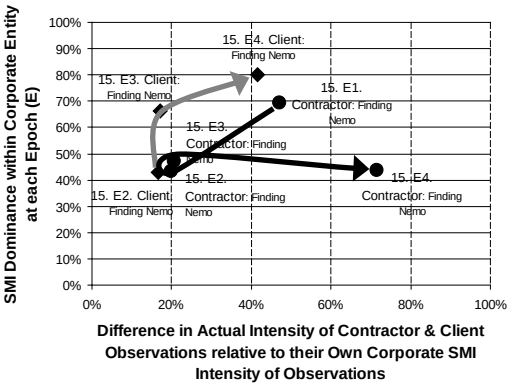

Case S

Epoch 1 – Client – Awareness Order

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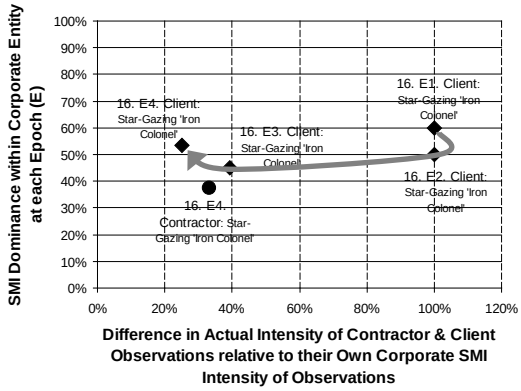

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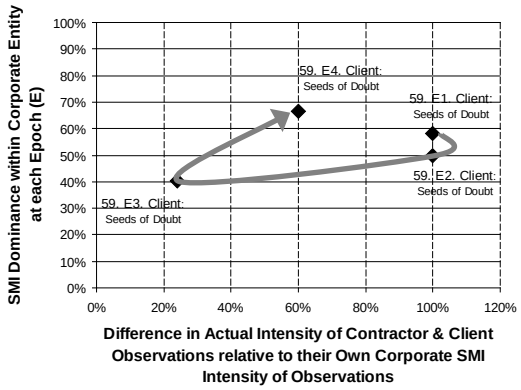

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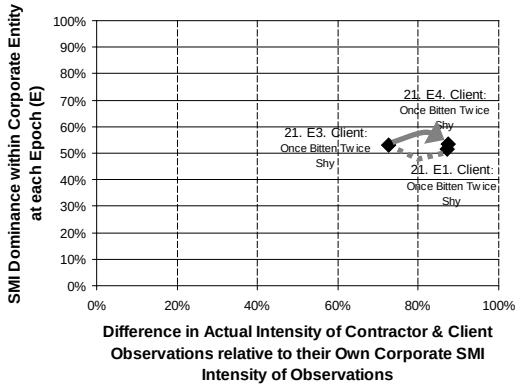

Epoch 1 – Contractor – Awareness Order

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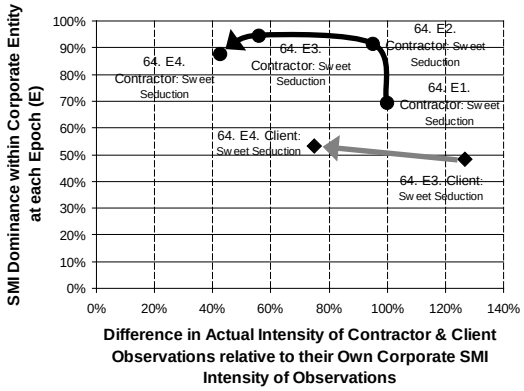

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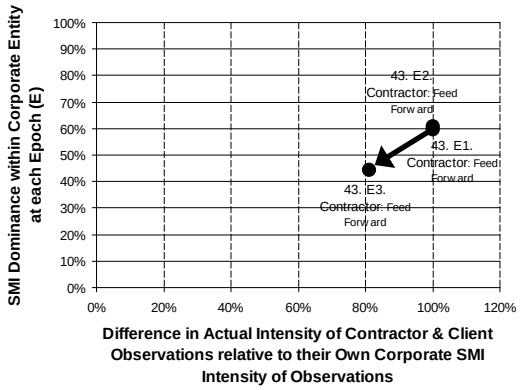

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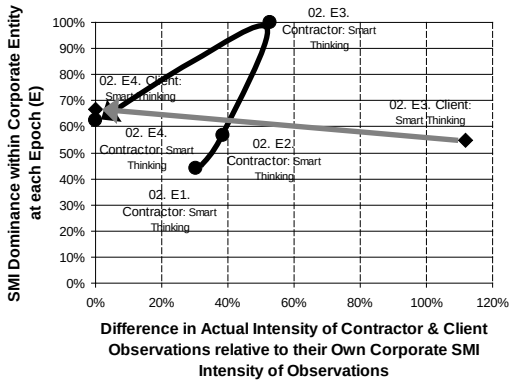
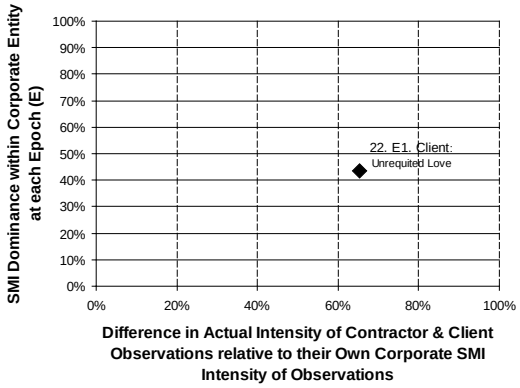


Case S

Epoch 2 – Client – Awareness Order

22. E1 Unrequited Love: Past superior performance appears to be of academic value only.



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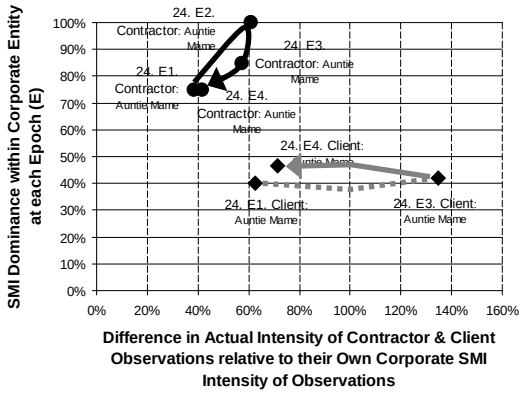

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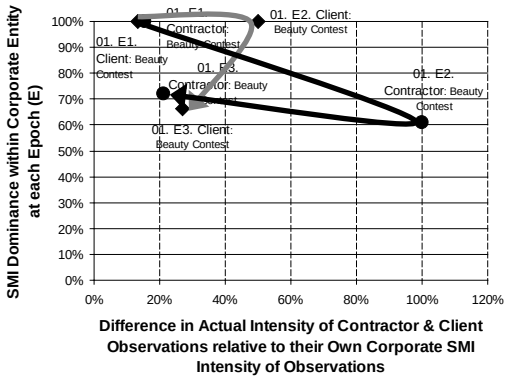
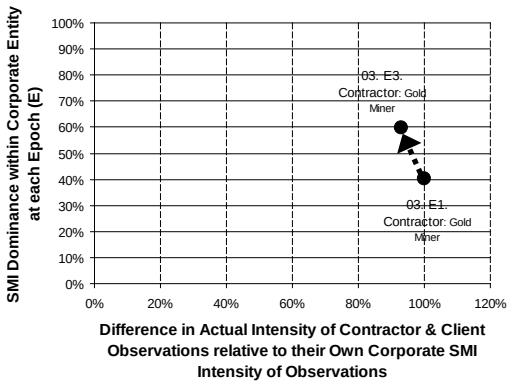


Epoch 2 – Contractor – Awareness Order

03. E1 Gold Miner: A party uses this project to advance another project's objectives.



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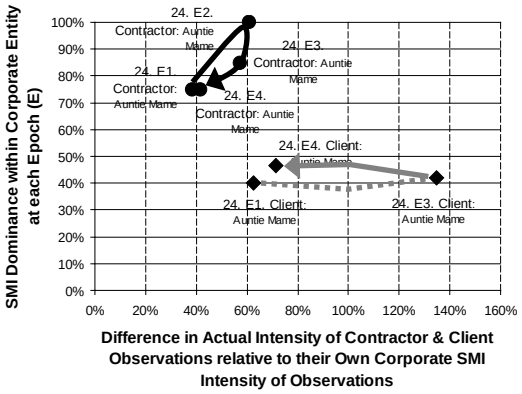

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Epoch 2 – Client – Awareness Order

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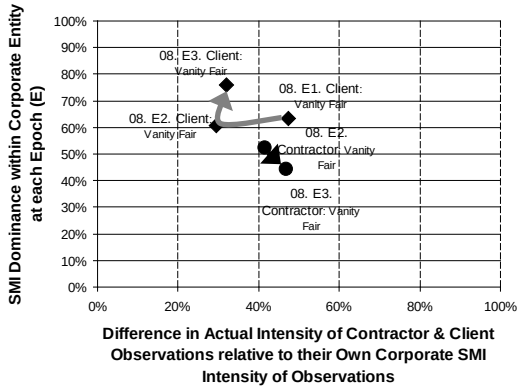

Epoch 2 – Contractor – Awareness Order

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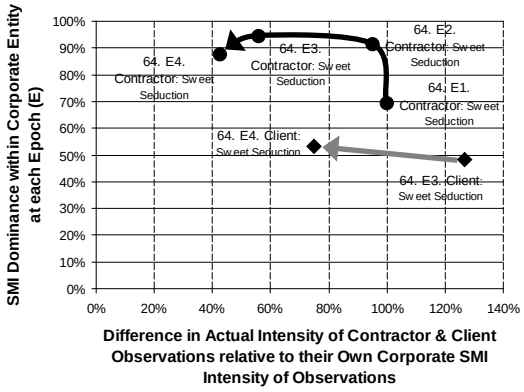

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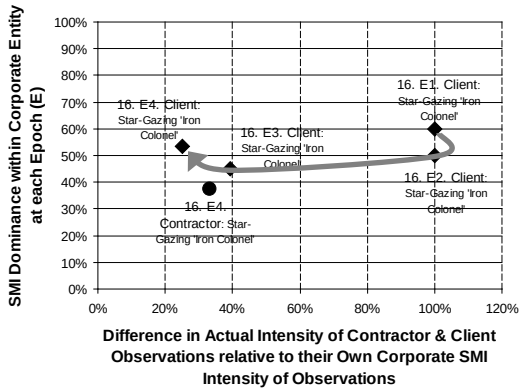
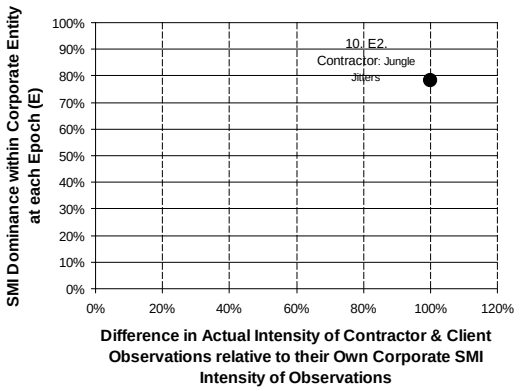


10. E2 Jungle Jitters: A party is keen for the work but apprehensive about untested relationships.



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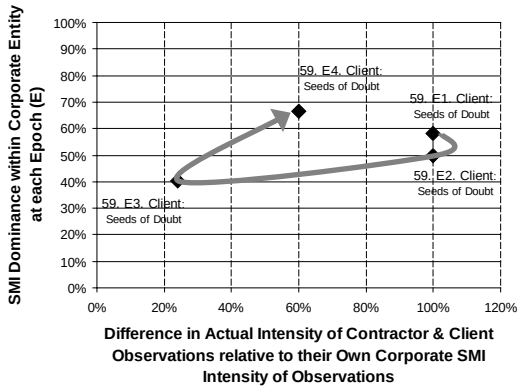

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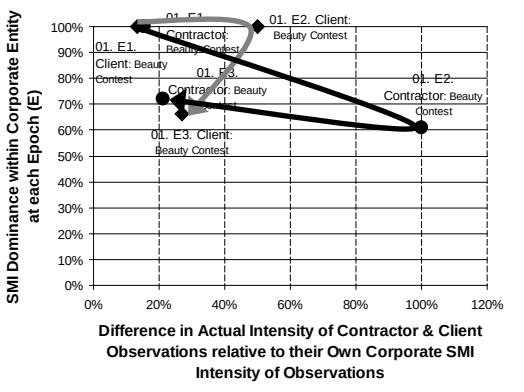

Case S

Epoch 2 – Client – Awareness Order

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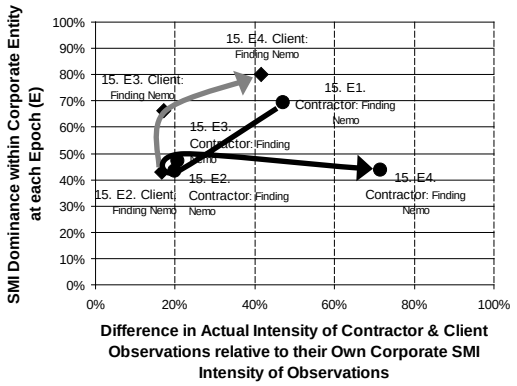

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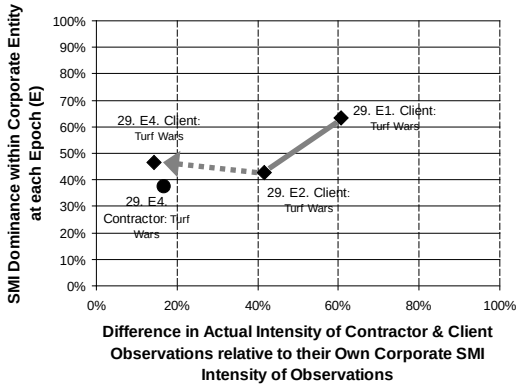

Epoch 2 – Contractor – Awareness Order

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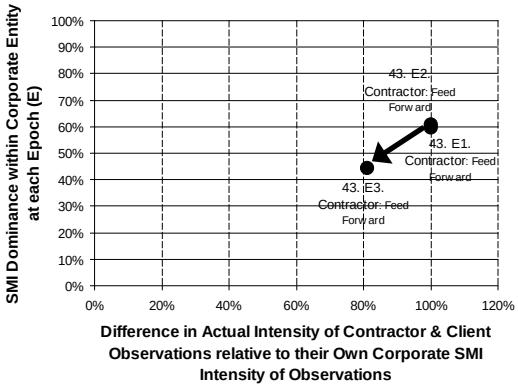

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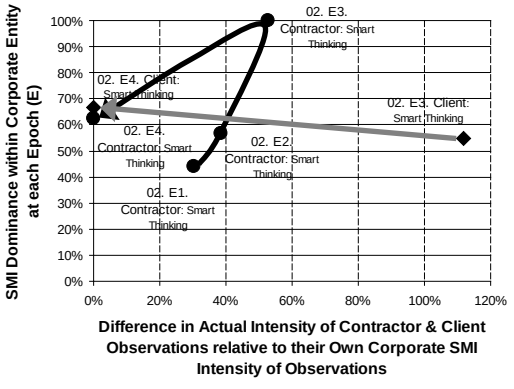
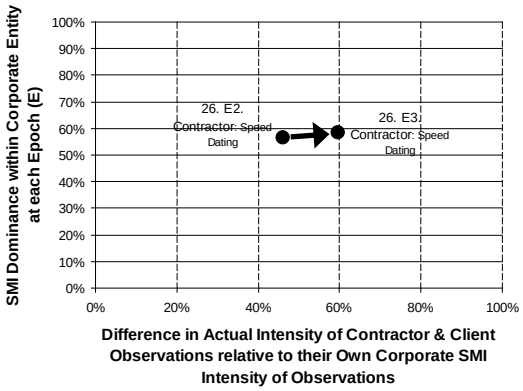


26. E2 Speed Dating (in a shrinking sample): Potential participants must mate before entering the game.



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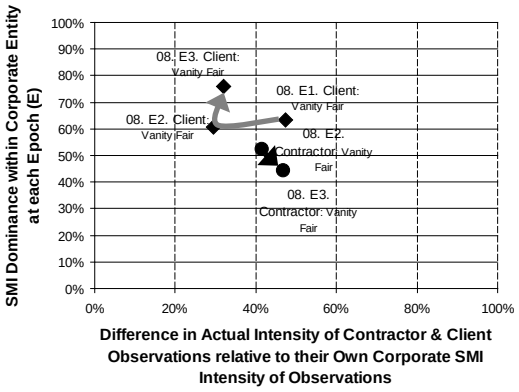
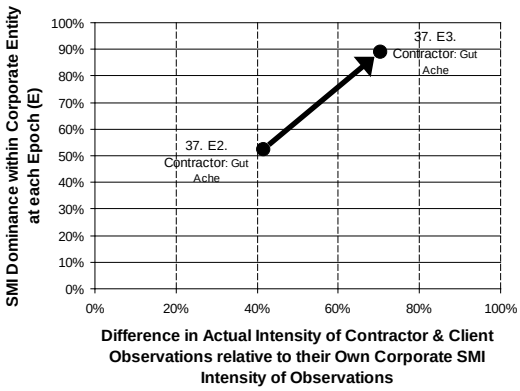
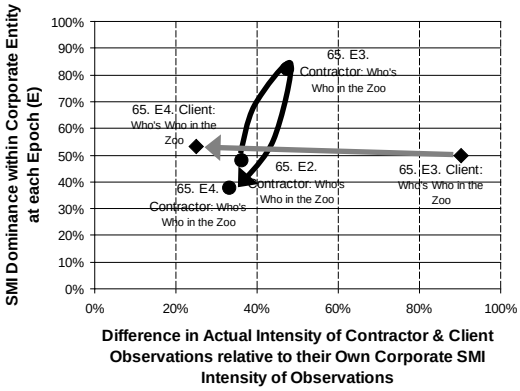
	08. E2 Vanity Fair: A party feels pressure to participate because of the project size and/or its market stature. 
	37. E2 Gut Ache: An aura of doubt pervades the process even though everything appears to be technically correct. 
	65. E2 Who's Who in the Zoo: Putting structure to the political issues and players. 

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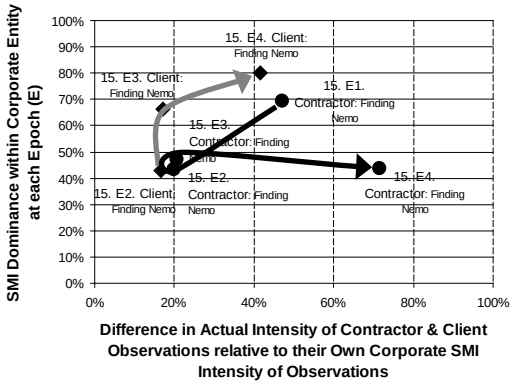
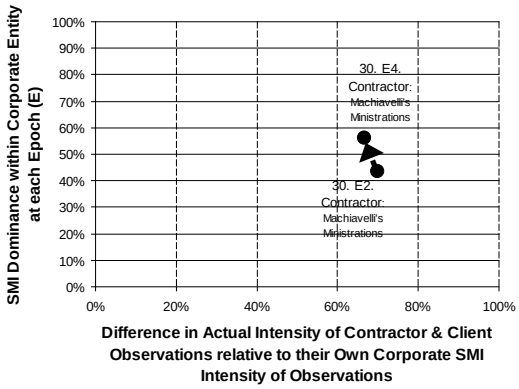
	15. E2 Finding Nemo: A party knows that there is a game at play but has difficulty defining its parameters and structure. 
	30. E2 Machiavelli's Ministrations: A powerful stakeholder changes the game. 

Case S

Epoch 3 – Client – Awareness Order

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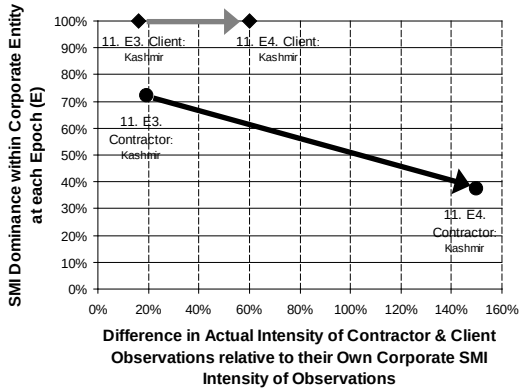

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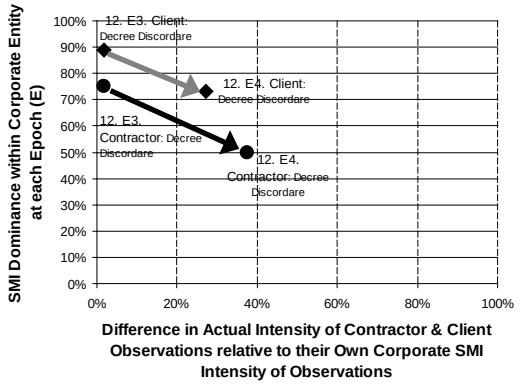

Epoch 3 – Contractor – Awareness Order

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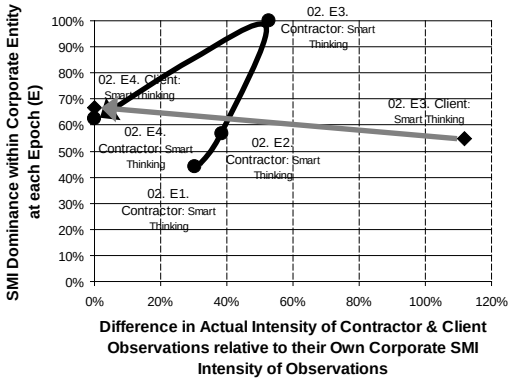

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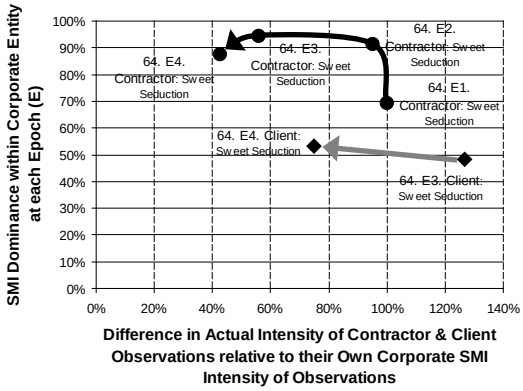

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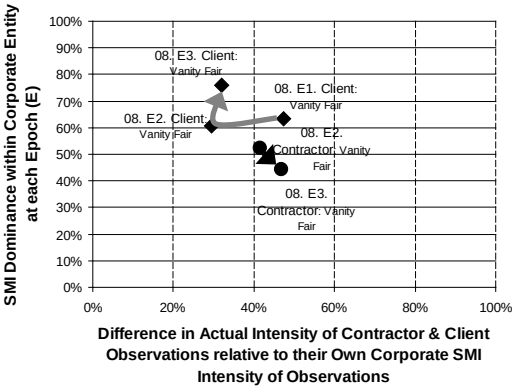

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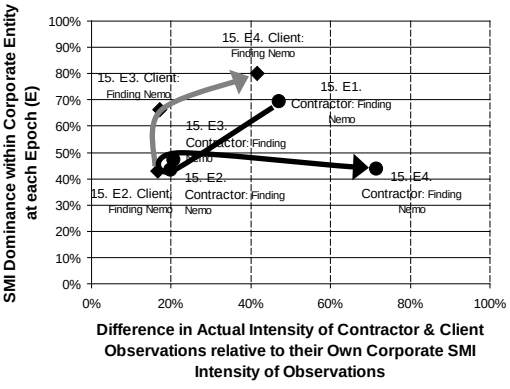

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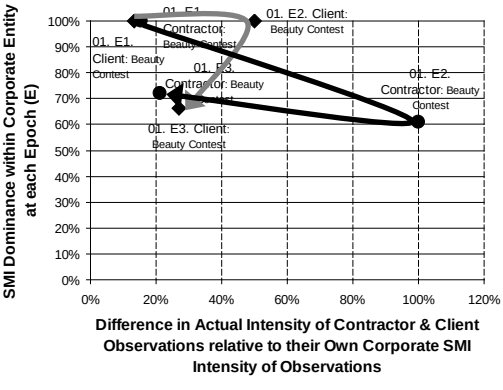

Epoch 3 – Contractor – Awareness Order

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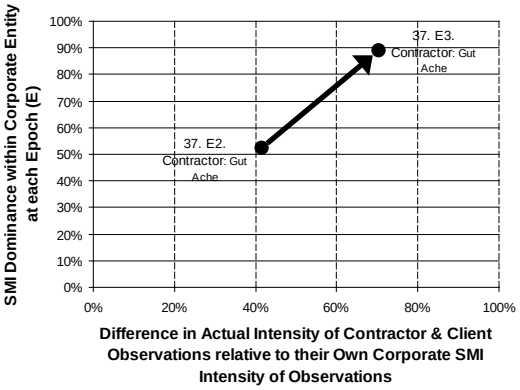
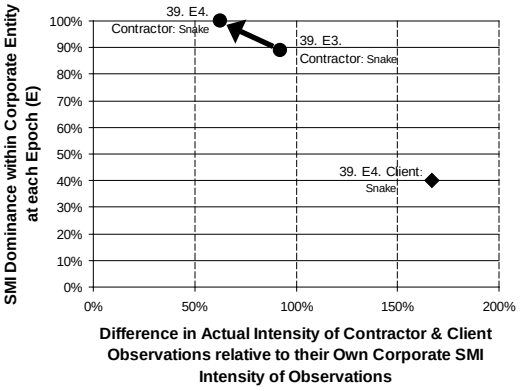


39. E3 Snake: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).



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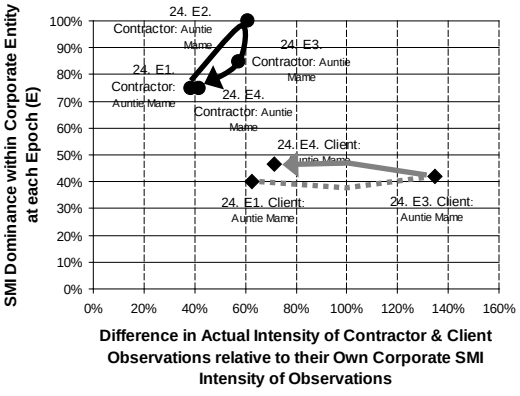

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Epoch 3 – Client – Awareness Order

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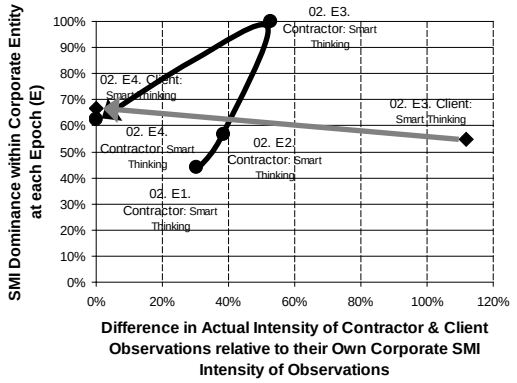

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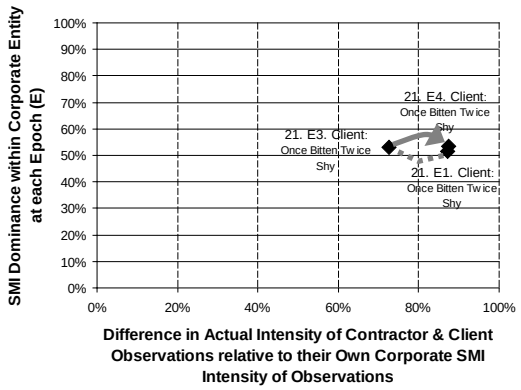

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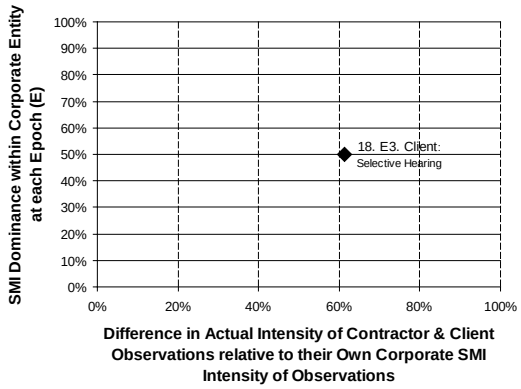

Epoch 3 – Contractor – Awareness Order

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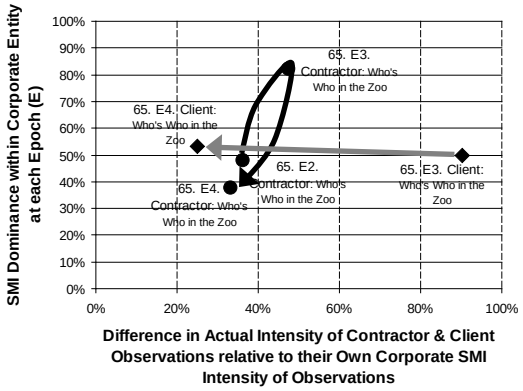

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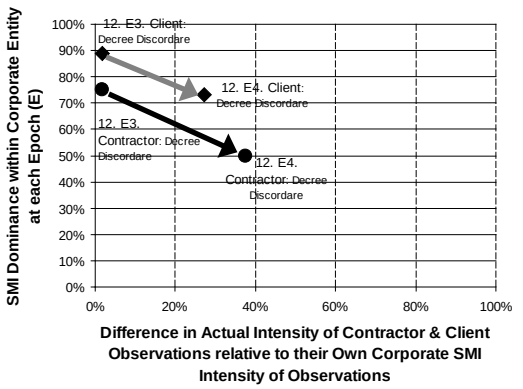

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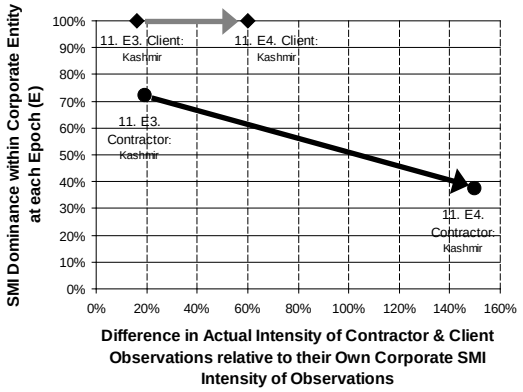

Case S

Epoch 3 – Client – Awareness Order

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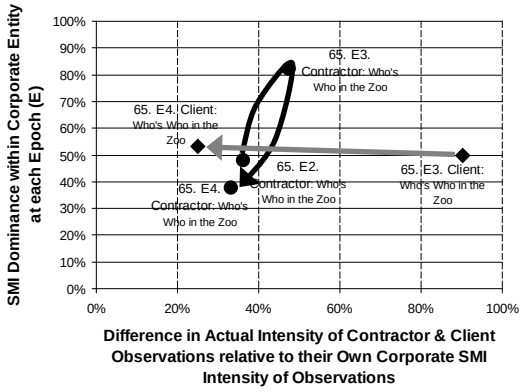

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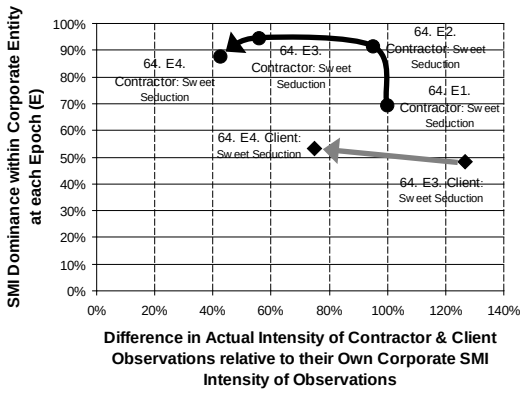

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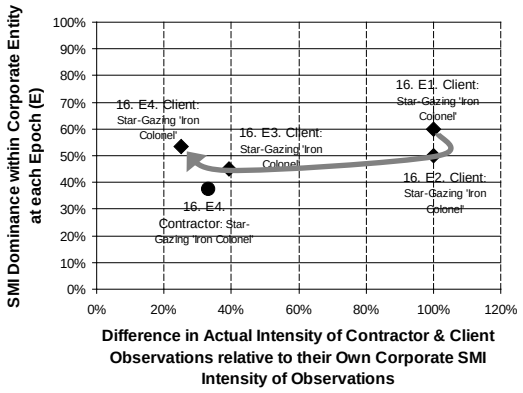
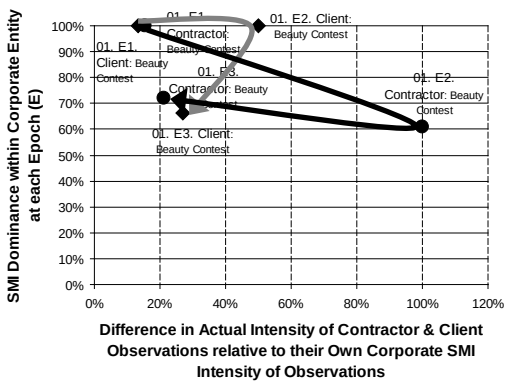
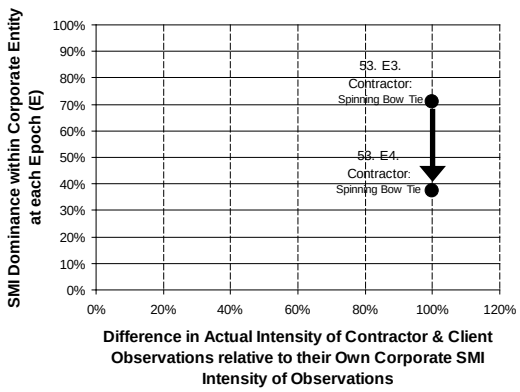


Epoch 3 – Contractor – Awareness Order

01. E3 Beauty Contest: A party's behaviour concentrates on its presentation values.



53. E3 Spinning Bow Tie: I don't trust the middle-man.



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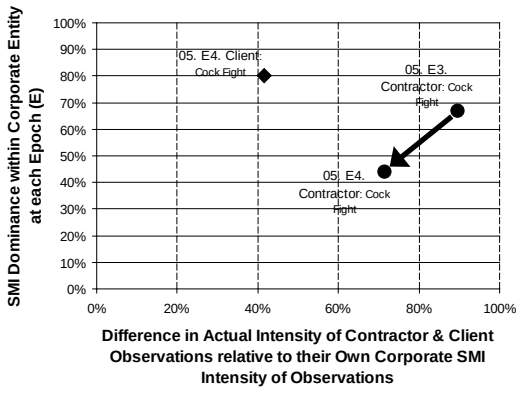
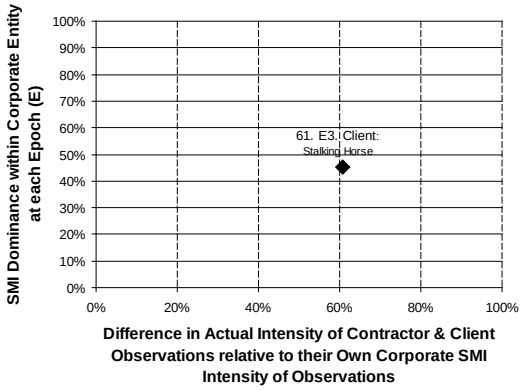


Case S

Epoch 3 – Client – Awareness Order

61. E3 Stalking Horse: Tenderers believe they are being used as a political 'stalking horse'.



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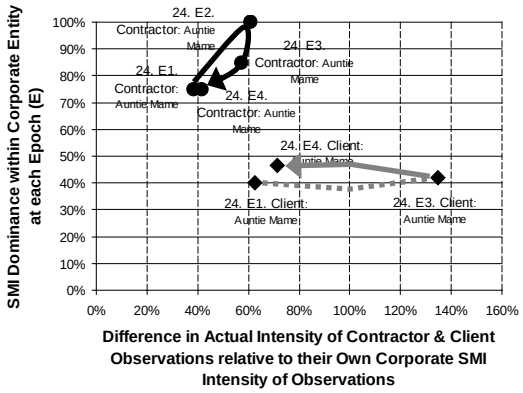

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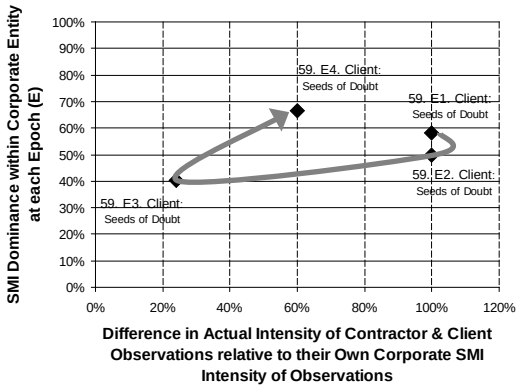
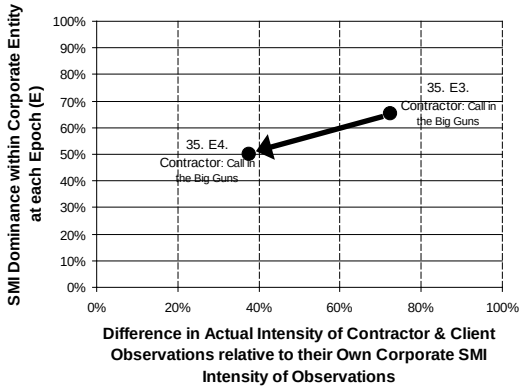
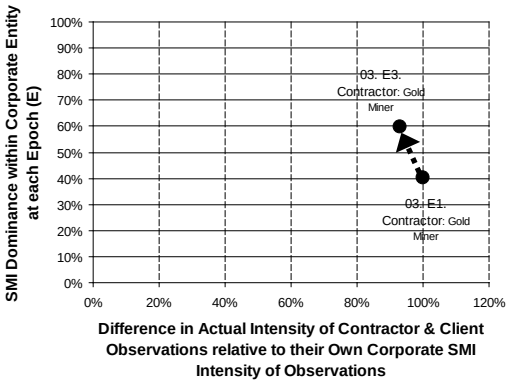


Epoch 3 – Contractor – Awareness Order

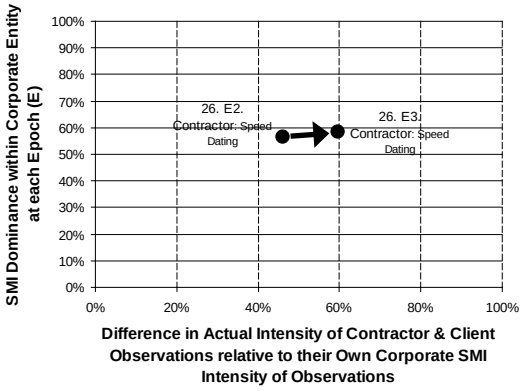
35. E3 Call in the Big Guns: A party seeks Ministerial dialog.



03. E3 Gold Miner: A party uses this project to advance another project's objectives.



26. E3 Speed Dating (in a shrinking sample): Potential participants must mate before entering the game.



Case S	
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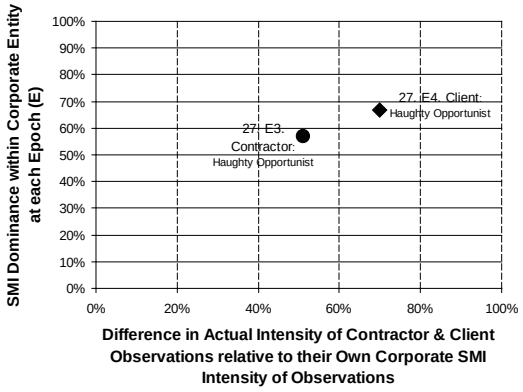
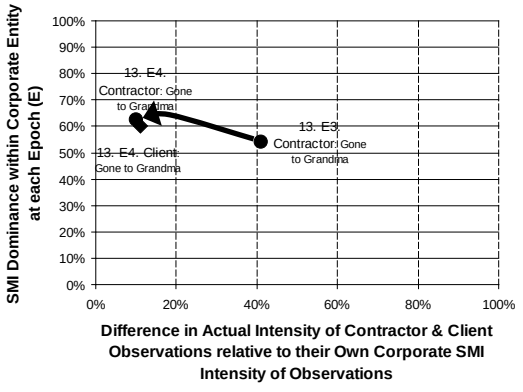
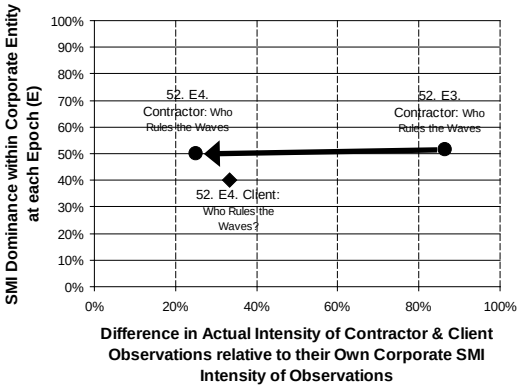
	27. E3 Haughty Opportunist: A temporal situation fortuitously affords one party enhanced power. 
	13. E3 Gone to Grandma: A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor. 
	52. E3 Who Rules the Waves?: Regardless of the client's specification, it must be done our way. 

Case S	
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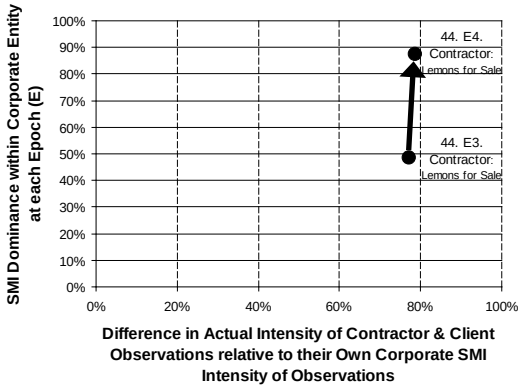
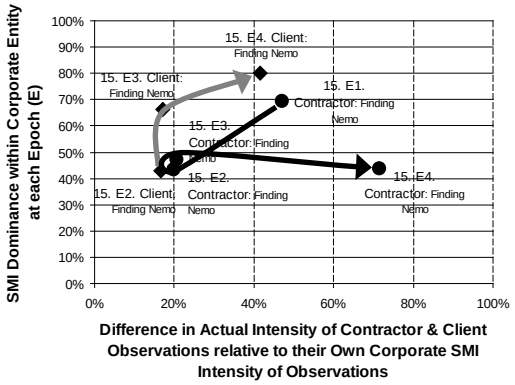
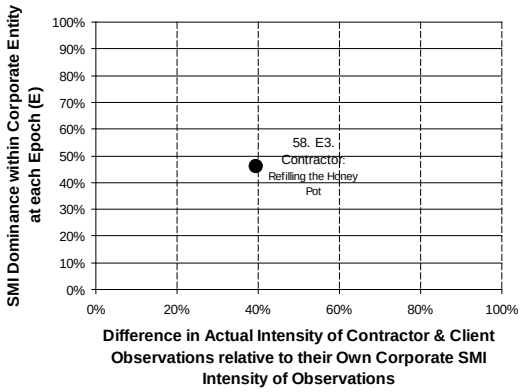
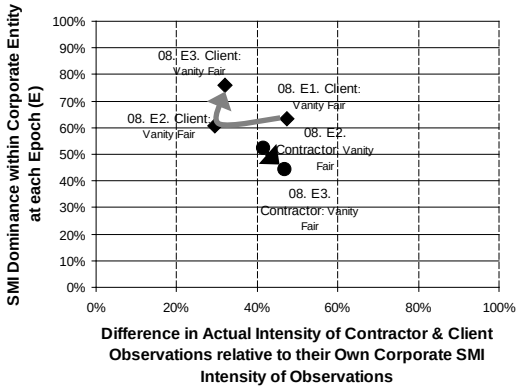
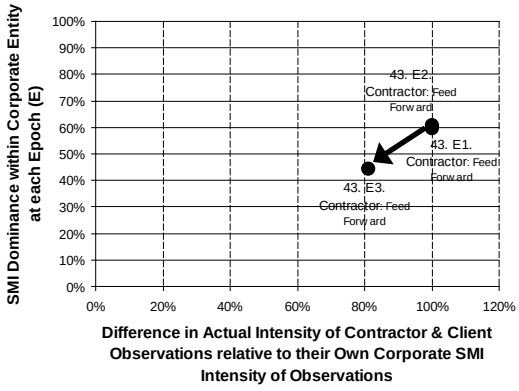
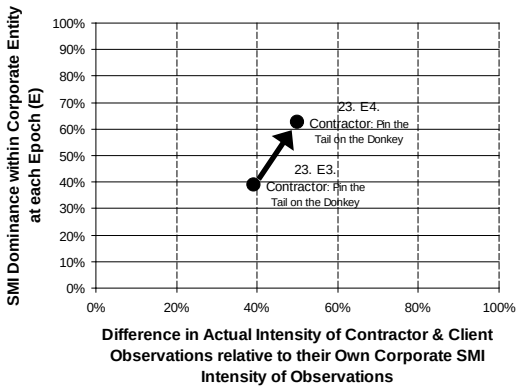
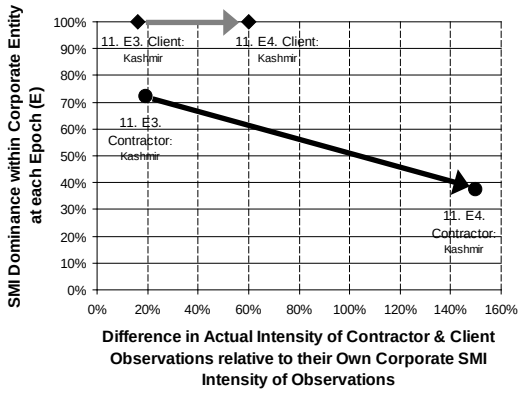
	44. E3 Lemons for Sale: A contractor closely monitors the client for any potential contract breach which could sustain a transfer of risk. 
	15. E3 Finding Nemo: A party knows that there is a game at play but has difficulty defining its parameters and structure. 
	58. E3 Refilling the Honey Pot: Enticed participants need constant maintenance. 

Case S	
Epoch 3 – Client – Awareness Order	**Epoch 3 – Contractor – Awareness Order**
	08. E3 Vanity Fair: A party feels pressure to participate because of the project size and/or its market stature. 
	43. E3 Feed Forward: Political decisions which framed an earlier project are having foreseeable impacts on the current project. 
	23. E3 Pin the Tail on the Donkey: Both parties have a fundamentally different sense-making itemion of the game at play. 

Case S

Epoch 4 – Client – Awareness Order

11. E4 Kashmir: A party behaves apprehensively as it perceives that other involved contractors may try to appropriate its current &/or future contract share.



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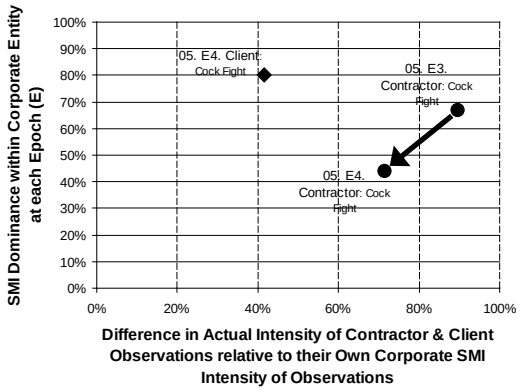

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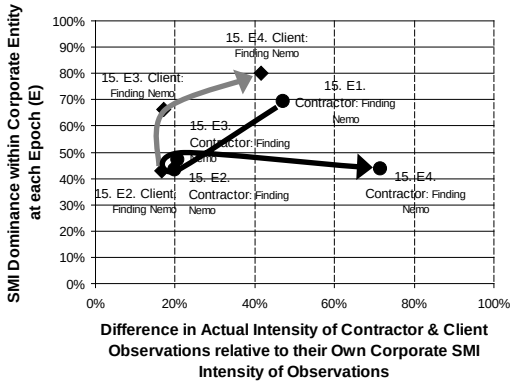
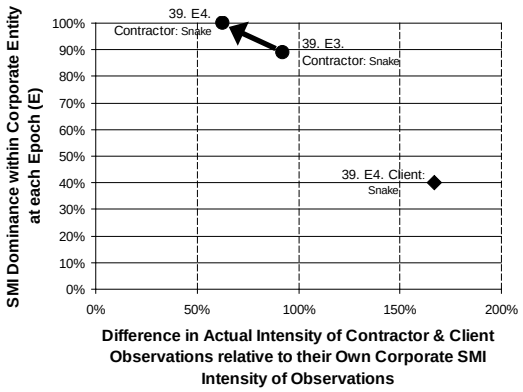


Epoch 4 – Contractor – Awareness Order

39. E4 Snake: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).



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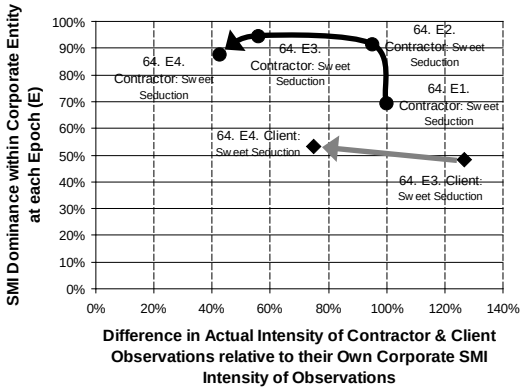
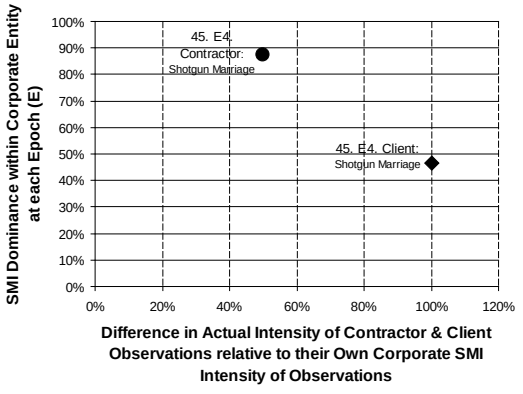


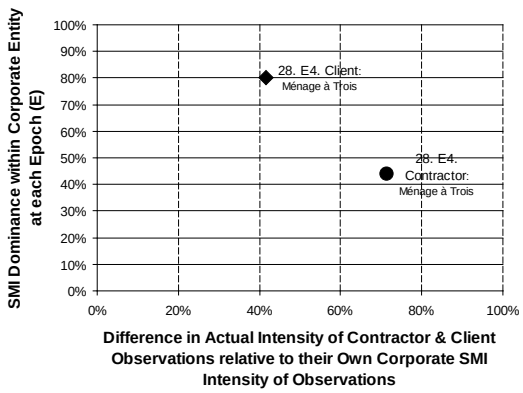
45. E4 Shotgun Marriage: Political pressure to consummate a contract or agree to terms.



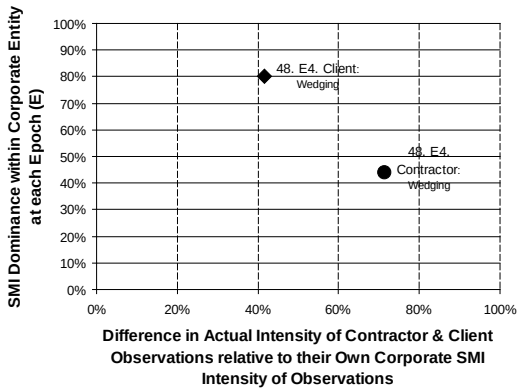
Case S

Epoch 4 – Client – Awareness Order

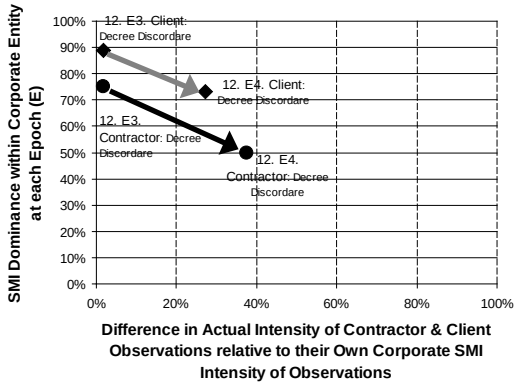
28. E4 Ménage à Trois: A client and subcontractor are negotiating.



48. E4 Wedging: A small negotiation win on one issue can be used to leverage positions on related issues.



12. E4 Decree Discordare: A party believes that another party plays the dual (ambiguous) roles of a team-player while retaining final decision-rights.



Epoch 4 – Contractor – Awareness Order

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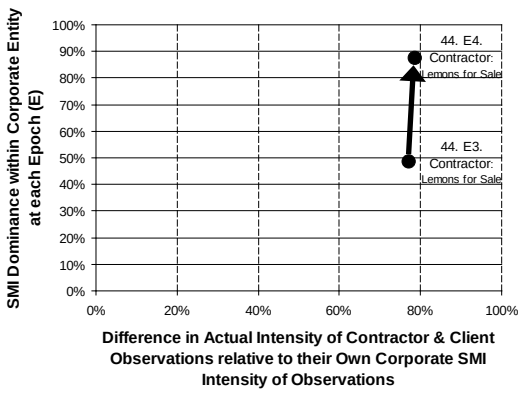
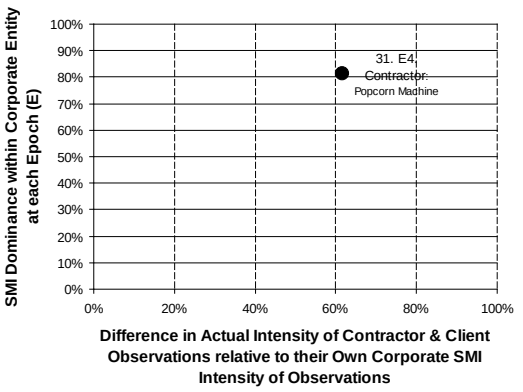


31. E4 Popcorn Machine: A negotiator has an unstable authority base.



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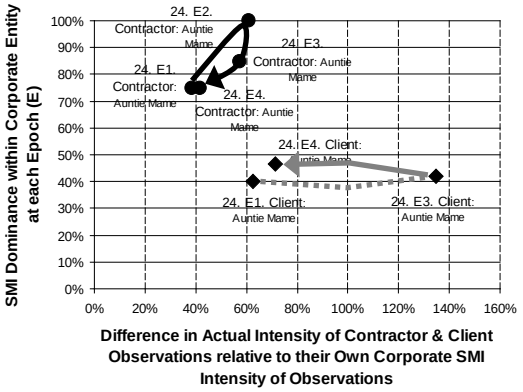
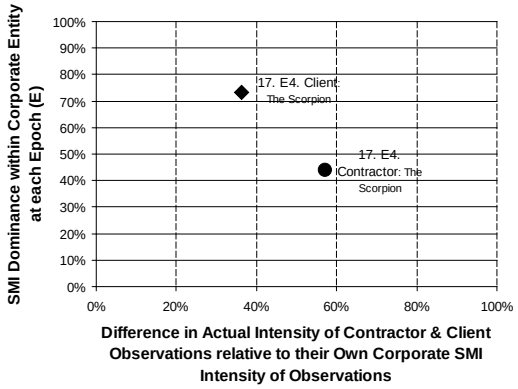


Case S

Epoch 4 – Client – Awareness Order

17. E4 The Scorpion: The project is implanted with a toxic human agent (common foe) whose presence unites opposing parties or drives them apart.



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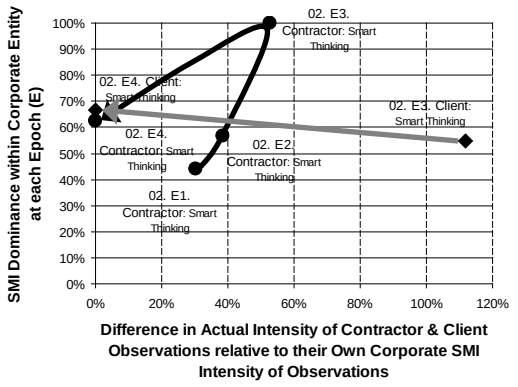

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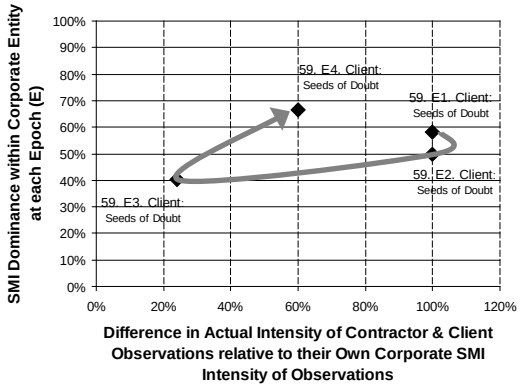

Epoch 4 – Contractor – Awareness Order

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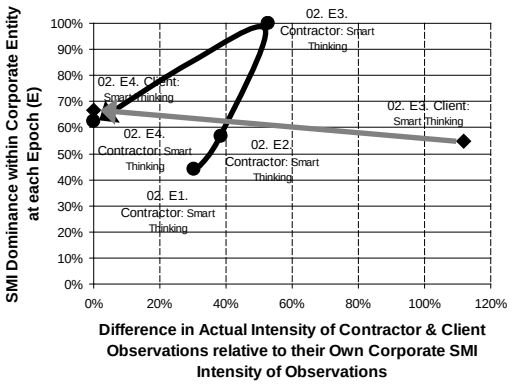

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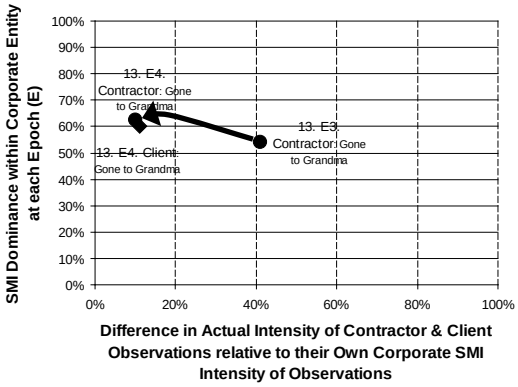

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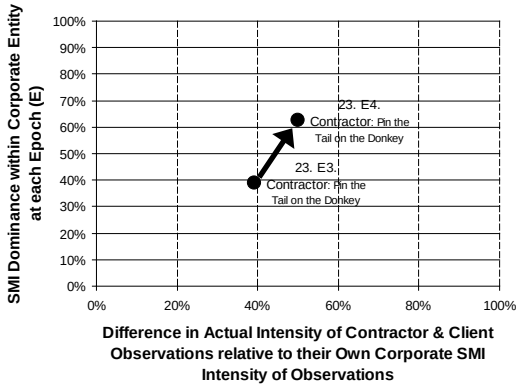

Case S

Epoch 4 – Client – Awareness Order

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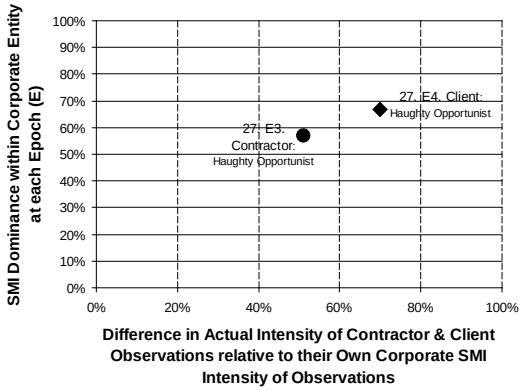

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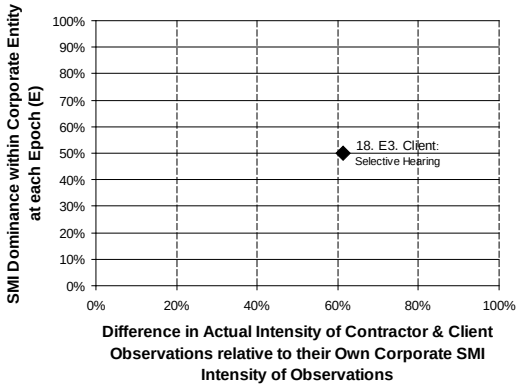

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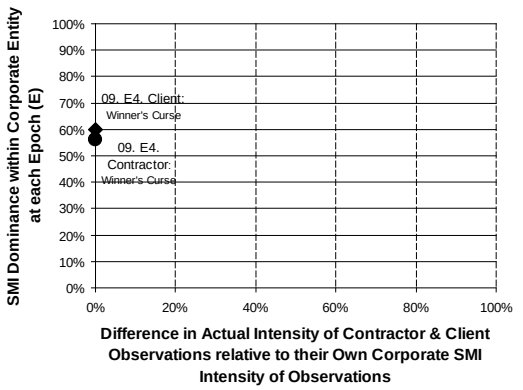

Epoch 4 – Contractor – Awareness Order

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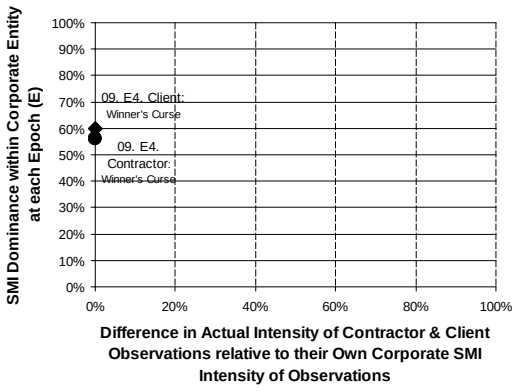
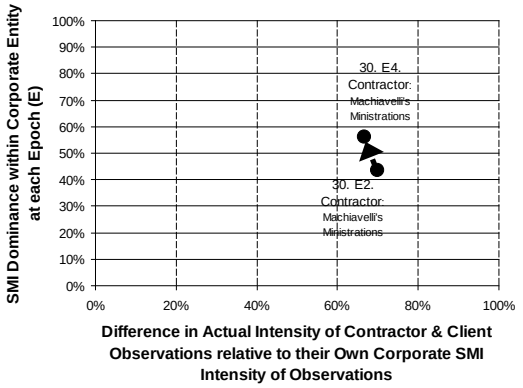


30. E4 Machiavelli's Ministrations: A powerful stakeholder changes the game.



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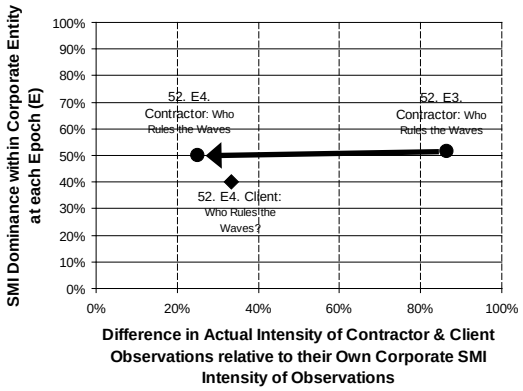

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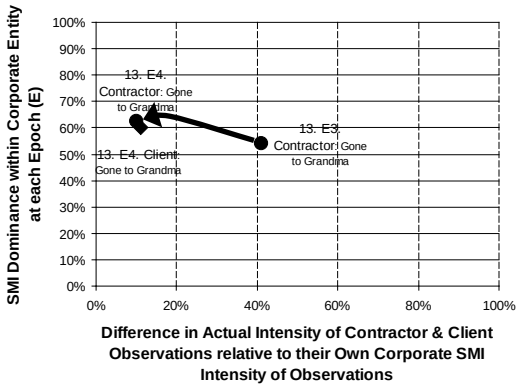
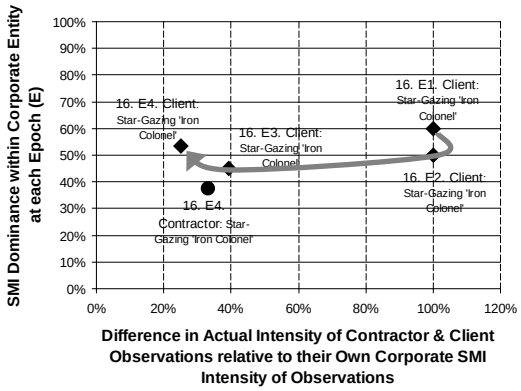
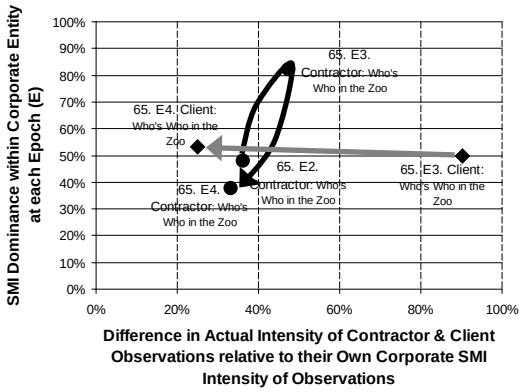


16. E4 Star-Gazing 'Iron Colonel': A non-aligned bureaucrat focuses on procedural detail to avoid contentious issues which might degrade promotion prospects.

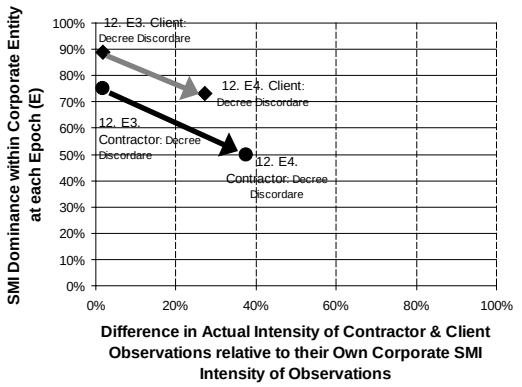


65. E4 Who's Who in the Zoo: Putting structure to the political issues and players.

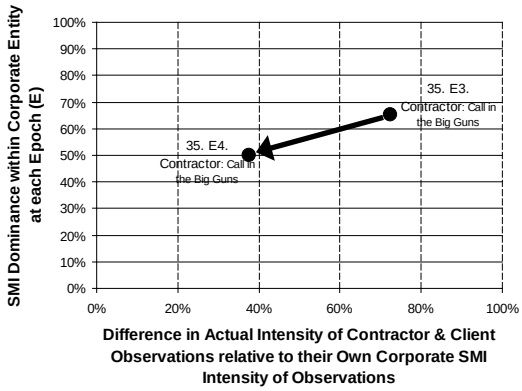


Epoch 4 – Contractor – Awareness Order

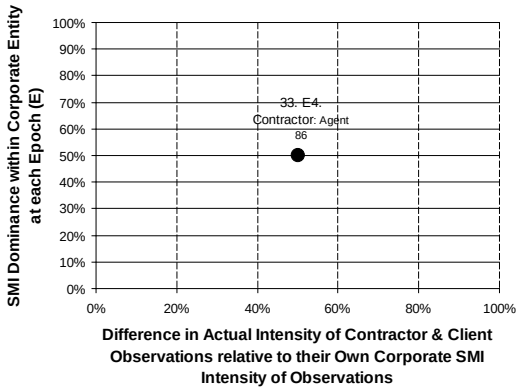
12. E4 Decree Discordare: A party believes that another party plays the dual (ambiguous) roles of a team-player while retaining final decision-rights.



35. E4 Call in the Big Guns: A party seeks Ministerial dialog.



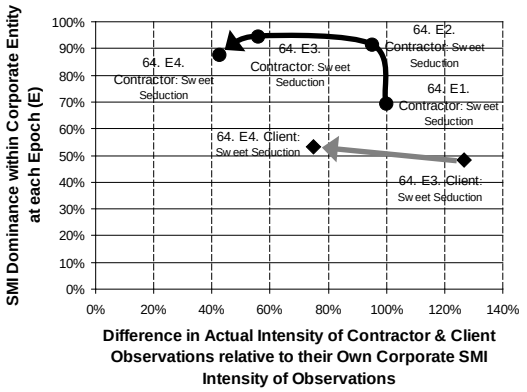
33. E4 Agent 86: A surreal personality is active in the project.



Case S

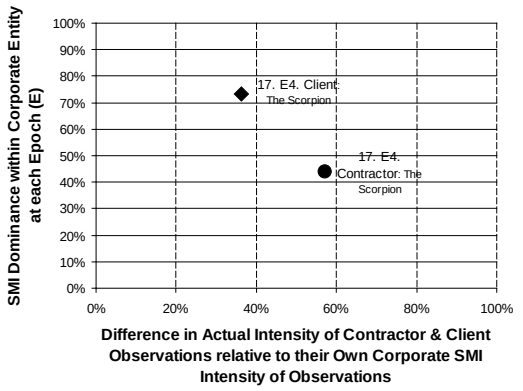
Epoch 4 – Client – Awareness Order

64. E4 Sweet Seduction: Probing for potential intelligence sources.

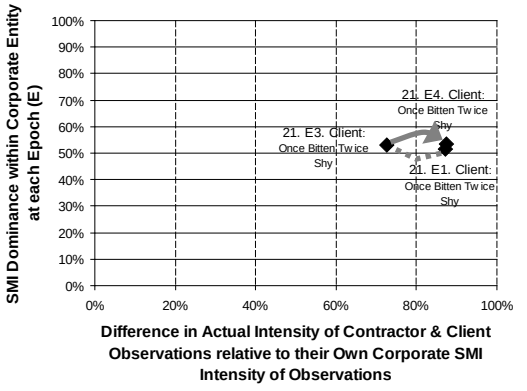


Epoch 4 – Contractor – Awareness Order

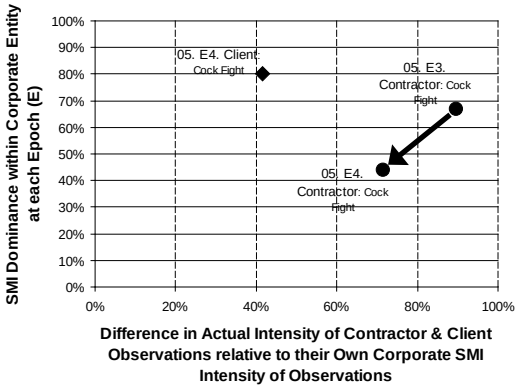
17. E4 The Scorpion: The project is implanted with a toxic human agent (common foe) whose presence unites opposing parties or drives them apart.



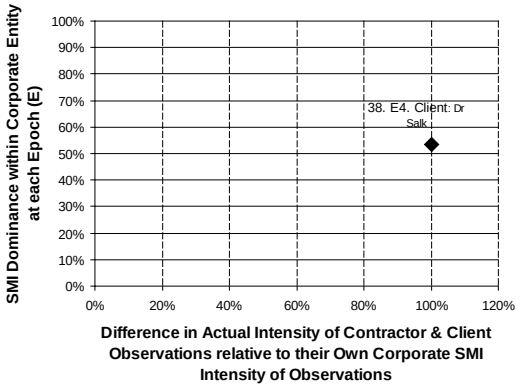
21. E4 Once Bitten, Twice Shy: Previous experiences have led to ambivalent or negative feelings.



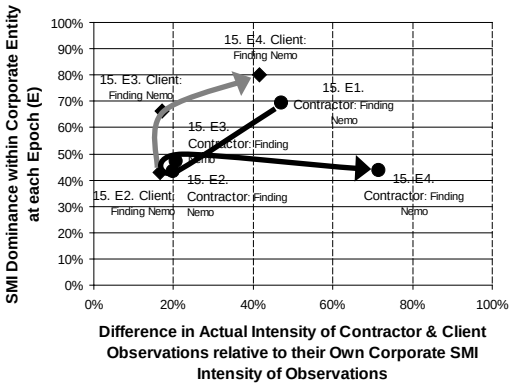
05. E4 Cock Fight: Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.



38. E4 Dr Salk: A game is initiated to thwart the emergence of another game.



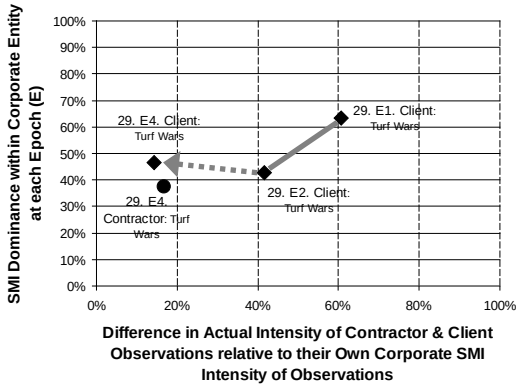
15. E4 Finding Nemo: A party knows that there is a game at play but has difficulty defining its parameters and structure.



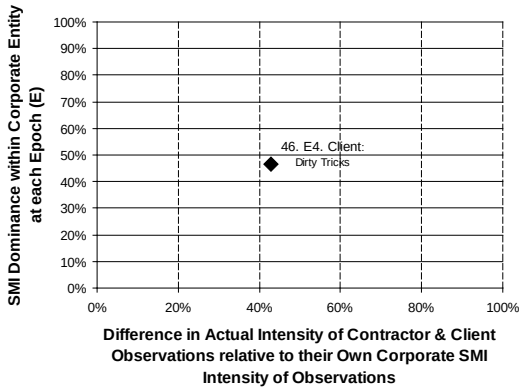
Case S

Epoch 4 – Client – Awareness Order

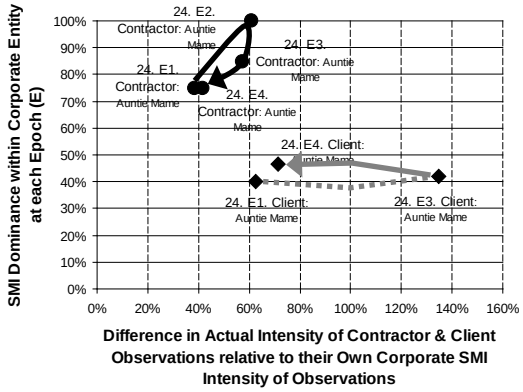
29. E4 Turf Wars: Bureaucrats compete for involvement.



46. E4 Dirty Tricks: Misinformation is supplied to the highest political level.

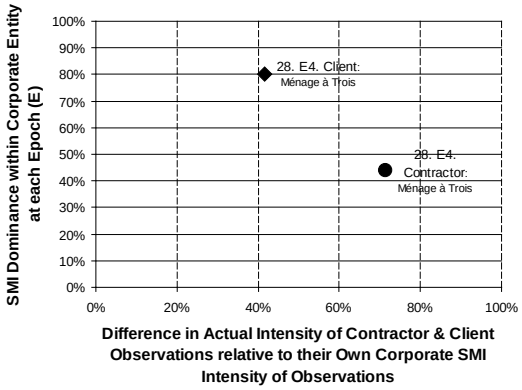


24. E4 Auntie Mame: Obtaining high-value insights from a non-contracting party.

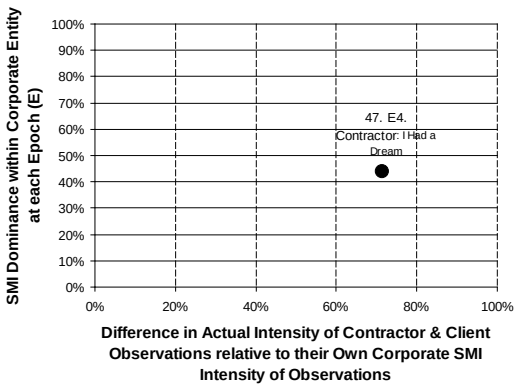


Epoch 4 – Contractor – Awareness Order

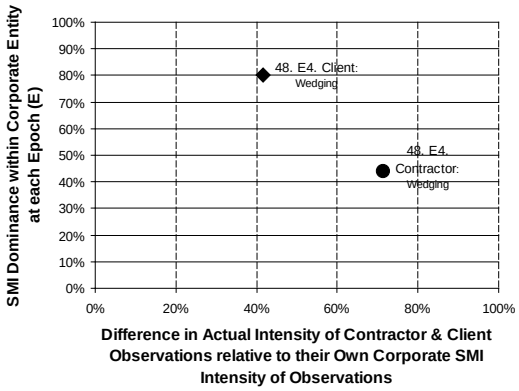
28. E4 Ménage à Trois: A client and subcontractor are negotiating.



47. E4 I Had a Dream: Receiving impeccable non-attributable political direction.



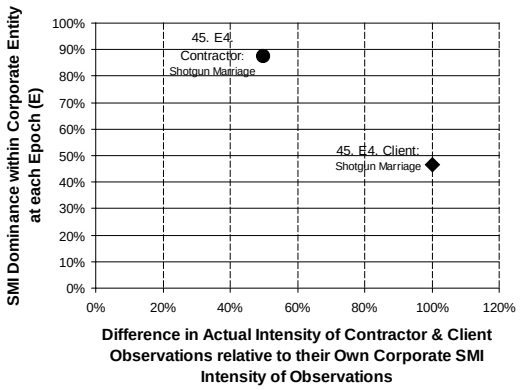
48. E4 Wedging: A small negotiation win on one issue can be used to leverage positions on related issues.



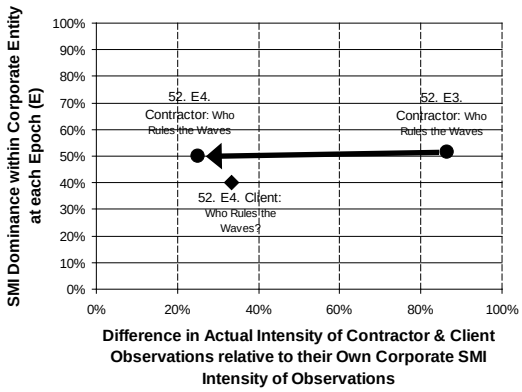
Case S

Epoch 4 – Client – Awareness Order

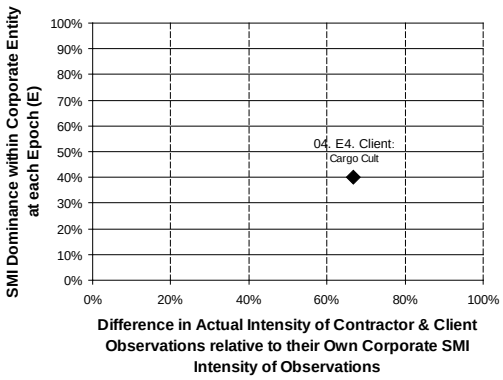
45. E4 Shotgun Marriage: Political pressure to consummate a contract or agree to terms.



52. E4 Who Rules the Waves?: Regardless of the client's specification, it must be done our way.

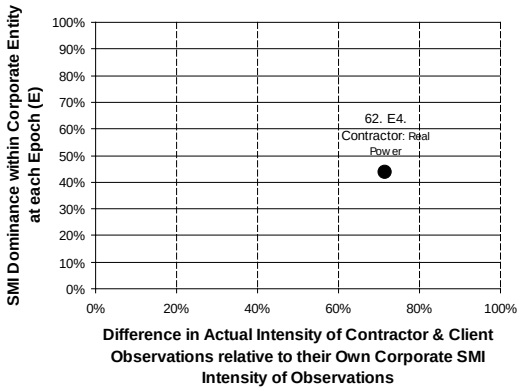


04. E4 Cargo Cult: A party's behaviours result from a history of receiving guaranteed non-competitive work.

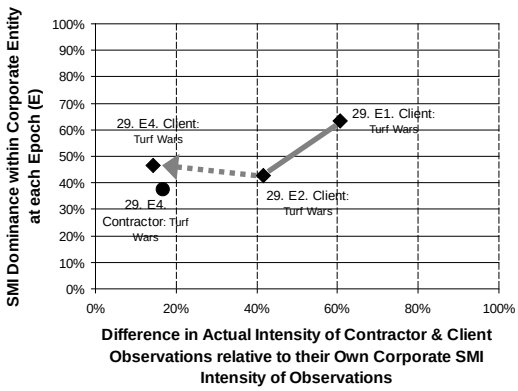


Epoch 4 – Contractor – Awareness Order

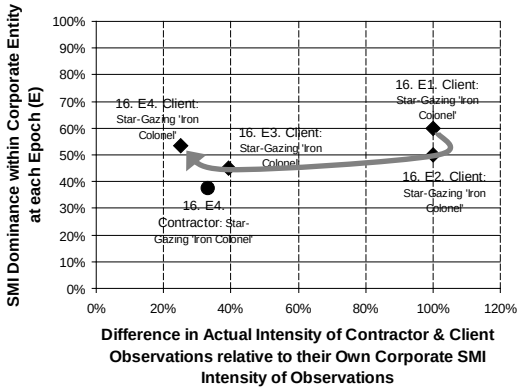
62. E4 Real Power: The political office is called upon to reduce artificial complexity generated by the bureaucracy.



29. E4 Turf Wars: Bureaucrats compete for involvement.



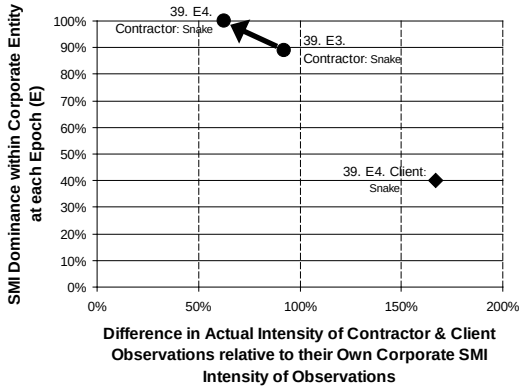
16. E4 Star-Gazing 'Iron Colonel': A non-aligned bureaucrat focuses on procedural detail to avoid contentious issues which might degrade promotion prospects.



Case S

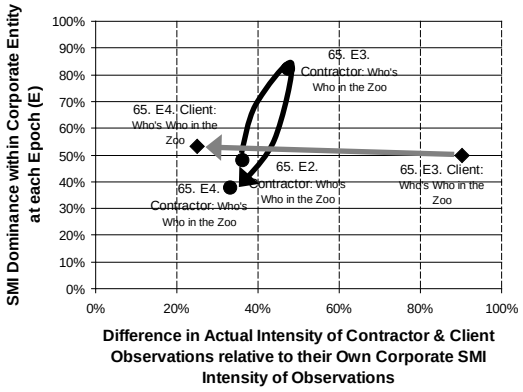
Epoch 4 – Client – Awareness Order

39. E4 Snake: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

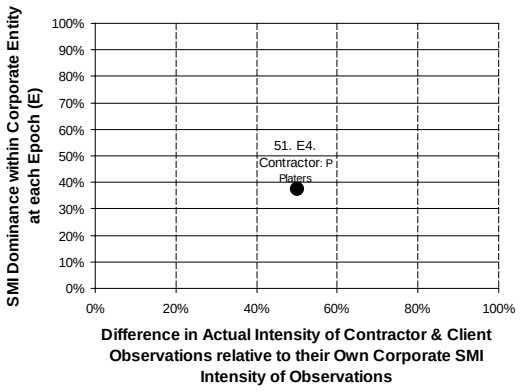


Epoch 4 – Contractor – Awareness Order

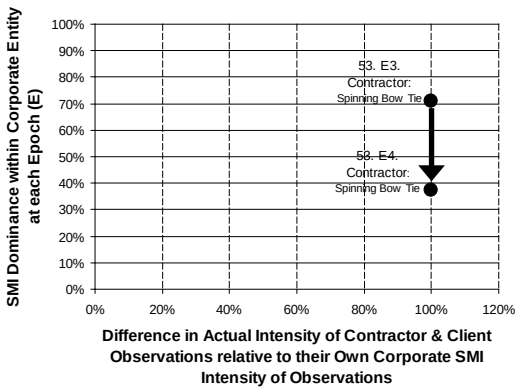
65. E4 Who's Who in the Zoo: Putting structure to the political issues and players.

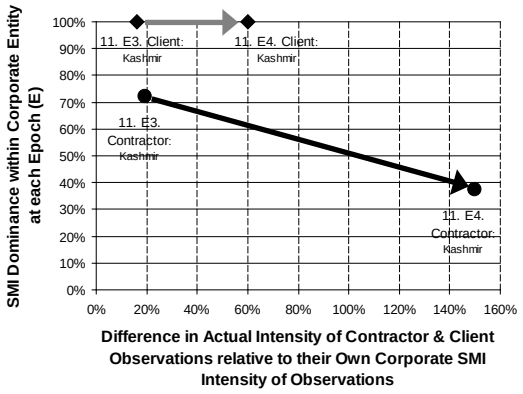


51. E4 P Platers: A negotiation team is comprised of rookies.



53. E4 Spinning Bow Tie: I don't trust the middle-man.



Case S	
Epoch 4 – Client – Awareness Order	**Epoch 4 – Contractor – Awareness Order**
	11. E4 Kashmir: A party behaves apprehensively as it perceives that other involved contractors may try to appropriate its current &/or future contract share. 

ANNEXURE E.
PREDICTIVE ACCURACY OF THE BAYESIAN BELIEF LEARNING NETWORKS

Case S, Client: BBLN Predictive Accuracy

For each epoch, the predictive accuracy of each Tendering Purpose variable is calculated using the Cross Validation method embodied in the Structure Learning facility of the Bayesian Belief Modelling software. The network producing the highest predictive accuracy is nominated to represent that epoch. (For example in Case S, Epoch 1, the network with the focus variable of 'Impacting Trust' produces the highest relative predictive accuracy of 80.95% with a Standard Deviation of 8.57.)

Case S: Client E1 Comprehending Focus	Case S: Client E1 Confronting Focus	Case S: Client E1 Creating Value Focus
Variable E1_Confronting: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294	Variable E1_Comprehending: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Comprehending: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406
Variable E1_Creating_Value: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294	Variable E1_Creating_Value: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858	Variable E1_Confronting: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294
Variable E1_Finding_Connections: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Finding_Connections: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636	Variable E1_Finding_Connections: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636
Variable E1_Finding_Direction: Correct: 10.0 Incorrect: 11.0 Accuracy: 47.619% St. Dev.: 10.899	Variable E1_Finding_Direction: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799	Variable E1_Finding_Direction: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799
Variable E1_Impacting_Trust: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636	Variable E1_Impacting_Trust: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569	Variable E1_Impacting_Trust: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569
Variable E1_Influencing: Correct: 11.0 Incorrect: 10.0 Accuracy: 52.381% St. Dev.: 10.899	Variable E1_Influencing: Correct: 8.0 Incorrect: 13.0 Accuracy: 38.095% St. Dev.: 10.597	Variable E1_Influencing: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597
Variable E1_Obstructing: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Obstructing: Correct: 10.0 Incorrect: 11.0 Accuracy: 47.619% St. Dev.: 10.899	Variable E1_Obstructing: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406
Variable E1_Comprehending: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569	Variable E1_Confronting: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287	Variable E1_Creating_Value: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287
Overall accuracy: 75.000% (SD = 9.449)	Overall accuracy: 63.690% (SD = 10.494)	Overall accuracy: 76.190% (SD = 9.294)

Case S: Client E1 Finding Connections Focus	Case S: Client E1 Finding Direction Focus	**Case S: Client E1 Impacting Trust Focus**
Variable E1_Comprehending: Correct: 21.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E1_Comprehending: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636	Variable E1_Comprehending: Correct: 21.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E1_Confronting: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858	Variable E1_Confronting: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Confronting: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858
Variable E1_Creating_Value: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287	Variable E1_Creating_Value: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287	Variable E1_Creating_Value: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597
Variable E1_Finding_Direction: Correct: 10.0 Incorrect: 11.0 Accuracy: 47.619% St. Dev.: 10.899	Variable E1_Finding_Connections: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636	Variable E1_Finding_Connections: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647
Variable E1_Impacting_Trust: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Impacting_Trust: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569	Variable E1_Finding_Direction: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799
Variable E1_Influencing: Correct: 10.0 Incorrect: 11.0 Accuracy: 47.619% St. Dev.: 10.899	Variable E1_Influencing: Correct: 11.0 Incorrect: 10.0 Accuracy: 52.381% St. Dev.: 10.899	Variable E1_Influencing: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858
Variable E1_Obstructing: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Obstructing: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569	Variable E1_Obstructing: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647
Variable E1_Finding_Connections: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647	Variable E1_Finding_Direction: Correct: 8.0 Incorrect: 13.0 Accuracy: 38.095% St. Dev.: 10.597	Variable E1_Impacting_Trust: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647
Overall accuracy: 76.190% (SD = 9.294)	Overall accuracy: 69.048% (SD = 10.088)	**Overall accuracy: 80.952% (SD = 8.569)**

Case S: Client E1 Influencing Focus	Case S: Client E1 Obstructing Focus	Case S: Client E2 Comprehending Focus
Variable E1_Comprehending: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Comprehending: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E1_Confronting: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Confronting: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287	Variable E2_Creating_Value: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E1_Creating_Value: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858	Variable E1_Creating_Value: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287	Variable E2_Finding_Connections: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075
Variable E1_Finding_Connections: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294	Variable E1_Finding_Connections: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636	Variable E2_Finding_Direction: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704
Variable E1_Finding_Direction: Correct: 10.0 Incorrect: 11.0 Accuracy: 47.619% St. Dev.: 10.899	Variable E1_Finding_Direction: Correct: 11.0 Incorrect: 10.0 Accuracy: 52.381% St. Dev.: 10.899	Variable E2_Impacting_Trust: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E1_Impacting_Trust: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Impacting_Trust: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636	Variable E2_Influencing: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E1_Obstructing: Correct: 21.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E1_Influencing: Correct: 8.0 Incorrect: 13.0 Accuracy: 38.095% St. Dev.: 10.597	Variable E2_Obstructing: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E1_Influencing: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799	Variable E1_Obstructing: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647	Variable E2_Comprehending: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Overall accuracy: 74.405% (SD = 9.523)	Overall accuracy: 72.619% (SD = 9.731)	Overall accuracy: 60.714% (SD = 18.459)

Case S: Client E2 Confronting Focus	Case S: Client E2 Creating Value Focus	Case S: Client E2 Finding Connections Focus
Variable E2_Comprehending: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Comprehending: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Comprehending: Correct: 0.0 Incorrect: 7.0 Accuracy: .000% St. Dev.: .000
Variable E2_Creating_Value: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E2_Finding_Connections: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Finding_Connections: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Creating_Value: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Finding_Direction: Correct: 0.0 Incorrect: 7.0 Accuracy: .000% St. Dev.: .000	Variable E2_Finding_Direction: Correct: 0.0 Incorrect: 7.0 Accuracy: .000% St. Dev.: .000	Variable E2_Finding_Direction: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226
Variable E2_Impacting_Trust: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Impacting_Trust: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Impacting_Trust: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226
Variable E2_Influencing: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Influencing: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Influencing: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226
Variable E2_Obstructing: Correct: 6.0 Incorrect: 1.0 Accuracy: 85.714% St. Dev.: 13.226	Variable E2_Obstructing: Correct: 6.0 Incorrect: 1.0 Accuracy: 85.714% St. Dev.: 13.226	Variable E2_Obstructing: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704
Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Creating_Value: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Overall accuracy: 53.571% (SD = 18.850)	Overall accuracy: 53.571% (SD = 18.850)	Overall accuracy: 33.929% (SD = 17.895)

Case S: Client E2 Finding Direction Focus	Case S: Client E2 Impacting Trust Focus	Case S: Client E2 Influencing Focus
Variable E2_Comprehending: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Comprehending: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Comprehending: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E2_Creating_Value: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Creating_Value: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Creating_Value: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Variable E2_Finding_Connections: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Finding_Connections: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226	Variable E2_Finding_Connections: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Impacting_Trust: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Finding_Direction: Correct: 0.0 Incorrect: 7.0 Accuracy: .000% St. Dev.: .000	Variable E2_Finding_Direction: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Influencing: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Influencing: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226	Variable E2_Impacting_Trust: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226
Variable E2_Obstructing: Correct: 6.0 Incorrect: 1.0 Accuracy: 85.714% St. Dev.: 13.226	Variable E2_Obstructing: Correct: 6.0 Incorrect: 1.0 Accuracy: 85.714% St. Dev.: 13.226	Variable E2_Obstructing: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704
Variable E2_Finding_Direction: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Impacting_Trust: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226	Variable E2_Influencing: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226
Overall accuracy: 62.500% (SD = 18.298)	Overall accuracy: 39.286% (SD = 18.459)	Overall accuracy: 41.071% (SD = 18.594)

Case S: Client E2, Obstructing Focus	**Case S: Client E3 Comprehending Focus**	Case S: Client E3 Confronting Focus
Variable E2_Comprehending: Correct: 0.0 Incorrect: 7.0 Accuracy: .000% St. Dev.: .000	Variable E3_Confronting: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590	Variable E3_Comprehending: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106
Variable E2_Confronting: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E3_Creating_Value: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051	Variable E3_Creating_Value: Correct: 3.0 Incorrect: 14.0 Accuracy: 17.647% St. Dev.: 9.246
Variable E2_Creating_Value: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E3_Finding_Connections: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Finding_Connections: Correct: 8.0 Incorrect: 9.0 Accuracy: 47.059% St. Dev.: 12.106
Variable E2_Finding_Connections: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E3_Finding_Direction: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E3_Finding_Direction: Correct: 3.0 Incorrect: 14.0 Accuracy: 17.647% St. Dev.: 9.246
Variable E2_Finding_Direction: Correct: 0.0 Incorrect: 7.0 Accuracy: .000% St. Dev.: .000	Variable E3_Impacting_Trust: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Impacting_Trust: Correct: 8.0 Incorrect: 9.0 Accuracy: 47.059% St. Dev.: 12.106
Variable E2_Impacting_Trust: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707	Variable E3_Influencing: Correct: 4.0 Incorrect: 13.0 Accuracy: 23.529% St. Dev.: 10.288
Variable E2_Influencing: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E3_Mediating: Correct: 16.0 Incorrect: 1.0 Accuracy: 94.118% St. Dev.: 5.707	Variable E3_Mediating: Correct: 14.0 Incorrect: 3.0 Accuracy: 82.353% St. Dev.: 9.246
Variable E2_Obstructing: Correct: 6.0 Incorrect: 1.0 Accuracy: 85.714% St. Dev.: 13.226	Variable E3_Negotiating: Correct: 10.0 Incorrect: 7.0 Accuracy: 58.824% St. Dev.: 11.936	Variable E3_Negotiating: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590
Overall accuracy: 48.214% (SD = 18.886)	Variable E3_Obstructing: Correct: 14.0 Incorrect: 3.0 Accuracy: 82.353% St. Dev.: 9.246	Variable E3_Obstructing: Correct: 12.0 Incorrect: 5.0 Accuracy: 70.588% St. Dev.: 11.051
	Variable E3_Comprehending: Correct: 10.0 Incorrect: 7.0 Accuracy: 58.824% St. Dev.: 11.936	Variable E3_Confronting: Correct: 7.0 Incorrect: 10.0 Accuracy: 41.176% St. Dev.: 11.936
	Overall accuracy: 53.529% **(SD = 12.097)**	Overall accuracy: 46.471% (SD = 12.097)

Case S: Client E3 Creating Value Focus	Case S: Client E3 Finding Connections Focus	Case S: Client E3 Finding Direction Focus
Variable E3_Comprehending: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Comprehending: Correct: 7.0 Incorrect: 10.0 Accuracy: 41.176% St. Dev.: 11.936	Variable E3_Comprehending: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106
Variable E3_Confronting: Correct: 8.0 Incorrect: 9.0 Accuracy: 47.059% St. Dev.: 12.106	Variable E3_Confronting: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590	Variable E3_Confronting: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590
Variable E3_Finding_Connections: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E3_Creating_Value: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E3_Creating_Value: Correct: 2.0 Incorrect: 15.0 Accuracy: 11.765% St. Dev.: 7.814
Variable E3_Finding_Direction: Correct: 4.0 Incorrect: 13.0 Accuracy: 23.529% St. Dev.: 10.288	Variable E3_Finding_Direction: Correct: 4.0 Incorrect: 13.0 Accuracy: 23.529% St. Dev.: 10.288	Variable E3_Finding_Connections: Correct: 7.0 Incorrect: 10.0 Accuracy: 41.176% St. Dev.: 11.936
Variable E3_Impacting_Trust: Correct: 3.0 Incorrect: 14.0 Accuracy: 17.647% St. Dev.: 9.246	Variable E3_Impacting_Trust: Correct: 3.0 Incorrect: 14.0 Accuracy: 17.647% St. Dev.: 9.246	Variable E3_Impacting_Trust: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051
Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707	Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707	Variable E3_Influencing: Correct: 2.0 Incorrect: 15.0 Accuracy: 11.765% St. Dev.: 7.814
Variable E3_Mediating: Correct: 12.0 Incorrect: 5.0 Accuracy: 70.588% St. Dev.: 11.051	Variable E3_Mediating: Correct: 12.0 Incorrect: 5.0 Accuracy: 70.588% St. Dev.: 11.051	Variable E3_Mediating: Correct: 14.0 Incorrect: 3.0 Accuracy: 82.353% St. Dev.: 9.246
Variable E3_Negotiating: Correct: 8.0 Incorrect: 9.0 Accuracy: 47.059% St. Dev.: 12.106	Variable E3_Negotiating: Correct: 8.0 Incorrect: 9.0 Accuracy: 47.059% St. Dev.: 12.106	Variable E3_Negotiating: Correct: 12.0 Incorrect: 5.0 Accuracy: 70.588% St. Dev.: 11.051
Variable E3_Obstructing: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Obstructing: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Obstructing: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106
Variable E3_Creating_Value: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E3_Finding_Connections: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E3_Finding_Direction: Correct: 4.0 Incorrect: 13.0 Accuracy: 23.529% St. Dev.: 10.288
Overall accuracy: 38.824% (SD = 11.820)	Overall accuracy: 39.412% (SD = 11.852)	Overall accuracy: 44.118% (SD = 12.043)

Case S: Client E3 Impacting Trust Focus	Case S: Client E3 Influencing Focus	Case S: Client E3 Obstructing Focus
Variable E3_Comprehending: Correct: 4.0 Incorrect: 13.0 Accuracy: 23.529% St. Dev.: 10.288	Variable E3_Comprehending: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Comprehending: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106
Variable E3_Confronting: Correct: 10.0 Incorrect: 7.0 Accuracy: 58.824% St. Dev.: 11.936	Variable E3_Confronting: Correct: 12.0 Incorrect: 5.0 Accuracy: 70.588% St. Dev.: 11.051	Variable E3_Confronting: Correct: 14.0 Incorrect: 3.0 Accuracy: 82.353% St. Dev.: 9.246
Variable E3_Creating_Value: Correct: 7.0 Incorrect: 10.0 Accuracy: 41.176% St. Dev.: 11.936	Variable E3_Creating_Value: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051	Variable E3_Creating_Value: Correct: 2.0 Incorrect: 15.0 Accuracy: 11.765% St. Dev.: 7.814
Variable E3_Finding_Connections: Correct: 10.0 Incorrect: 7.0 Accuracy: 58.824% St. Dev.: 11.936	Variable E3_Finding_Connections: Correct: 8.0 Incorrect: 9.0 Accuracy: 47.059% St. Dev.: 12.106	Variable E3_Finding_Connections: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051
Variable E3_Finding_Direction: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 15.0 Accuracy: 11.765% St. Dev.: 7.814	Variable E3_Finding_Direction: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590
Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707	Variable E3_Impacting_Trust: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051	Variable E3_Impacting_Trust: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051
Variable E3_Mediating: Correct: 12.0 Incorrect: 5.0 Accuracy: 70.588% St. Dev.: 11.051	Variable E3_Mediating: Correct: 14.0 Incorrect: 3.0 Accuracy: 82.353% St. Dev.: 9.246	Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707
Variable E3_Negotiating: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Negotiating: Correct: 10.0 Incorrect: 7.0 Accuracy: 58.824% St. Dev.: 11.936	Variable E3_Mediating: Correct: 17.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E3_Obstructing: Correct: 7.0 Incorrect: 10.0 Accuracy: 41.176% St. Dev.: 11.936	Variable E3_Obstructing: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Negotiating: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590
Variable E3_Impacting_Trust: Correct: 3.0 Incorrect: 14.0 Accuracy: 17.647% St. Dev.: 9.246	Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707	Variable E3_Obstructing: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590
Overall accuracy: 40.588% (SD = 11.910)	Overall accuracy: 44.118% (SD = 12.043)	Overall accuracy: 47.647% (SD = 12.113)

Case S: Client E3 Mediating Focus	Case S: Client E3 Negotiating Focus	Case S: Client E4 Comprehending Focus
Variable E3_Comprehending: Correct: 10.0 Incorrect: 7.0 Accuracy: 58.824% St. Dev.: 11.936	Variable E3_Comprehending: Correct: 7.0 Incorrect: 10.0 Accuracy: 41.176% St. Dev.: 11.936	Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Confronting: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590	Variable E3_Confronting: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E3_Creating_Value: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051	Variable E3_Creating_Value: Correct: 4.0 Incorrect: 13.0 Accuracy: 23.529% St. Dev.: 10.288	Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E3_Finding_Connections: Correct: 10.0 Incorrect: 7.0 Accuracy: 58.824% St. Dev.: 11.936	Variable E3_Finding_Connections: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E4_Finding_Direction: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E3_Finding_Direction: Correct: 6.0 Incorrect: 11.0 Accuracy: 35.294% St. Dev.: 11.590	Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 15.0 Accuracy: 11.765% St. Dev.: 7.814	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Impacting_Trust: Correct: 5.0 Incorrect: 12.0 Accuracy: 29.412% St. Dev.: 11.051	Variable E3_Impacting_Trust: Correct: 7.0 Incorrect: 10.0 Accuracy: 41.176% St. Dev.: 11.936	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707	Variable E3_Influencing: Correct: 1.0 Incorrect: 16.0 Accuracy: 5.882% St. Dev.: 5.707	Variable E4_Mediating: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E3_Negotiating: Correct: 9.0 Incorrect: 8.0 Accuracy: 52.941% St. Dev.: 12.106	Variable E3_Mediating: Correct: 15.0 Incorrect: 2.0 Accuracy: 88.235% St. Dev.: 7.814	Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Variable E3_Obstructing: Correct: 15.0 Incorrect: 2.0 Accuracy: 88.235% St. Dev.: 7.814	Variable E3_Obstructing: Correct: 11.0 Incorrect: 6.0 Accuracy: 64.706% St. Dev.: 11.590	Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E3_Mediating: Correct: 14.0 Incorrect: 3.0 Accuracy: 82.353% St. Dev.: 9.246	Variable E3_Negotiating: Correct: 13.0 Incorrect: 4.0 Accuracy: 76.471% St. Dev.: 10.288	Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Overall accuracy: 50.588% (SD = 12.126)	Overall accuracy: 44.118% (SD = 12.043)	Overall accuracy: 65.000% (SD = 23.848)

Case S: Client E4 Confronting Focus	Case S: Client E4 Creating Value Focus	Case S: Client E4 Finding Connections Focus
Variable E4_Comprehending: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Comprehending: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Comprehending: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Confronting: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Finding_Direction: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Finding_Direction: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Finding_Direction: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Influencing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Mediating: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Mediating: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Confronting: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Overall accuracy: 62.500% (SD = 24.206)	Overall accuracy: 75.000% (SD = 21.651)	Overall accuracy: 65.000% (SD = 23.848)

Case S: Client E4 Finding Direction Focus	Case S: Client E4 Impacting Trust Focus	Case S: Client E4 Influencing Focus
Variable E4_Comprehending: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Influencing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Mediating: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Finding_Direction: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 **Overall accuracy: 77.500% (SD = 0.879)**	Variable E4_Comprehending: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Finding_Direction: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Mediating: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Impacting_Trust: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Overall accuracy: 65.000% (SD = 23.848)	Variable E4_Comprehending: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Finding_Direction: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Mediating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Influencing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Overall accuracy: 70.000% (SD = 22.913)

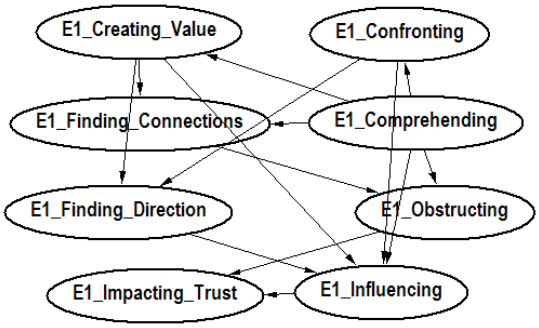
Case S: Client E4 Obstructing Focus	**Case S: Client E4 Mediating Focus**	Case S: Client E4 Negotiating Focus
Variable E4_Comprehending: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Comprehending: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Comprehending: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Confronting: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Finding_Connections: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Finding_Direction: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Finding_Direction: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Finding_Direction: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Influencing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Influencing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Mediating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Mediating: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Obstructing: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Mediating: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Overall accuracy: 70.000% (SD = 22.913)	**Overall accuracy: 77.500% (SD = 20.879)**	Overall accuracy: 65.000% (SD = 23.848)

Highest relative predictive accuracy of all Bayesian Belief Learning Networks in each epoch (Case S, Client)

Case S: (Client Only)

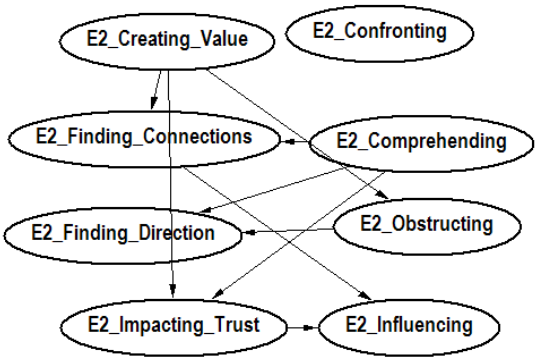
Epoch E1

RFI, Risk Reduction Studies, RFQ
Complexity Factor = 19%
Highest Accuracy with Impacting Trust Focus



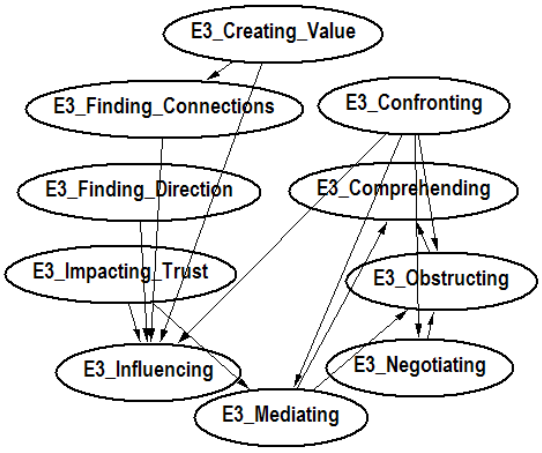
Epoch E2

Design Development
Complexity Factor = 37%
Highest Accuracy with Finding Direction Focus



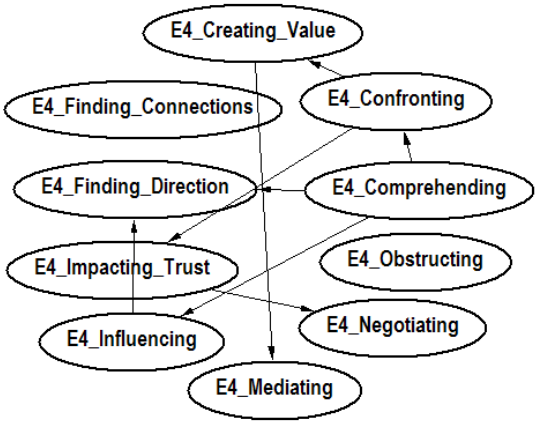
Epoch E3

Teaming, RFT, Tender Evaluation, Offer Definition
Complexity Factor = 46%
Highest Accuracy with Comprehending Focus



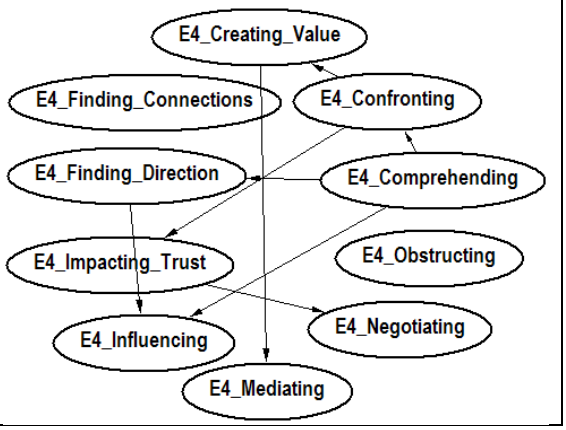
Epoch E4

Negotiations
Complexity Factor = 22%
Highest Accuracy with Finding Direction Focus



Epoch E4

Negotiations
Complexity Factor = 22%
Highest Accuracy with Mediating Focus

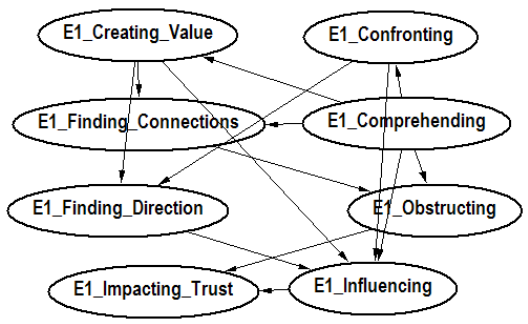


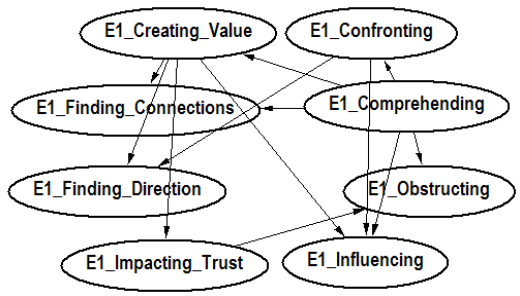
Bayesian Belief Learning Networks for each Tendering Concept (Case S, Client)

Complexity (Interdependence) of Tendering Purposes – Case S: (Client Only)

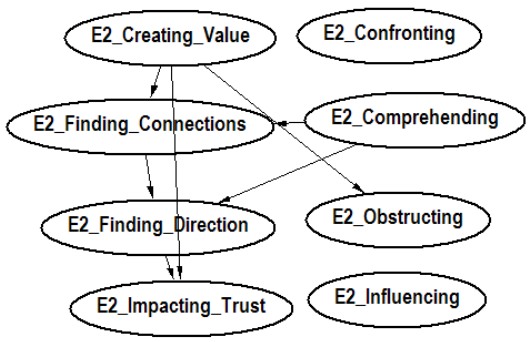
Impacting Trust	Finding Direction

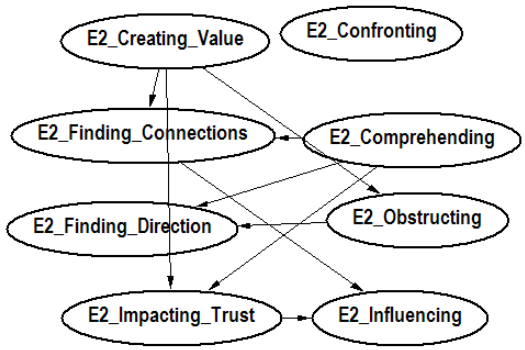
Epoch 1: RFI, Risk Reduction Studies, RFQ



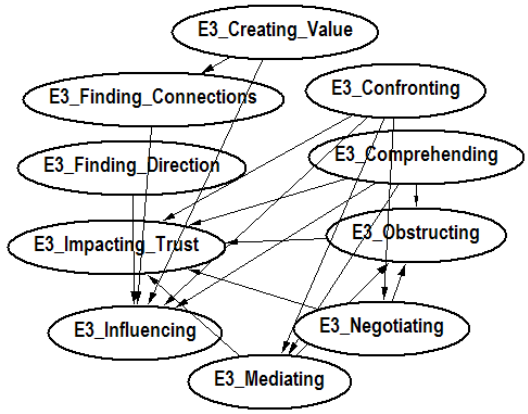


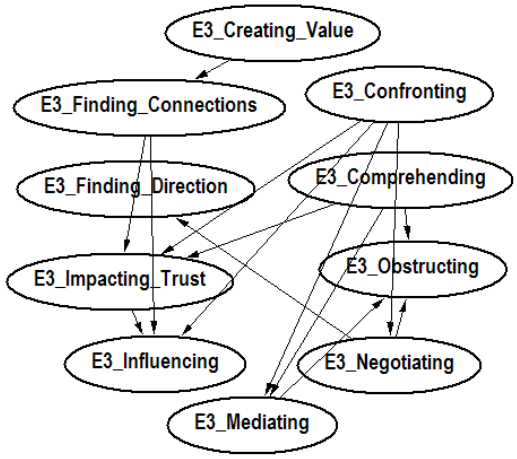
Epoch 2: Design Development

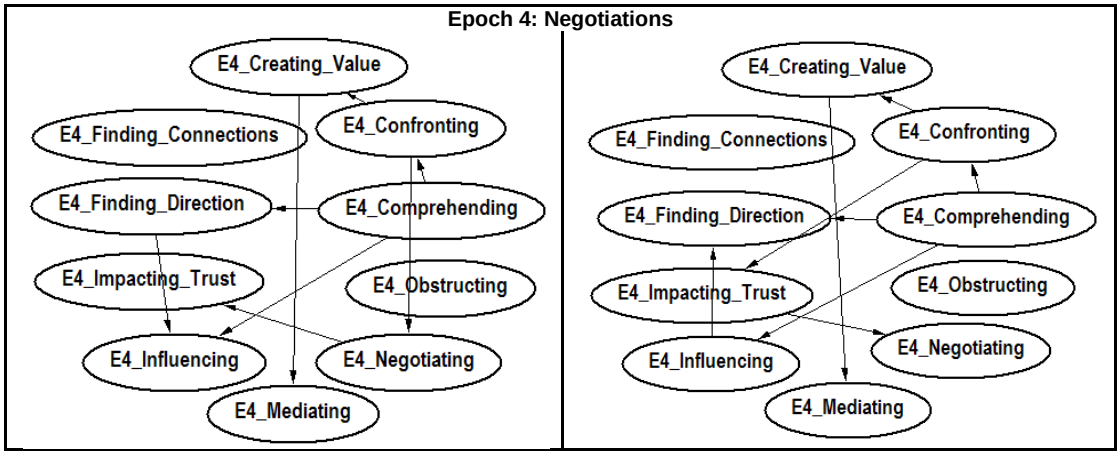


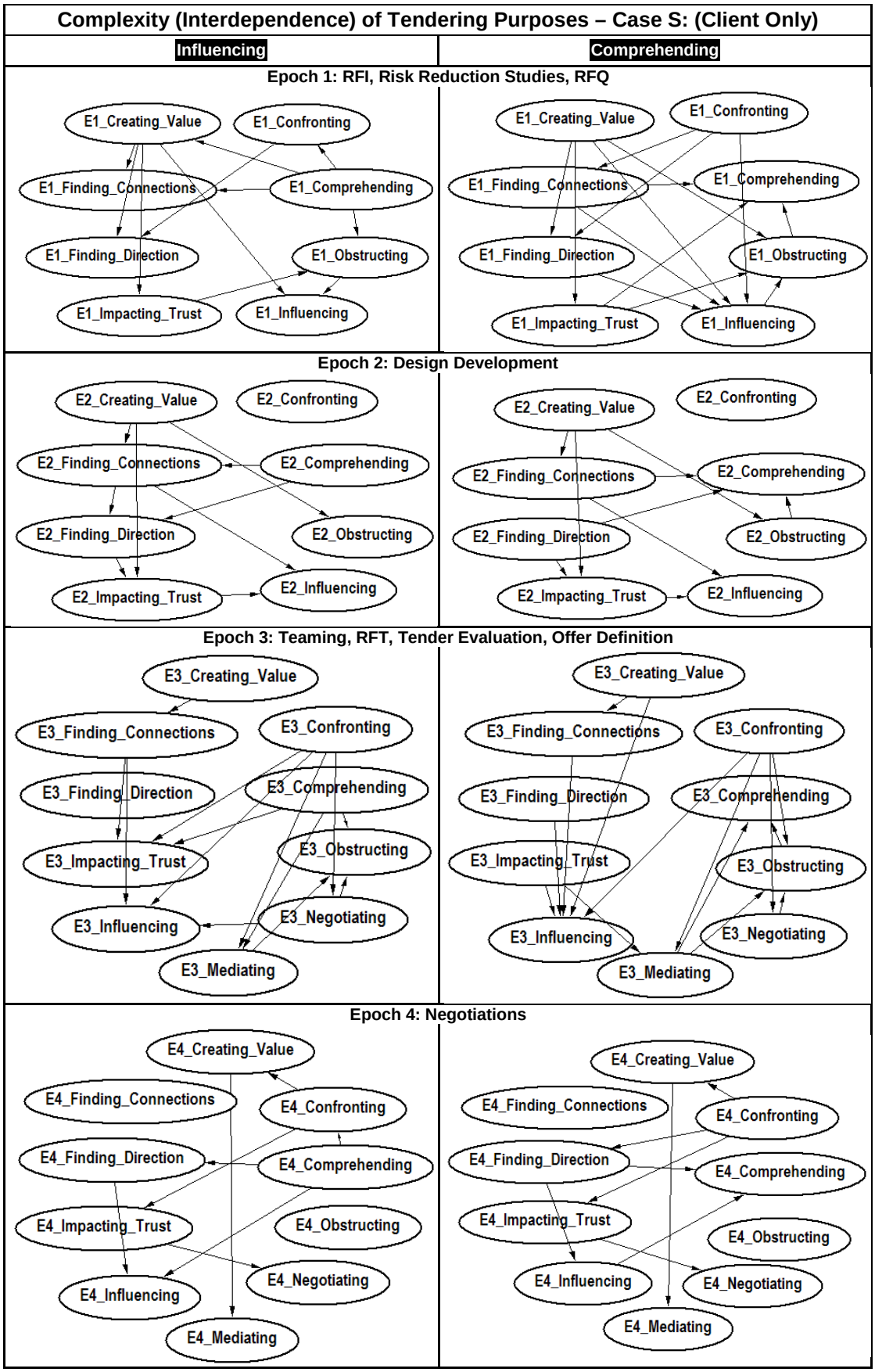


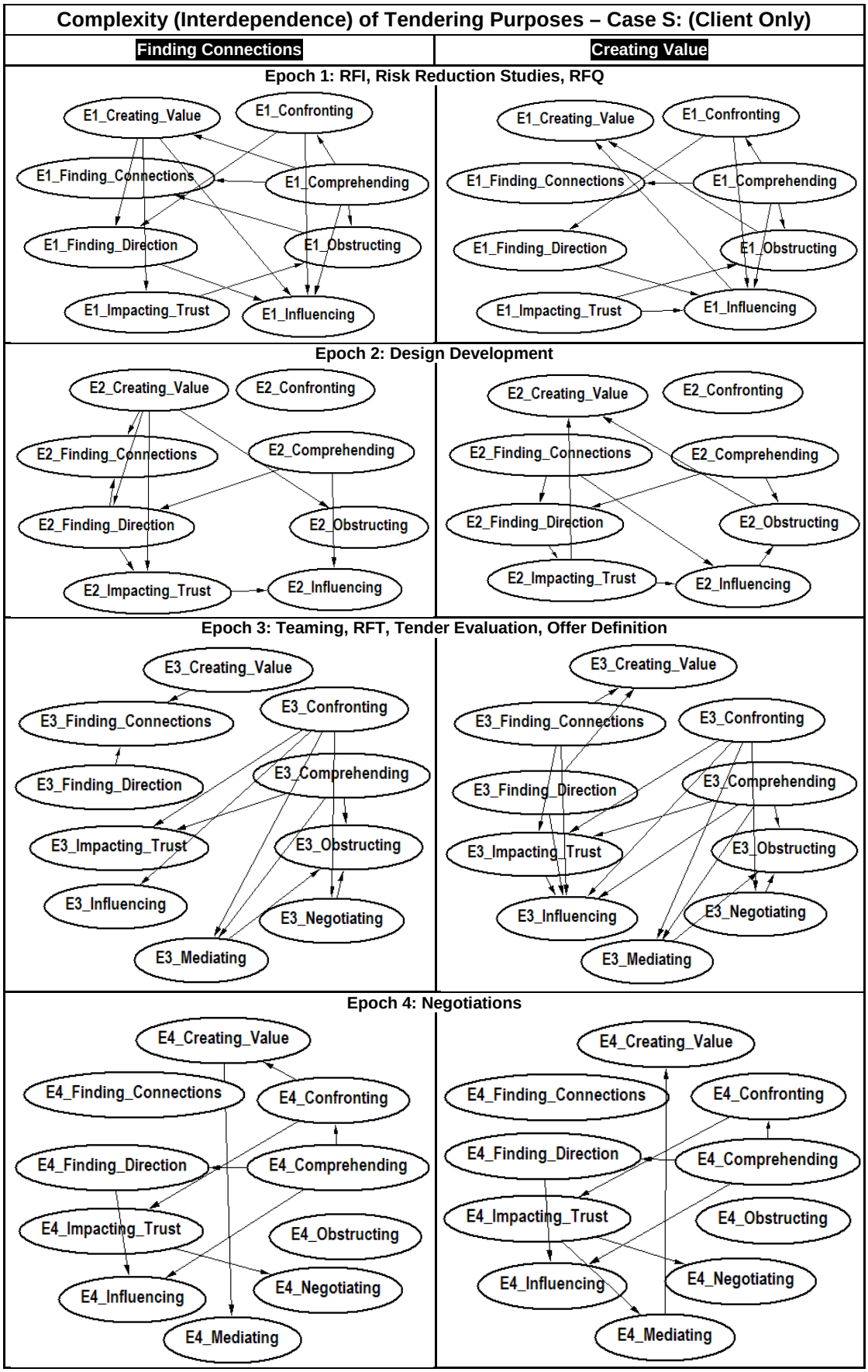
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition

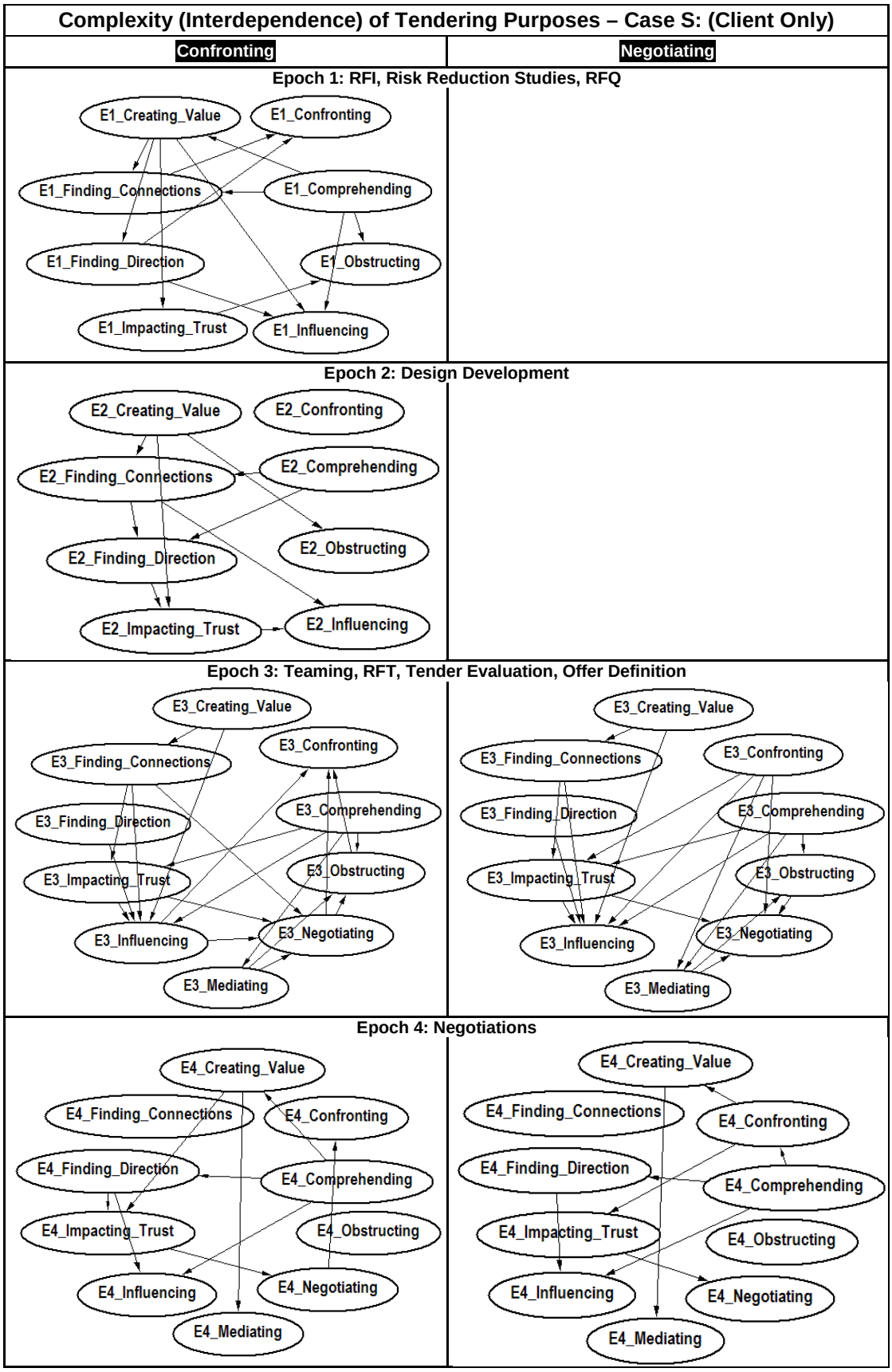





Epoch 4: Negotiations
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Influencing
E4_Negotiating
E4_Mediating
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Negotiating
E4_Influencing
E4_Mediating


Complexity (Interdependence) of Tendering Purposes – Case S: (Client Only)
Influencing
Comprehending
Epoch 1: RFI, Risk Reduction Studies, RFQ
E1_Creating_Value
E1_Confronting
E1_Finding_Connections
E1_Comprehending
E1_Finding_Direction
E1_Obstructing
E1_Impacting_Trust
E1_Influencing
E1_Creating_Value
E1_Confronting
E1_Finding_Connections
E1_Comprehending
E1_Finding_Direction
E1_Obstructing
E1_Impacting_Trust
E1_Influencing
Epoch 2: Design Development
E2_Creating_Value
E2_Confronting
E2_Finding_Connections
E2_Comprehending
E2_Finding_Direction
E2_Obstructing
E2_Impacting_Trust
E2_Influencing
E2_Creating_Value
E2_Confronting
E2_Finding_Connections
E2_Comprehending
E2_Finding_Direction
E2_Obstructing
E2_Impacting_Trust
E2_Influencing
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition
E3_Creating_Value
E3_Finding_Connections
E3_Confronting
E3_Finding_Direction
E3_Comprehending
E3_Impacting_Trust
E3_Obstructing
E3_Influencing
E3_Negotiating
E3_Mediating
E3_Creating_Value
E3_Finding_Connections
E3_Confronting
E3_Finding_Direction
E3_Comprehending
E3_Impacting_Trust
E3_Obstructing
E3_Influencing
E3_Negotiating
E3_Mediating
Epoch 4: Negotiations
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Negotiating
E4_Influencing
E4_Mediating
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Influencing
E4_Negotiating
E4_Mediating

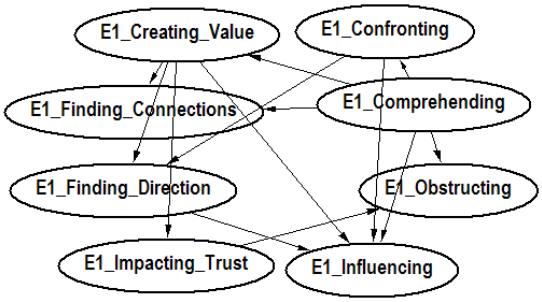

Complexity (Interdependence) of Tendering Purposes – Case S: (Client Only)
Finding Connections
Creating Value
Epoch 1: RFI, Risk Reduction Studies, RFQ
E1_Creating_Value
E1_Confronting
E1_Finding_Connections
E1_Comprehending
E1_Finding_Direction
E1_Obstructing
E1_Impacting_Trust
E1_Influencing
E1_Creating_Value
E1_Confronting
E1_Finding_Connections
E1_Comprehending
E1_Finding_Direction
E1_Obstructing
E1_Impacting_Trust
E1_Influencing
Epoch 2: Design Development
E2_Creating_Value
E2_Confronting
E2_Finding_Connections
E2_Comprehending
E2_Finding_Direction
E2_Obstructing
E2_Impacting_Trust
E2_Influencing
E2_Creating_Value
E2_Confronting
E2_Finding_Connections
E2_Comprehending
E2_Finding_Direction
E2_Obstructing
E2_Impacting_Trust
E2_Influencing
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition
E3_Creating_Value
E3_Confronting
E3_Finding_Connections
E3_Comprehending
E3_Finding_Direction
E3_Impacting_Trust
E3_Obstructing
E3_Influencing
E3_Negotiating
E3_Mediating
E3_Creating_Value
E3_Finding_Connections
E3_Confronting
E3_Finding_Direction
E3_Comprehending
E3_Impacting_Trust
E3_Obstructing
E3_Influencing
E3_Negotiating
E3_Mediating
Epoch 4: Negotiations
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Influencing
E4_Negotiating
E4_Mediating
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Influencing
E4_Negotiating
E4_Mediating


Complexity (Interdependence) of Tendering Purposes – Case S: (Client Only)
Confronting
Negotiating
Epoch 1: RFI, Risk Reduction Studies, RFQ
E1_Creating_Value
E1_Confronting
E1_Finding_Connections
E1_Comprehending
E1_Finding_Direction
E1_Obstructing
E1_Impacting_Trust
E1_Influencing
Epoch 2: Design Development
E2_Creating_Value
E2_Confronting
E2_Finding_Connections
E2_Comprehending
E2_Finding_Direction
E2_Obstructing
E2_Impacting_Trust
E2_Influencing
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition
E3_Creating_Value
E3_Confronting
E3_Finding_Connections
E3_Comprehending
E3_Finding_Direction
E3_Obstructing
E3_Impacting_Trust
E3_Influencing
E3_Negotiating
E3_Mediating
E3_Creating_Value
E3_Confronting
E3_Finding_Connections
E3_Comprehending
E3_Finding_Direction
E3_Obstructing
E3_Impacting_Trust
E3_Influencing
E3_Negotiating
E3_Mediating
Epoch 4: Negotiations
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Influencing
E4_Negotiating
E4_Mediating
E4_Creating_Value
E4_Finding_Connections
E4_Confronting
E4_Finding_Direction
E4_Comprehending
E4_Impacting_Trust
E4_Obstructing
E4_Influencing
E4_Negotiating
E4_Mediating

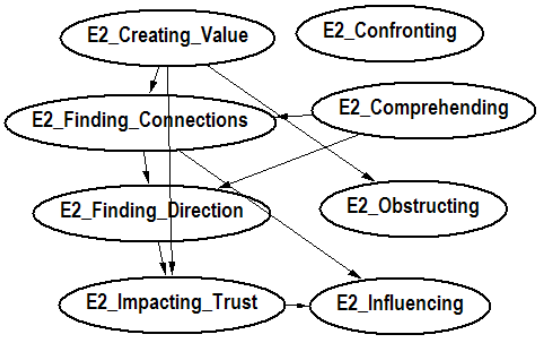
Complexity (Interdependence) of Tendering Purposes – Case S: (Client Only)

Obstructing	Mediating

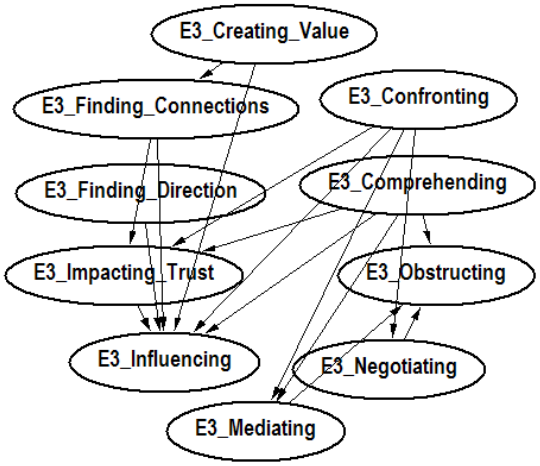
Epoch 1: RFI, Risk Reduction Studies, RFQ

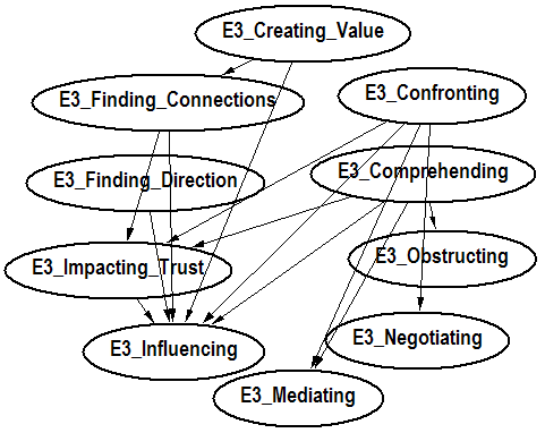


Epoch 2: Design Development

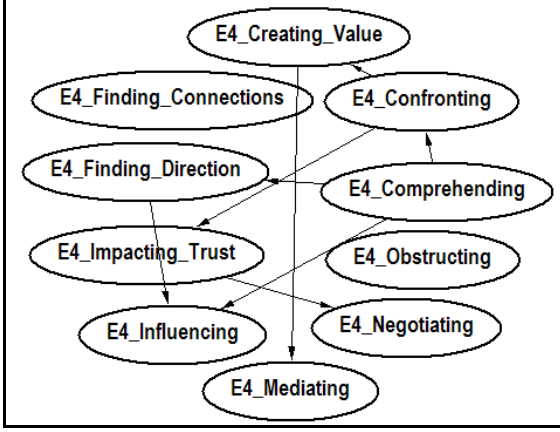


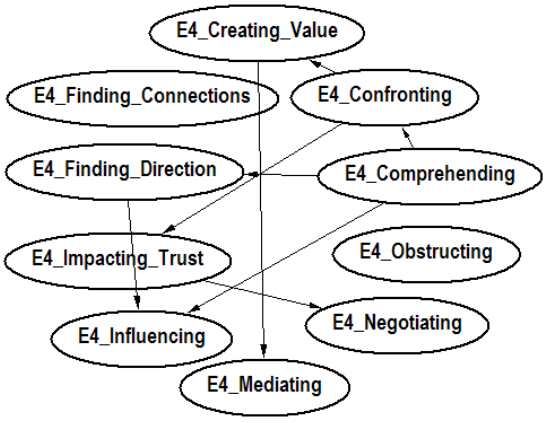
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition





Epoch 4: Negotiations





Case S, Contractor: BBLN Predictive Accuracy

Case S: Contractor E1 Comprehending Focus	Case S: Contractor E1 Confronting Focus	**Case S: Contractor E1 Creating Value Focus**
Variable E1_Confronting: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294	Variable E1_Comprehending: Correct: 11.0 Incorrect: 10.0 Accuracy: 52.381% St. Dev.: 10.899	Variable E1_Comprehending: Correct: 11.0 Incorrect: 10.0 Accuracy: 52.381% St. Dev.: 10.899
Variable E1_Creating_Value: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799	Variable E1_Creating_Value: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287	Variable E1_Confronting: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406
Variable E1_Finding_Connections: Correct: 21.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E1_Finding_Connections: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294	Variable E1_Finding_Connections: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647
Variable E1_Finding_Direction: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Finding_Direction: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799	Variable E1_Finding_Direction: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636
Variable E1_Impacting_Trust: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858	Variable E1_Impacting_Trust: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Impacting_Trust: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636
Variable E1_Influencing: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569	Variable E1_Influencing: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858	Variable E1_Influencing: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647
Variable E1_Comprehending: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858	Variable E1_Confronting: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569	Variable E1_Creating_Value: Correct: 17.0 Incorrect: 4.0 Accuracy: 80.952% St. Dev.: 8.569
Overall accuracy: 74.150% (SD = 9.554)	Overall accuracy: 66.667% (SD = 10.287)	**Overall accuracy: 83.673% (SD = 8.065)**

Case S: Contractor E1 Finding Connection Focus	Case S: Contractor E1 Finding Direction Focus	Case S: Contractor E1 Impacting Trust Focus
Variable E1_Comprehending: Correct: 10.0 Incorrect: 11.0 Accuracy: 47.619% St. Dev.: 10.899	Variable E1_Comprehending: Correct: 9.0 Incorrect: 12.0 Accuracy: 42.857% St. Dev.: 10.799	Variable E1_Comprehending: Correct: 10.0 Incorrect: 11.0 Accuracy: 47.619% St. Dev.: 10.899
Variable E1_Confronting: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Confronting: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294	Variable E1_Confronting: Correct: 18.0 Incorrect: 3.0 Accuracy: 85.714% St. Dev.: 7.636
Variable E1_Creating_Value: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Creating_Value: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799	Variable E1_Creating_Value: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858
Variable E1_Finding_Direction: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Finding_Connections: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Finding_Connections: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406
Variable E1_Impacting_Trust: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799	Variable E1_Impacting_Trust: Correct: 12.0 Incorrect: 9.0 Accuracy: 57.143% St. Dev.: 10.799	Variable E1_Finding_Direction: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858
Variable E1_Influencing: Correct: 14.0 Incorrect: 7.0 Accuracy: 66.667% St. Dev.: 10.287	Variable E1_Influencing: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E1_Influencing: Correct: 20.0 Incorrect: 1.0 Accuracy: 95.238% St. Dev.: 4.647
Variable E1_Finding_Connections: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E1_Finding_Direction: Correct: 9.0 Incorrect: 12.0 Accuracy: 42.857% St. Dev.: 10.799	Variable E1_Impacting_Trust: Correct: 15.0 Incorrect: 6.0 Accuracy: 71.429% St. Dev.: 9.858
Overall accuracy: 63.946% (SD = 10.478)	Overall accuracy: 61.224% (SD = 10.632)	Overall accuracy: 76.190% (SD = 9.294)

Case S: Contractor E1 Influencing Focus	Case S: Contractor E2 Comprehending Focus	Case S: Contractor E2 Confronting Focus
Variable E1_Comprehending: Correct: 9.0 Incorrect: 12.0 Accuracy: 42.857% St. Dev.: 10.799	Variable E2_Confronting: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Comprehending: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075
Variable E1_Confronting: Correct: 16.0 Incorrect: 5.0 Accuracy: 76.190% St. Dev.: 9.294	Variable E2_Creating_Value: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Creating_Value: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075
Variable E1_Creating_Value: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E2_Finding_Connections: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Variable E1_Finding_Connections: Correct: 19.0 Incorrect: 2.0 Accuracy: 90.476% St. Dev.: 6.406	Variable E2_Finding_Direction: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Finding_Direction: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E1_Finding_Direction: Correct: 11.0 Incorrect: 10.0 Accuracy: 52.381% St. Dev.: 10.899	Variable E2_Impacting_Trust: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Impacting_Trust: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Variable E1_Impacting_Trust: Correct: 11.0 Incorrect: 10.0 Accuracy: 52.381% St. Dev.: 10.899	Variable E2_Influencing: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Influencing: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075
Variable E1_Influencing: Correct: 13.0 Incorrect: 8.0 Accuracy: 61.905% St. Dev.: 10.597	Variable E2_Negotiating: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Negotiating: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Overall accuracy: 62.585% (SD = 10.560)	Variable E2_Comprehending: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Confronting: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
	Overall accuracy: 60.714% (SD = 18.459)	Overall accuracy: 50.000% (SD = 18.898)

Case S: Contractor E2 Creating Value Focus	**Case S: Contractor E2 Finding Connections Focus**	Case S: Contractor E2 Finding Direction Focus
Variable E2_Comprehending: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Comprehending: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Comprehending: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Confronting: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Confronting: Correct: 6.0 Incorrect: 1.0 Accuracy: 85.714% St. Dev.: 13.226	Variable E2_Confronting: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Creating_Value: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Creating_Value: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Finding_Direction: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Finding_Direction: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Variable E2_Impacting_Trust: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Impacting_Trust: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Impacting_Trust: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226
Variable E2_Influencing: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Influencing: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Influencing: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075
Variable E2_Negotiating: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Negotiating: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Negotiating: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Creating_Value: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Finding_Direction: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226
Overall accuracy: 64.286% (SD = 18.110)	**Overall accuracy: 66.071% (SD = 17.895)**	Overall accuracy: 35.714% (SD = 18.110)

Case S: Contractor E2 Impacting Trust Focus	Case S: Contractor E2 Influencing Focus	Case S: Contractor E2 Negotiating Focus
Variable E2_Comprehending: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Comprehending: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Comprehending: Correct: 7.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E2_Confronting: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Confronting: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226	Variable E2_Confronting: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Creating_Value: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Creating_Value: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Creating_Value: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704
Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Finding_Connections: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075
Variable E2_Finding_Direction: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Finding_Direction: Correct: 1.0 Incorrect: 6.0 Accuracy: 14.286% St. Dev.: 13.226	Variable E2_Finding_Direction: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Variable E2_Influencing: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704	Variable E2_Impacting_Trust: Correct: 2.0 Incorrect: 5.0 Accuracy: 28.571% St. Dev.: 17.075	Variable E2_Impacting_Trust: Correct: 4.0 Incorrect: 3.0 Accuracy: 57.143% St. Dev.: 18.704
Variable E2_Negotiating: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Negotiating: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Influencing: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075
Variable E2_Impacting_Trust: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704	Variable E2_Influencing: Correct: 5.0 Incorrect: 2.0 Accuracy: 71.429% St. Dev.: 17.075	Variable E2_Negotiating: Correct: 3.0 Incorrect: 4.0 Accuracy: 42.857% St. Dev.: 18.704
Overall accuracy: 55.357% (SD = 18.789)	Overall accuracy: 33.929% (SD = 17.895)	Overall accuracy: 55.357% (SD = 18.789)

Case S: Contractor E3 Comprehending Focus	Case S: Contractor E3 Confronting Focus	Case S: Contractor E3 Creating Value Focus
Variable E3_Confronting: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712	Variable E3_Comprehending: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490	Variable E3_Comprehending: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784
Variable E3_Creating_Value: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Creating_Value: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E3_Confronting: Correct: 12.0 Incorrect: 6.0 Accuracy: 66.667% St. Dev.: 11.111
Variable E3_Finding_Connections: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712	Variable E3_Finding_Connections: Correct: 12.0 Incorrect: 6.0 Accuracy: 66.667% St. Dev.: 11.111	Variable E3_Finding_Connections: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712
Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Finding_Direction: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399
Variable E3_Impacting_Trust: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Impacting_Trust: Correct: 14.0 Incorrect: 4.0 Accuracy: 77.778% St. Dev.: 9.799	Variable E3_Impacting_Trust: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557
Variable E3_Influencing: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E3_Influencing: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E3_Influencing: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557
Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557
Variable E3_Negotiating: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E3_Negotiating: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E3_Negotiating: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111
Variable E3_Obstructing: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E3_Obstructing: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490	Variable E3_Obstructing: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490
Variable E3_Comprehending: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E3_Confronting: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785	Variable E3_Creating_Value: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407
Overall accuracy: 36.667% (SD = 11.358)	Overall accuracy: 44.444% (SD = 11.712)	Overall accuracy: 38.889% (SD = 11.490)

Case S: Contractor E3 Finding Connections Focus	Case S: Contractor E3 Finding Direction Focus	Case S: Contractor E3 Impacting Trust Focus
Variable E3_Comprehending: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490	Variable E3_Comprehending: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E3_Comprehending: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111
Variable E3_Confronting: Correct: 16.0 Incorrect: 2.0 Accuracy: 88.889% St. Dev.: 7.407	Variable E3_Confronting: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785	Variable E3_Confronting: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712
Variable E3_Creating_Value: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712	Variable E3_Creating_Value: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E3_Creating_Value: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399
Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Finding_Connections: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785	Variable E3_Finding_Connections: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490
Variable E3_Impacting_Trust: Correct: 12.0 Incorrect: 6.0 Accuracy: 66.667% St. Dev.: 11.111	Variable E3_Impacting_Trust: Correct: 14.0 Incorrect: 4.0 Accuracy: 77.778% St. Dev.: 9.799	Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407
Variable E3_Influencing: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490	Variable E3_Influencing: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E3_Influencing: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111
Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557
Variable E3_Negotiating: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E3_Negotiating: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E3_Negotiating: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557
Variable E3_Obstructing: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E3_Obstructing: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490	Variable E3_Obstructing: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490
Variable E3_Finding_Connections: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785	Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Impacting_Trust: Correct: 18.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Overall accuracy: 45.556% (SD = 11.738)	Overall accuracy: 37.778% (SD = 11.428)	Overall accuracy: 43.889% (SD = 11.697)

Case S: Contractor E3 Influencing Focus	Case S: Contractor E3 Obstructing Focus	Case S: Contractor E3 Mediating Focus
Variable E3_Comprehending: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E3_Comprehending: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E3_Comprehending: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799
Variable E3_Confronting: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490	Variable E3_Confronting: Correct: 14.0 Incorrect: 4.0 Accuracy: 77.778% St. Dev.: 9.799	Variable E3_Confronting: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799
Variable E3_Creating_Value: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399	Variable E3_Creating_Value: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Creating_Value: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407
Variable E3_Finding_Connections: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490	Variable E3_Finding_Connections: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712	Variable E3_Finding_Connections: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712
Variable E3_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Finding_Direction: Correct: 0.0 Incorrect: 18.0 Accuracy: .000% St. Dev.: .000	Variable E3_Finding_Direction: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399
Variable E3_Impacting_Trust: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Impacting_Trust: Correct: 12.0 Incorrect: 6.0 Accuracy: 66.667% St. Dev.: 11.111	Variable E3_Impacting_Trust: Correct: 14.0 Incorrect: 4.0 Accuracy: 77.778% St. Dev.: 9.799
Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Influencing: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E3_Influencing: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399
Variable E3_Negotiating: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E3_Negotiating: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111
Variable E3_Obstructing: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E3_Negotiating: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E3_Obstructing: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490
Variable E3_Influencing: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E3_Obstructing: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557
Overall accuracy: 38.889% (SD = 11.490)	Overall accuracy: 36.111% (SD = 11.321)	Overall accuracy: 34.444% (SD = 11.200)

Case S: Contractor E3 Negotiating Focus	Case S: Contractor E4 Comprehending Focus	**Case S: Contractor E4 Confronting Focus**
Variable E3_Comprehending: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E4_Confronting: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Variable E3_Confronting: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712	Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Creating_Value: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E3_Creating_Value: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E4_Finding_Connections: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Finding_Connections: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712	Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Finding_Direction: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Impacting_Trust: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Influencing: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E3_Mediating: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Obstructing: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E3_Negotiating: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Confronting: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Overall accuracy: 37.778% (SD = 11.428)	Overall accuracy: 57.500% (SD = 24.717)	**Overall accuracy: 60.000% (SD = 24.495)**

Case S: Contractor E4 Creating Value Focus	Case S: Contractor E4 Finding Connections Focus	Case S: Contractor E4 Finding Direction Focus
Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Comprehending: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Variable E4_Confronting: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Confronting: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Confronting: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Creating_Value: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Mediating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Negotiating: Correct: 0.0 Incorrect: 4.0 Accuracy: .000% St. Dev.: .000	Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Finding_Connections: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Finding_Direction: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Overall accuracy: 55.000% (SD = 24.875)	Overall accuracy: 47.500% (SD = 24.969)	Overall accuracy: 57.500% (SD = 24.717)

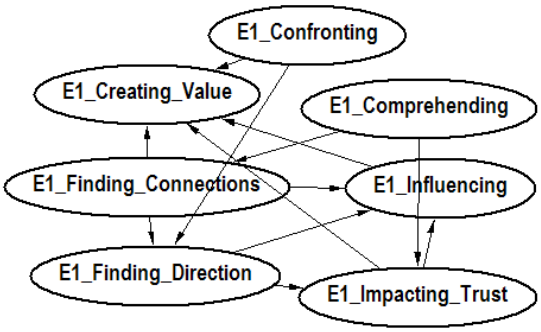
Case S: Contractor E4 Impacting Trust Focus	Case S: Contractor E4 Influencing Focus	Case S: Contractor E4 Obstructing Focus
Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651
Variable E4_Confronting: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Confronting: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Confronting: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651	Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651
Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000	Variable E4_Negotiating: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Variable E4_Impacting_Trust: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Influencing: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651	Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000
Overall accuracy: 57.500% (SD = 24.717)	Overall accuracy: 57.500% (SD = 24.717)	Overall accuracy: 60.000% (SD = 24.495)

Case S: Contractor E4 Mediating Focus	Case S: Contractor E4 Negotiating Focus
Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Variable E4_Confronting: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Negotiating: Correct: 0.0 Incorrect: 4.0 Accuracy: .000% St. Dev.: .000 Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Overall accuracy: 55.000% (SD = 24.875)	Variable E4_Comprehending: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Variable E4_Confronting: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Creating_Value: Correct: 3.0 Incorrect: 1.0 Accuracy: 75.000% St. Dev.: 21.651 Variable E4_Finding_Connections: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Impacting_Trust: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Influencing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Mediating: Correct: 4.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E4_Obstructing: Correct: 2.0 Incorrect: 2.0 Accuracy: 50.000% St. Dev.: 25.000 Variable E4_Negotiating: Correct: 1.0 Incorrect: 3.0 Accuracy: 25.000% St. Dev.: 21.651 Overall accuracy: 57.500% (SD = 24.717)

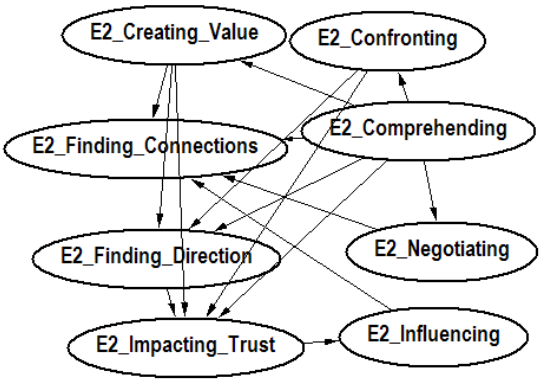
Highest relative predictive accuracy of all Bayesian Belief Learning Networks in each epoch (Case S, Contractor)

Case S: (Contractor Only)

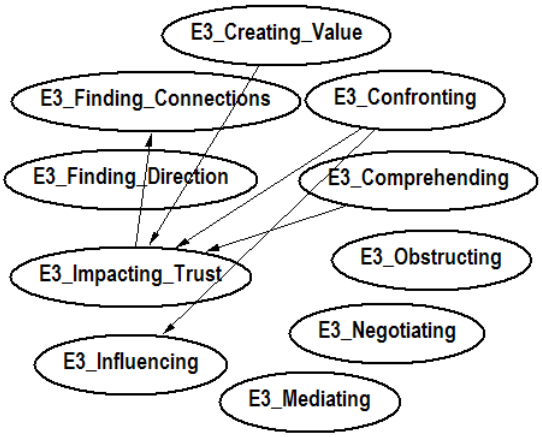
Epoch E1
RFI, Risk Reduction Studies, RFQ
Complexity Factor = 16%
Highest Accuracy with Creating Value Focus



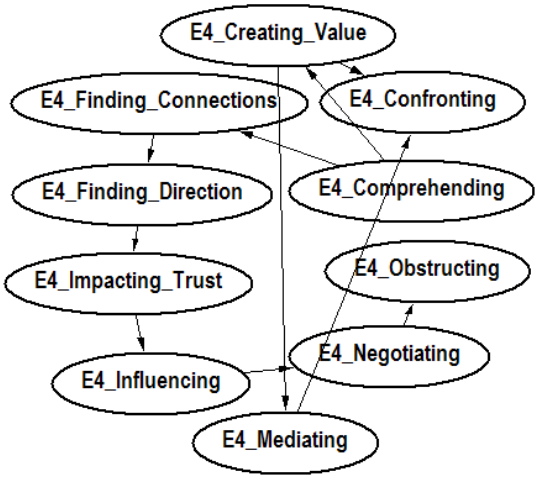
Epoch E2
Design Development
Complexity Factor = 34%
Highest Accuracy with Finding Connections Focus



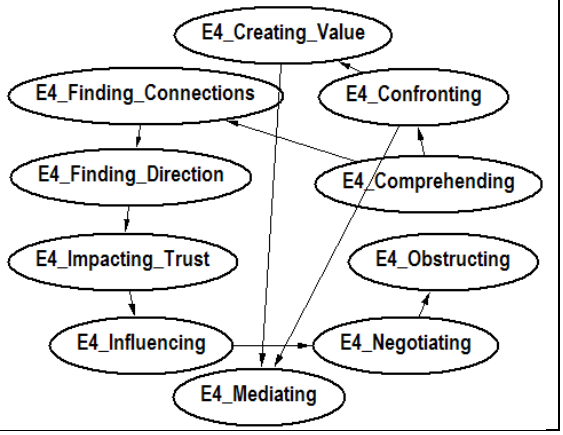
Epoch E3
Teaming, RFT, Tender Evaluation, Offer Definition
Complexity Factor = 54%
Highest Accuracy with Finding Connections Focus



Epoch E4
Negotiations
Complexity Factor = 40%
Highest Accuracy with Confronting Focus



Epoch E4
Negotiations
Complexity Factor = 40%
Highest Accuracy with Obstructing Focus

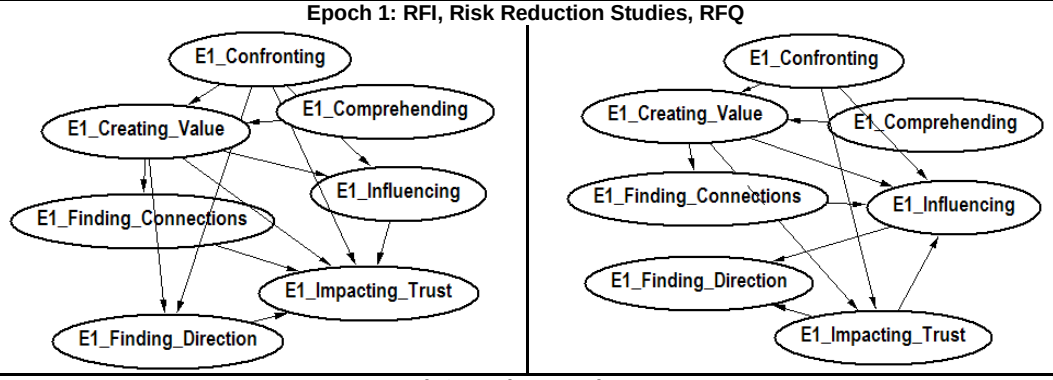


Bayesian Belief Learning Networks for each Tendering Concept (Case S, Contractor)

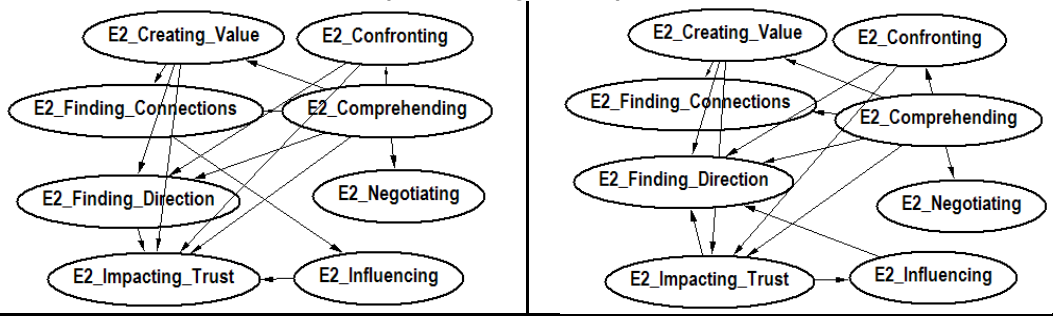
Complexity (Interdependence) of Tendering Purposes – Case S: (Contractor Only)

Impacting Trust	Finding Direction

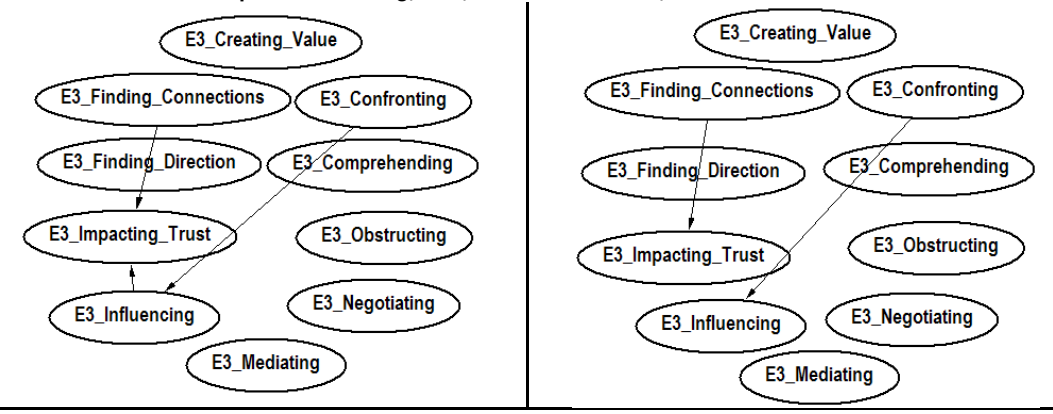
Epoch 1: RFI, Risk Reduction Studies, RFQ



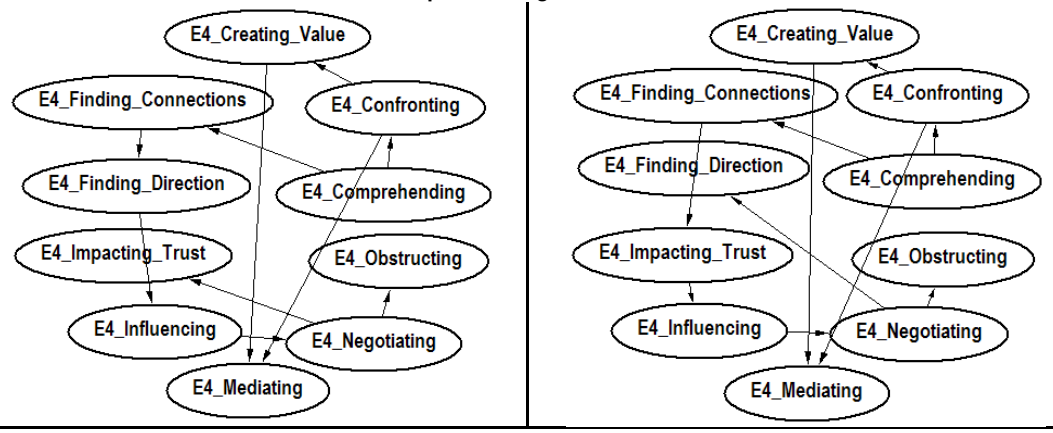
Epoch 2: Design Development



Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition



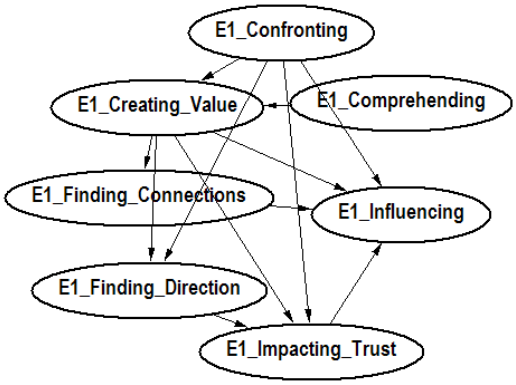
Epoch 4: Negotiations

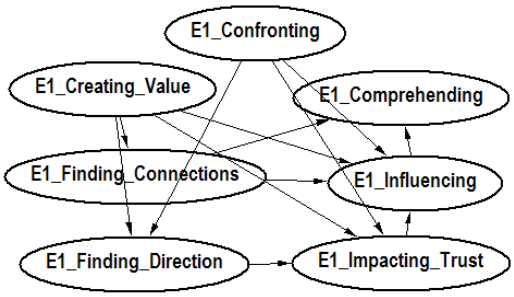


Complexity (Interdependence) of Tendering Purposes – Case S: (Contractor Only)

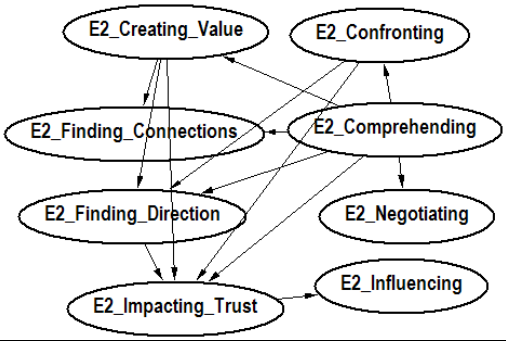
Influencing	Comprehending

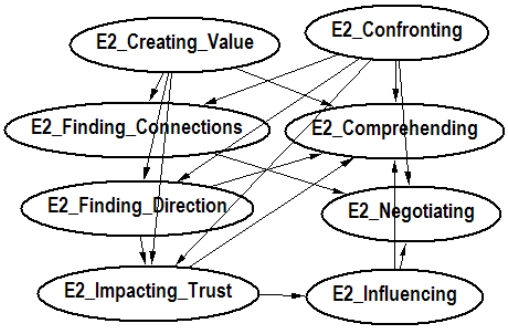
Epoch 1: RFI, Risk Reduction Studies, RFQ



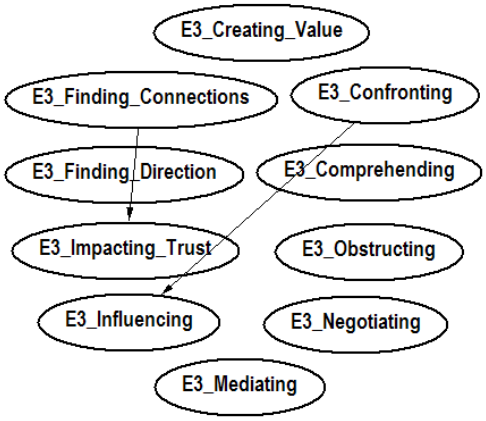


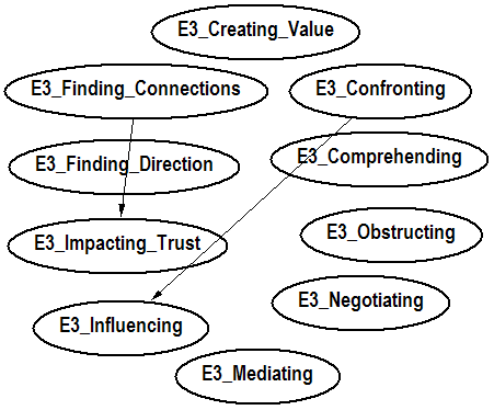
Epoch 2: Design Development



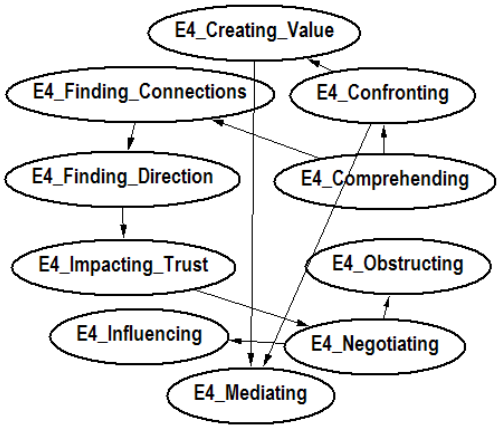


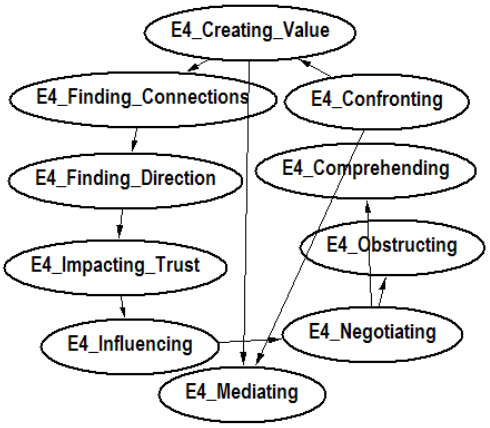
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition





Epoch 4: Negotiations

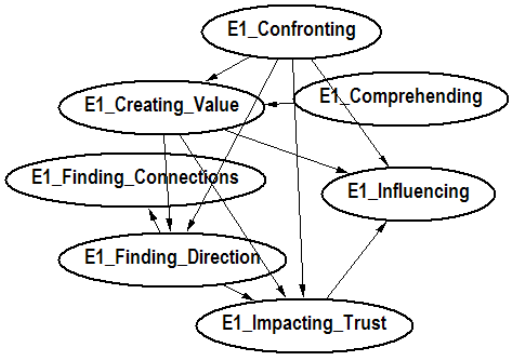


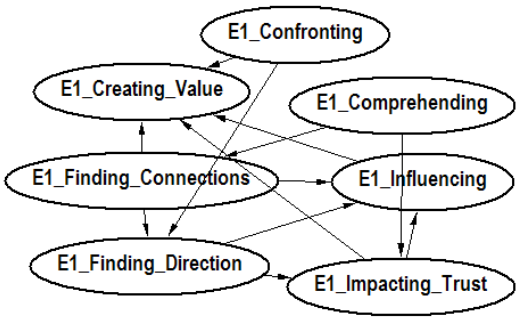


Complexity (Interdependence) of Tendering Purposes – Case S: (Contractor Only)

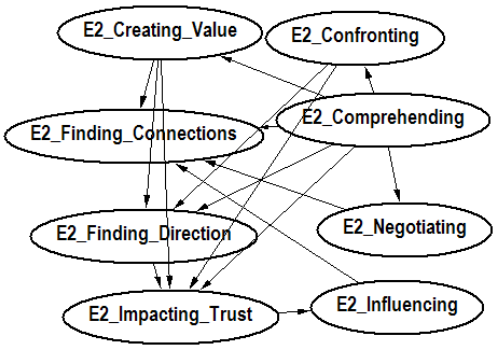
Finding Connections	Creating Value

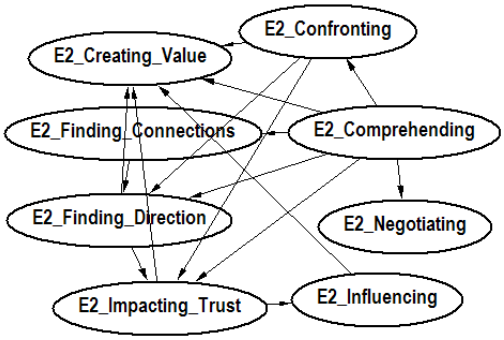
Epoch 1: RFI, Risk Reduction Studies, RFQ



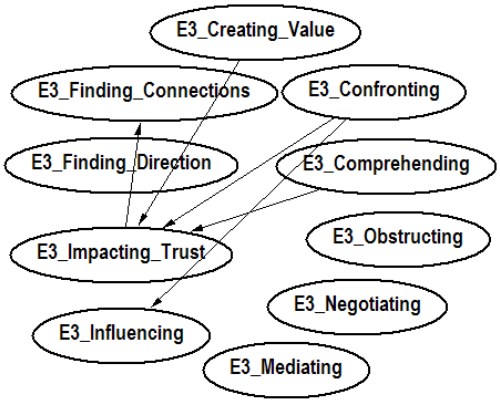


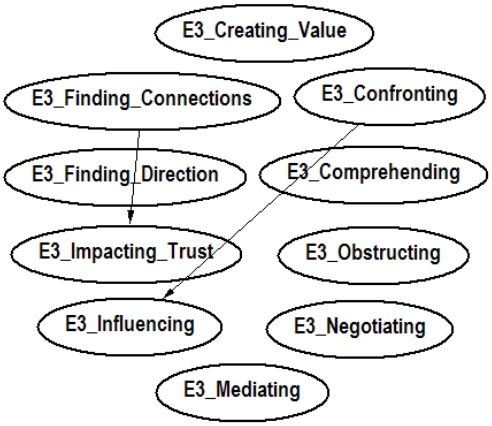
Epoch 2: Design Development



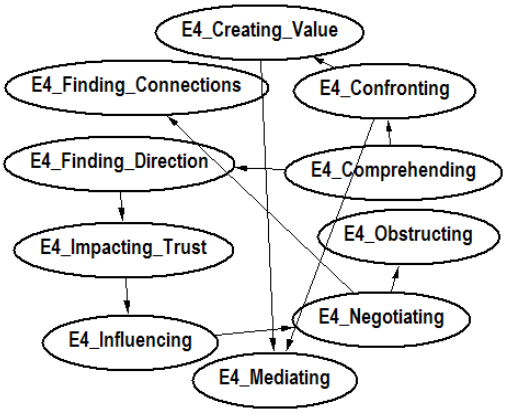


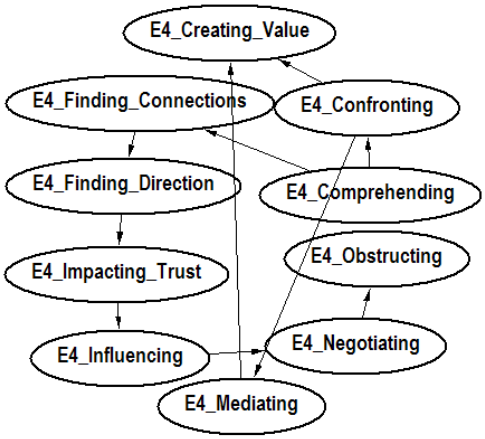
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition





Epoch 4: Negotiations

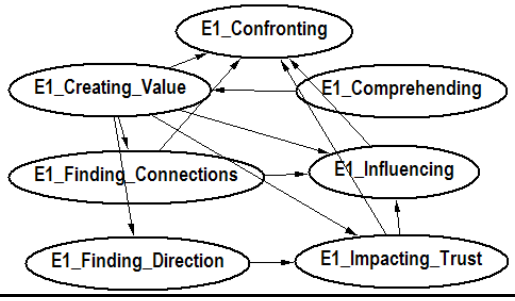




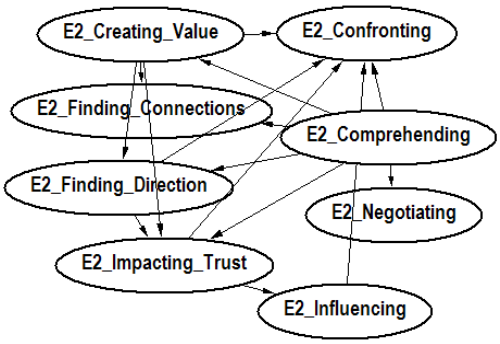
Complexity (Interdependence) of Tendering Purposes – Case S: (Contractor Only)

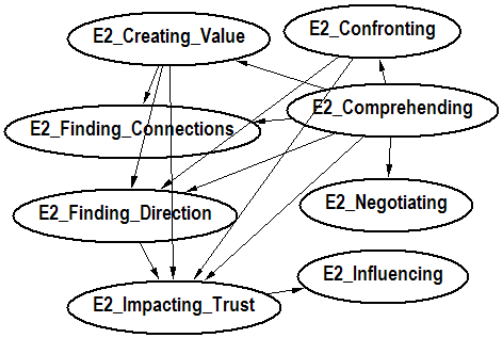
Confronting	Negotiating

Epoch 1: RFI, Risk Reduction Studies, RFQ

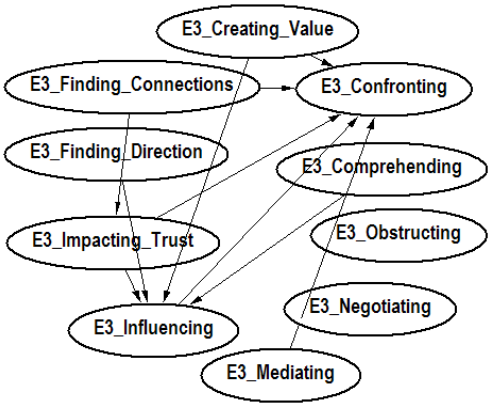


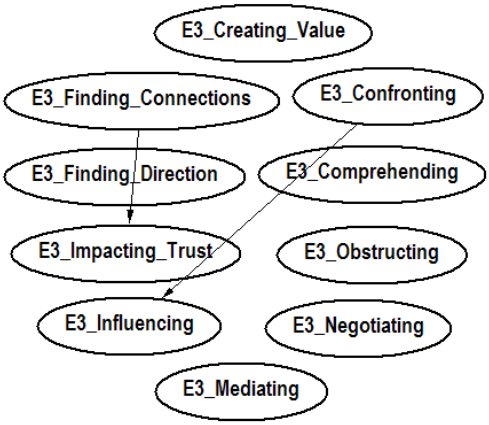
Epoch 2: Design Development



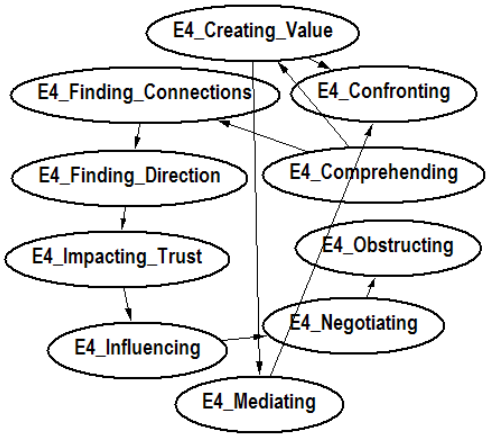


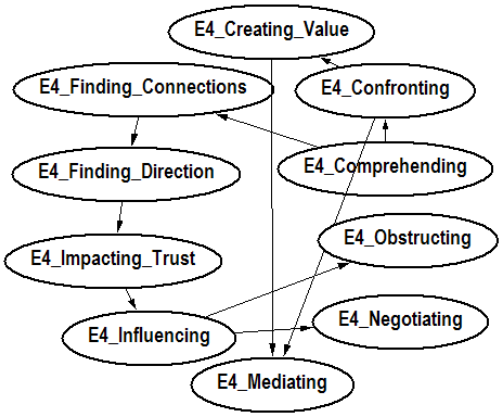
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition

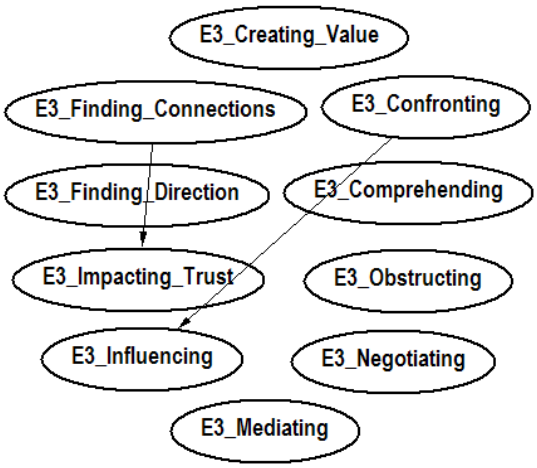
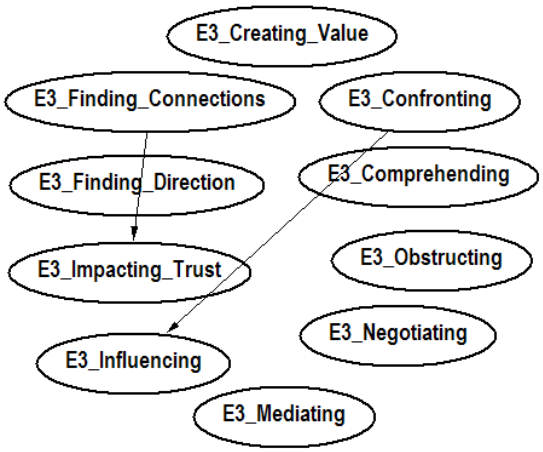
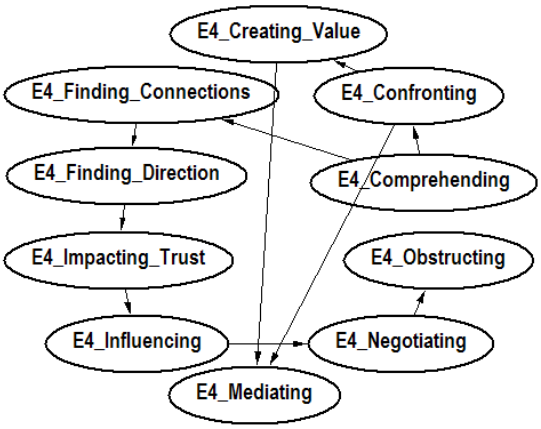
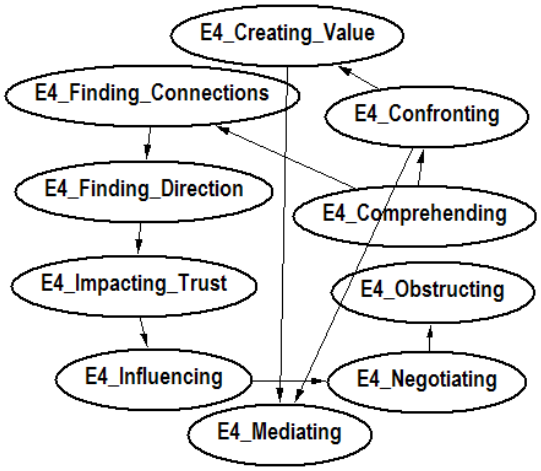




Epoch 4: Negotiations





Complexity (Interdependence) of Tendering Purposes – Case S: (Contractor Only)	
Obstructing	**Mediating**
Epoch 1: RFI, Risk Reduction Studies, RFQ	
Epoch 2: Design Development	
Epoch 3: Teaming, RFT, Tender Evaluation, Offer Definition	
	
Epoch 4: Negotiations	
	

Case L, Client: BBLN Predictive Accuracy

Case L: Client E1 Influencing Focus	Case L: Client E1 Impacting Trust Focus	Case L: Client E1 Finding Direction Focus
Variable E1_Comprehending: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268	Variable E1_Comprehending: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588	Variable E1_Comprehending: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103
Variable E1_Creating_Value: Correct: 12.0 Incorrect: 4.0 Accuracy: 75.000% St. Dev.: 10.825	Variable E1_Creating_Value: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402	Variable E1_Creating_Value: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588
Variable E1_Finding_Connections: Correct: 15.0 Incorrect: 1.0 Accuracy: 93.750% St. Dev.: 6.052	Variable E1_Finding_Connections: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268	Variable E1_Finding_Connections: Correct: 15.0 Incorrect: 1.0 Accuracy: 93.750% St. Dev.: 6.052
Variable E1_Finding_Direction: Correct: 16.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E1_Finding_Direction: Correct: 16.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E1_Impacting_Trust: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588
Variable E1_Impacting_Trust: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588	Variable E1_Influencing: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268	Variable E1_Influencing: Correct: 13.0 Incorrect: 3.0 Accuracy: 81.250% St. Dev.: 9.758
Variable E1_Influencing: Correct: 13.0 Incorrect: 3.0 Accuracy: 81.250% St. Dev.: 9.758	Variable E1_Impacting_Trust: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588	Variable E1_Finding_Direction: Correct: 16.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Overall accuracy: 84.375% **(SD = 9.077)**	Overall accuracy: 78.125% (SD = 10.335)	Overall accuracy: 79.167% (SD = 10.153)

Case L: Client E1 Finding Connections Focus	Case L: Client E1 Creating Value Focus	Case L: Client E1 Comprehending Focus
Variable E1_Comprehending: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500 Variable E1_Creating_Value: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500 Variable E1_Finding_Direction: Correct: 16.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E1_Impacting_Trust: Correct: 7.0 Incorrect: 9.0 Accuracy: 43.750% St. Dev.: 12.402 Variable E1_Influencing: Correct: 7.0 Incorrect: 9.0 Accuracy: 43.750% St. Dev.: 12.402 Variable E1_Finding_Connections: Correct: 15.0 Incorrect: 1.0 Accuracy: 93.750% St. Dev.: 6.052 Overall accuracy: 63.542% (SD = 12.033)	Variable E1_Comprehending: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500 Variable E1_Finding_Connections: Correct: 15.0 Incorrect: 1.0 Accuracy: 93.750% St. Dev.: 6.052 Variable E1_Finding_Direction: Correct: 16.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E1_Impacting_Trust: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588 Variable E1_Influencing: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402 Variable E1_Creating_Value: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500 Overall accuracy: 69.792% (SD = 11.479)	Variable E1_Creating_Value: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103 Variable E1_Finding_Connections: Correct: 16.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E1_Finding_Direction: Correct: 16.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E1_Impacting_Trust: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588 Variable E1_Influencing: Correct: 15.0 Incorrect: 1.0 Accuracy: 93.750% St. Dev.: 6.052 Variable E1_Comprehending: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500 Overall accuracy: 79.167% (SD = 10.153)

Case L: Client E2 Influencing Focus	Case L: Client E2 Impacting Trust Focus	Case L: Client E2 Comprehending Focus
Variable E2_Comprehending: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E2_Confronting: Correct: 2.0 Incorrect: 6.0 Accuracy: 25.000% St. Dev.: 15.309 Variable E2_Creating_Value: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E2_Finding_Connections: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Finding_Direction: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678 Variable E2_Impacting_Trust: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678 Variable E2_Influencing: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Overall accuracy: 67.857% (SD = 16.512)	Variable E2_Comprehending: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E2_Confronting: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Creating_Value: Correct: 7.0 Incorrect: 1.0 Accuracy: 87.500% St. Dev.: 11.693 Variable E2_Finding_Connections: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Finding_Direction: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678 Variable E2_Influencing: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Impacting_Trust: Correct: 5.0 Incorrect: 3.0 Accuracy: 62.500% St. Dev.: 17.116 Overall accuracy: 75.000% (SD = 15.309)	Variable E2_Confronting: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Creating_Value: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E2_Finding_Connections: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Finding_Direction: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678 Variable E2_Impacting_Trust: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678 Variable E2_Influencing: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Comprehending: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Overall accuracy: 75.000% (SD = 15.309)

Case L: Client E2 Finding Direction Focus	Case L: Client E2 Creating Value Focus	Case L: Client E2 Confronting Focus
Variable E2_Comprehending: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Comprehending: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000	Variable E2_Comprehending: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000
Variable E2_Confronting: Correct: 7.0 Incorrect: 1.0 Accuracy: 87.500% St. Dev.: 11.693	Variable E2_Confronting: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309	Variable E2_Creating_Value: Correct: 7.0 Incorrect: 1.0 Accuracy: 87.500% St. Dev.: 11.693
Variable E2_Creating_Value: Correct: 7.0 Incorrect: 1.0 Accuracy: 87.500% St. Dev.: 11.693	Variable E2_Finding_Connections: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309	Variable E2_Finding_Connections: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309
Variable E2_Finding_Connections: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309	Variable E2_Finding_Direction: Correct: 5.0 Incorrect: 3.0 Accuracy: 62.500% St. Dev.: 17.116	Variable E2_Finding_Direction: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678
Variable E2_Impacting_Trust: Correct: 7.0 Incorrect: 1.0 Accuracy: 87.500% St. Dev.: 11.693	Variable E2_Impacting_Trust: Correct: 5.0 Incorrect: 3.0 Accuracy: 62.500% St. Dev.: 17.116	Variable E2_Impacting_Trust: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309
Variable E2_Influencing: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309	Variable E2_Influencing: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309	Variable E2_Influencing: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309
Variable E2_Finding_Direction: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678	Variable E2_Creating_Value: Correct: 7.0 Incorrect: 1.0 Accuracy: 87.500% St. Dev.: 11.693	Variable E2_Confronting: Correct: 2.0 Incorrect: 6.0 Accuracy: 25.000% St. Dev.: 15.309
Overall accuracy: 80.357% (SD = 14.047)	Overall accuracy: 76.786% (SD = 14.927)	Overall accuracy: 69.643% (SD = 16.256)

Case L: Client E2 Finding Connections Focus	Case L: Client E3 Influencing Focus	**Case L: Client E3** **Impacting Trust Focus**
Variable E2_Comprehending: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E2_Confronting: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Creating_Value: Correct: 8.0 Incorrect: 0.0 Accuracy: 100.000% St. Dev.: .000 Variable E2_Finding_Direction: Correct: 4.0 Incorrect: 4.0 Accuracy: 50.000% St. Dev.: 17.678 Variable E2_Impacting_Trust: Correct: 5.0 Incorrect: 3.0 Accuracy: 62.500% St. Dev.: 17.116 Variable E2_Influencing: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Variable E2_Finding_Connections: Correct: 6.0 Incorrect: 2.0 Accuracy: 75.000% St. Dev.: 15.309 Overall accuracy: 76.786% (SD = 14.927)	Variable E3_Comprehending: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500 Variable E3_Confronting: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268 Variable E3_Creating_Value: Correct: 4.0 Incorrect: 12.0 Accuracy: 25.000% St. Dev.: 10.825 Variable E3_Finding_Connections: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268 Variable E3_Finding_Direction: Correct: 13.0 Incorrect: 3.0 Accuracy: 81.250% St. Dev.: 9.758 Variable E3_Impacting_Trust: Correct: 1.0 Incorrect: 15.0 Accuracy: 6.250% St. Dev.: 6.052 Variable E3_Negotiating: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268 Variable E3_Influencing: Correct: 6.0 Incorrect: 10.0 Accuracy: 37.500% St. Dev.: 12.103 Overall accuracy: 57.812% (SD = 12.346)	Variable E3_Comprehending: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103 Variable E3_Confronting: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268 Variable E3_Creating_Value: Correct: 6.0 Incorrect: 10.0 Accuracy: 37.500% St. Dev.: 12.103 Variable E3_Finding_Connections: Correct: 12.0 Incorrect: 4.0 Accuracy: 75.000% St. Dev.: 10.825 Variable E3_Finding_Direction: Correct: 13.0 Incorrect: 3.0 Accuracy: 81.250% St. Dev.: 9.758 Variable E3_Influencing: Correct: 6.0 Incorrect: 10.0 Accuracy: 37.500% St. Dev.: 12.103 Variable E3_Negotiating: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268 Variable E3_Impacting_Trust: Correct: 4.0 Incorrect: 12.0 Accuracy: 25.000% St. Dev.: 10.825 **Overall accuracy: 61.719%** **(SD = 12.152)**

Case L: Client E3 Comprehending Focus	Case L: Client E3 Finding Direction Focus	Case L: Client E3 Creating Value Focus
Variable E3_Confronting: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268	Variable E3_Comprehending: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402	Variable E3_Comprehending: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402
Variable E3_Creating_Value: Correct: 3.0 Incorrect: 13.0 Accuracy: 18.750% St. Dev.: 9.758	Variable E3_Confronting: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103	Variable E3_Confronting: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268
Variable E3_Finding_Connections: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402	Variable E3_Creating_Value: Correct: 7.0 Incorrect: 9.0 Accuracy: 43.750% St. Dev.: 12.402	Variable E3_Finding_Connections: Correct: 13.0 Incorrect: 3.0 Accuracy: 81.250% St. Dev.: 9.758
Variable E3_Finding_Direction: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103	Variable E3_Finding_Connections: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103	Variable E3_Finding_Direction: Correct: 12.0 Incorrect: 4.0 Accuracy: 75.000% St. Dev.: 10.825
Variable E3_Impacting_Trust: Correct: 1.0 Incorrect: 15.0 Accuracy: 6.250% St. Dev.: 6.052	Variable E3_Impacting_Trust: Correct: 2.0 Incorrect: 14.0 Accuracy: 12.500% St. Dev.: 8.268	Variable E3_Impacting_Trust: Correct: 5.0 Incorrect: 11.0 Accuracy: 31.250% St. Dev.: 11.588
Variable E3_Influencing: Correct: 6.0 Incorrect: 10.0 Accuracy: 37.500% St. Dev.: 12.103	Variable E3_Influencing: Correct: 7.0 Incorrect: 9.0 Accuracy: 43.750% St. Dev.: 12.402	Variable E3_Influencing: Correct: 6.0 Incorrect: 10.0 Accuracy: 37.500% St. Dev.: 12.103
Variable E3_Negotiating: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268	Variable E3_Negotiating: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588	Variable E3_Negotiating: Correct: 15.0 Incorrect: 1.0 Accuracy: 93.750% St. Dev.: 6.052
Variable E3_Comprehending: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402	Variable E3_Finding_Direction: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402	Variable E3_Creating_Value: Correct: 4.0 Incorrect: 12.0 Accuracy: 25.000% St. Dev.: 10.825
Overall accuracy: 51.562% (SD = 12.494)	Overall accuracy: 50.781% (SD = 12.498)	Overall accuracy: 60.937% (SD = 12.197)

Case L: Client E3 Confronting Focus	Case L: Client E3 Negotiating Focus	**Case L: Client E3 Finding Connections Focus**
Variable E3_Comprehending: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500	Variable E3_Comprehending: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500	Variable E3_Comprehending: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103
Variable E3_Creating_Value: Correct: 3.0 Incorrect: 13.0 Accuracy: 18.750% St. Dev.: 9.758	Variable E3_Confronting: Correct: 14.0 Incorrect: 2.0 Accuracy: 87.500% St. Dev.: 8.268	Variable E3_Confronting: Correct: 13.0 Incorrect: 3.0 Accuracy: 81.250% St. Dev.: 9.758
Variable E3_Finding_Connections: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402	Variable E3_Creating_Value: Correct: 3.0 Incorrect: 13.0 Accuracy: 18.750% St. Dev.: 9.758	Variable E3_Creating_Value: Correct: 9.0 Incorrect: 7.0 Accuracy: 56.250% St. Dev.: 12.402
Variable E3_Finding_Direction: Correct: 8.0 Incorrect: 8.0 Accuracy: 50.000% St. Dev.: 12.500	Variable E3_Finding_Connections: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588	Variable E3_Finding_Direction: Correct: 12.0 Incorrect: 4.0 Accuracy: 75.000% St. Dev.: 10.825
Variable E3_Impacting_Trust: Correct: 4.0 Incorrect: 12.0 Accuracy: 25.000% St. Dev.: 10.825	Variable E3_Finding_Direction: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103	Variable E3_Impacting_Trust: Correct: 3.0 Incorrect: 13.0 Accuracy: 18.750% St. Dev.: 9.758
Variable E3_Influencing: Correct: 5.0 Incorrect: 11.0 Accuracy: 31.250% St. Dev.: 11.588	Variable E3_Impacting_Trust: Correct: 2.0 Incorrect: 14.0 Accuracy: 12.500% St. Dev.: 8.268	Variable E3_Influencing: Correct: 7.0 Incorrect: 9.0 Accuracy: 43.750% St. Dev.: 12.402
Variable E3_Negotiating: Correct: 7.0 Incorrect: 9.0 Accuracy: 43.750% St. Dev.: 12.402	Variable E3_Influencing: Correct: 6.0 Incorrect: 10.0 Accuracy: 37.500% St. Dev.: 12.103	Variable E3_Negotiating: Correct: 13.0 Incorrect: 3.0 Accuracy: 81.250% St. Dev.: 9.758
Variable E3_Confronting: Correct: 10.0 Incorrect: 6.0 Accuracy: 62.500% St. Dev.: 12.103	Variable E3_Negotiating: Correct: 11.0 Incorrect: 5.0 Accuracy: 68.750% St. Dev.: 11.588	Variable E3_Finding_Connections: Correct: 12.0 Incorrect: 4.0 Accuracy: 75.000% St. Dev.: 10.825
Overall accuracy: 42.187% (SD = 12.346)	Overall accuracy: 50.781% (SD = 12.498)	**Overall accuracy: 61.719% (SD = 12.152)**

Case L: Client E4 Influencing Focus	Case L: Client E4 Impacting Trust Focus	**Case L: Client E4 Comprehending Focus**
Variable E4_Comprehending: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399	Variable E4_Comprehending: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E4_Confronting: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712
Variable E4_Confronting: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712	Variable E4_Confronting: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785	Variable E4_Creating_Value: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712
Variable E4_Creating_Value: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399	Variable E4_Creating_Value: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E4_Finding_Connections: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557
Variable E4_Finding_Connections: Correct: 13.0 Incorrect: 5.0 Accuracy: 72.222% St. Dev.: 10.557	Variable E4_Finding_Connections: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490	Variable E4_Finding_Direction: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784
Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E4_Finding_Direction: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712	Variable E4_Impacting_Trust: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712
Variable E4_Impacting_Trust: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399	Variable E4_Influencing: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E4_Influencing: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712
Variable E4_Negotiating: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E4_Negotiating: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490	Variable E4_Negotiating: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490
Variable E4_Influencing: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E4_Impacting_Trust: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E4_Comprehending: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557
Overall accuracy: 26.389% (SD = 10.388)	Overall accuracy: 40.278% (SD = 11.560)	**Overall accuracy: 47.222% (SD = 11.767)**

Case L: Client E4 Finding Direction Focus	Case L: Client E4 Creating Value Focus	Case L: Client E4 Confronting Focus
Variable E4_Comprehending: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712	Variable E4_Comprehending: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E4_Comprehending: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111
Variable E4_Confronting: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785	Variable E4_Confronting: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712	Variable E4_Creating_Value: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111
Variable E4_Creating_Value: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557	Variable E4_Finding_Connections: Correct: 14.0 Incorrect: 4.0 Accuracy: 77.778% St. Dev.: 9.799	Variable E4_Finding_Connections: Correct: 12.0 Incorrect: 6.0 Accuracy: 66.667% St. Dev.: 11.111
Variable E4_Finding_Connections: Correct: 15.0 Incorrect: 3.0 Accuracy: 83.333% St. Dev.: 8.784	Variable E4_Finding_Direction: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E4_Finding_Direction: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799
Variable E4_Impacting_Trust: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799	Variable E4_Impacting_Trust: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E4_Impacting_Trust: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799
Variable E4_Influencing: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784	Variable E4_Influencing: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111	Variable E4_Influencing: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784
Variable E4_Negotiating: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490	Variable E4_Negotiating: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785	Variable E4_Negotiating: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490
Variable E4_Finding_Direction: Correct: 2.0 Incorrect: 16.0 Accuracy: 11.111% St. Dev.: 7.407	Variable E4_Creating_Value: Correct: 1.0 Incorrect: 17.0 Accuracy: 5.556% St. Dev.: 5.399	Variable E4_Confronting: Correct: 7.0 Incorrect: 11.0 Accuracy: 38.889% St. Dev.: 11.490
Overall accuracy: 39.583% (SD = 11.527)	Overall accuracy: 40.278% (SD = 11.560)	Overall accuracy: 34.028% (SD = 11.168)

Case L: Client E4 Negotiating Focus	Case L: Client E4 Finding Connections Focus
Variable E4_Comprehending: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712 Variable E4_Confronting: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712 Variable E4_Creating_Value: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557 Variable E4_Finding_Connections: Correct: 12.0 Incorrect: 6.0 Accuracy: 66.667% St. Dev.: 11.111 Variable E4_Finding_Direction: Correct: 8.0 Incorrect: 10.0 Accuracy: 44.444% St. Dev.: 11.712 Variable E4_Impacting_Trust: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111 Variable E4_Influencing: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799 Variable E4_Negotiating: Correct: 11.0 Incorrect: 7.0 Accuracy: 61.111% St. Dev.: 11.490 Overall accuracy: 44.444% (SD = 11.712)	Variable E4_Comprehending: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111 Variable E4_Confronting: Correct: 3.0 Incorrect: 15.0 Accuracy: 16.667% St. Dev.: 8.784 Variable E4_Creating_Value: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557 Variable E4_Finding_Direction: Correct: 4.0 Incorrect: 14.0 Accuracy: 22.222% St. Dev.: 9.799 Variable E4_Impacting_Trust: Correct: 6.0 Incorrect: 12.0 Accuracy: 33.333% St. Dev.: 11.111 Variable E4_Influencing: Correct: 5.0 Incorrect: 13.0 Accuracy: 27.778% St. Dev.: 10.557 Variable E4_Negotiating: Correct: 10.0 Incorrect: 8.0 Accuracy: 55.556% St. Dev.: 11.712 Variable E4_Finding_Connections: Correct: 9.0 Incorrect: 9.0 Accuracy: 50.000% St. Dev.: 11.785 Overall accuracy: 33.333% (SD = 11.111)

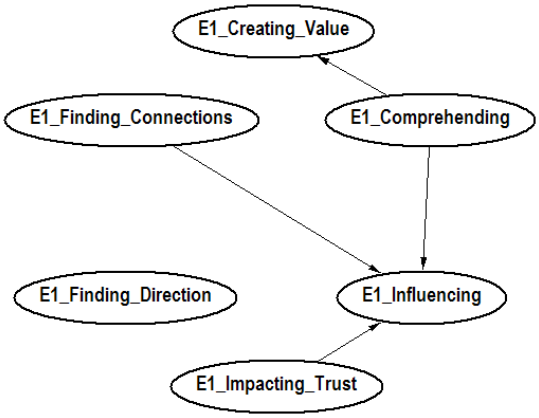
Highest relative predictive accuracy of all Bayesian Belief Learning Networks in each epoch (Case L, Client)

Case L (Client only)

Epoch E1

ITR, Acquisition Strategy

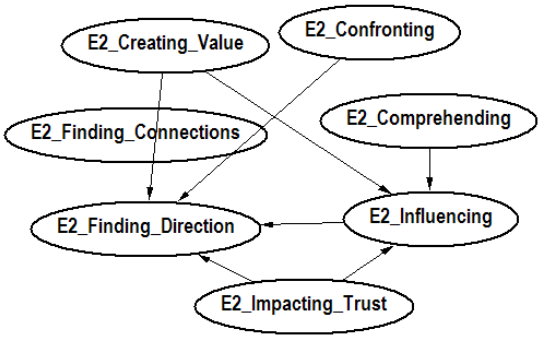
Complexity Factor = 0.16



Epoch E2

ITR Debrief, Industry Brief, Draft RFT

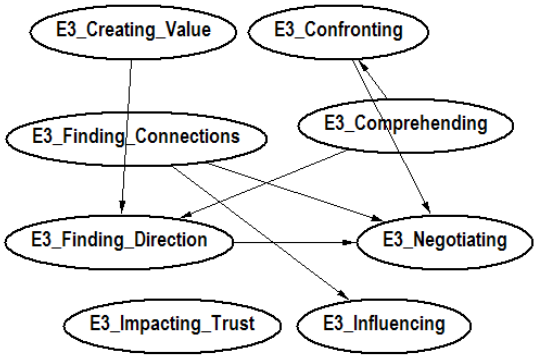
Complexity Factor = 0.2



Epoch E3

RFT, Tender Evaluation, VfM, Options Evaluation

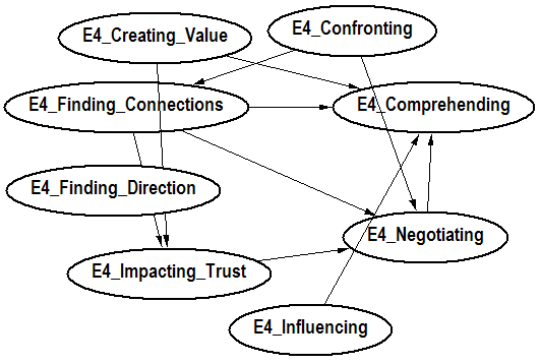
Complexity Factor = 0.38



Epoch E4

Committees, Negotiations

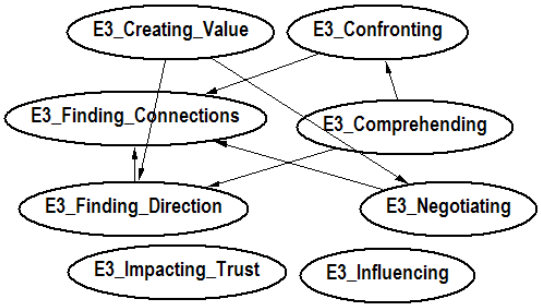
Complexity Factor = 0.53



Epoch E3

RFT, Tender Evaluation, VfM, Options Evaluation

Complexity Factor = 0.38

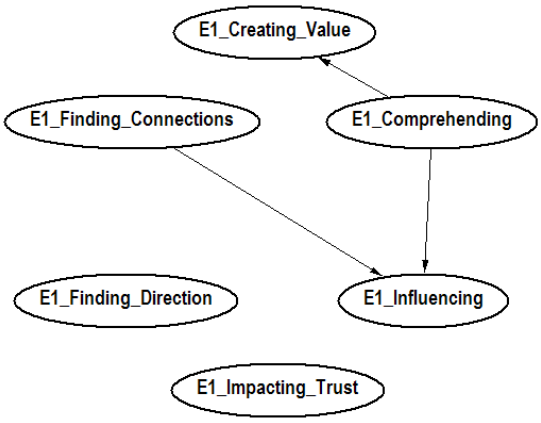


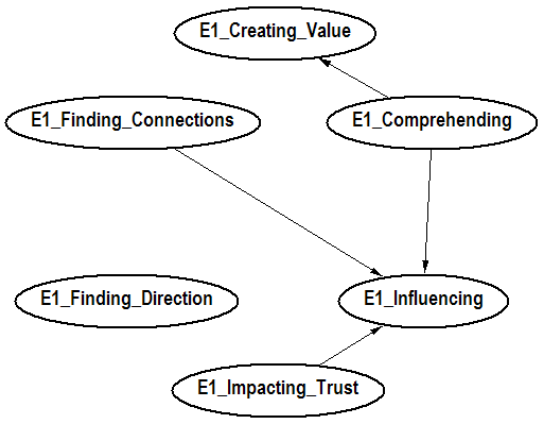
Bayesian Belief Learning Networks for each Tendering Concept (Case L, Client)

Complexity (Interdependence) of Tendering Purposes – Case L (Client)

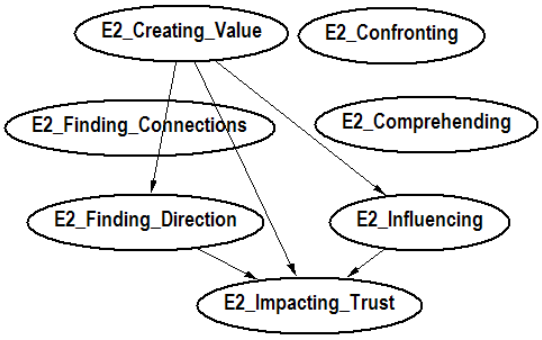
Impacting Trust	Finding Direction

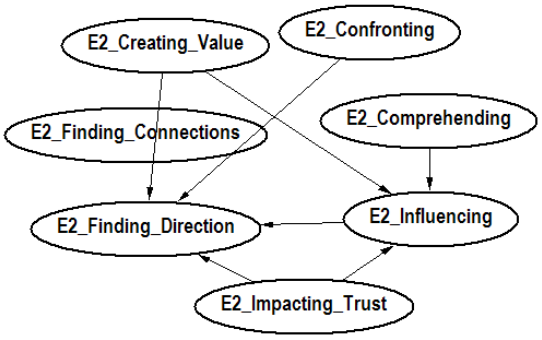
Epoch 1: ITR, Acquisition Strategy



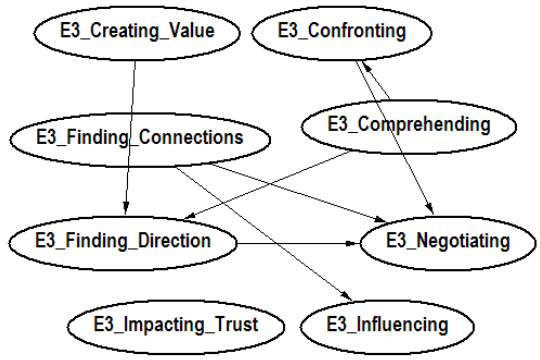


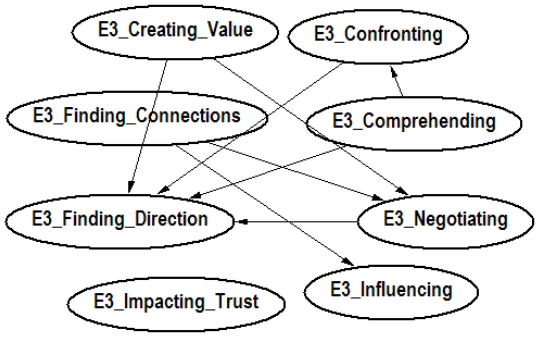
Epoch 2: ITR Debrief, Industry Brief, Draft RFT



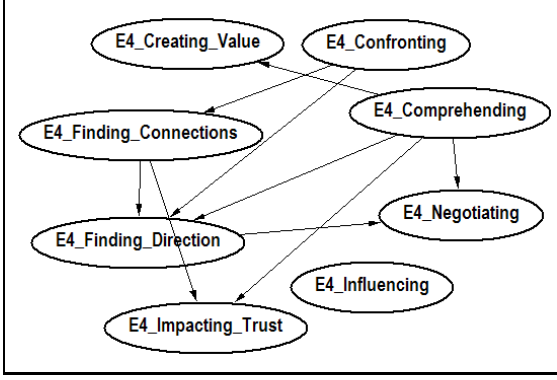


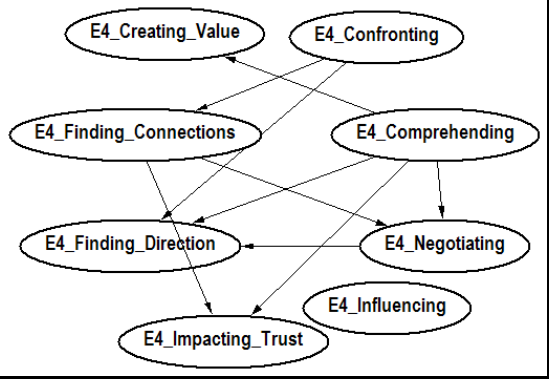
Epoch 3: RFT, Tender Evaluation, VfM, Options Evaluation





Epoch 4: Negotiations

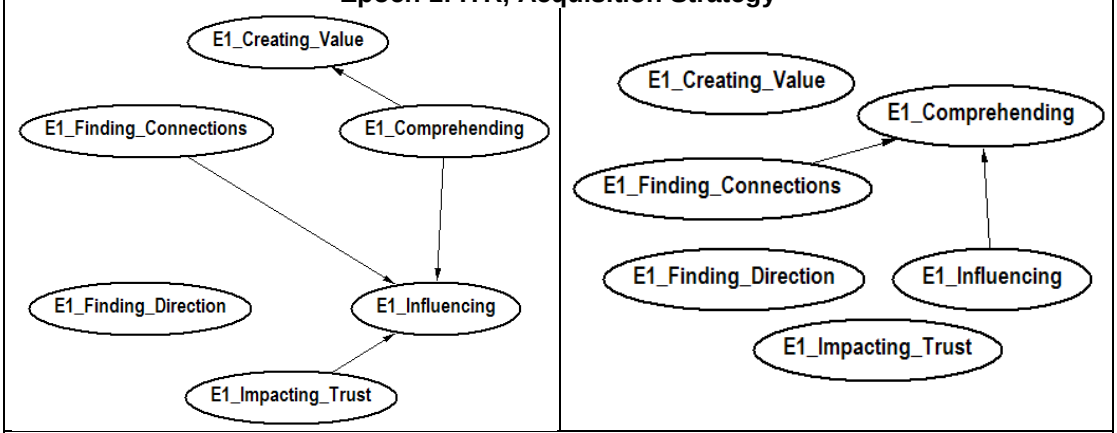




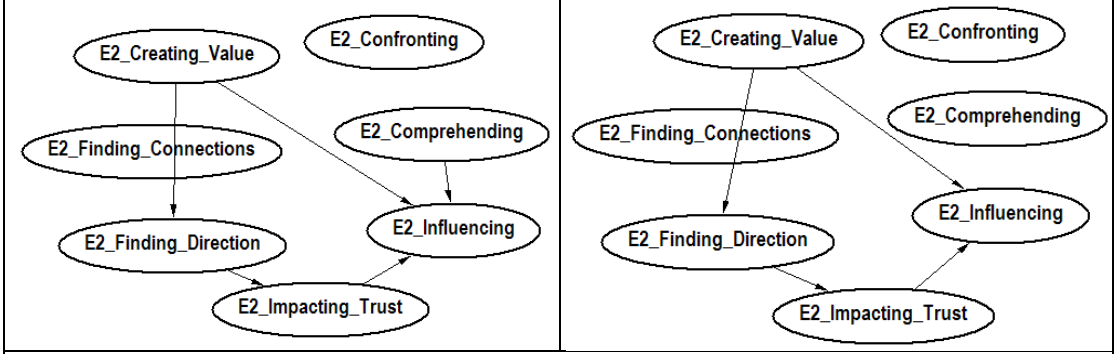
Complexity (Interdependence) of Tendering Purposes – Case L

Influencing	Comprehending

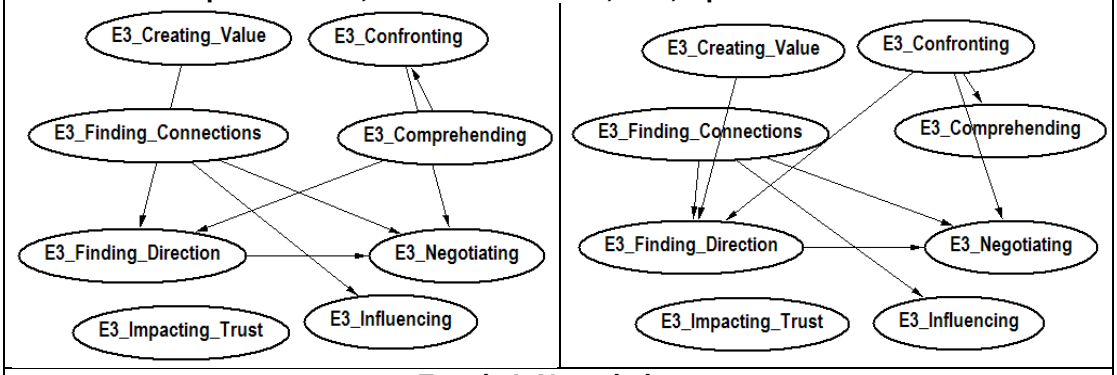
Epoch 1: ITR, Acquisition Strategy



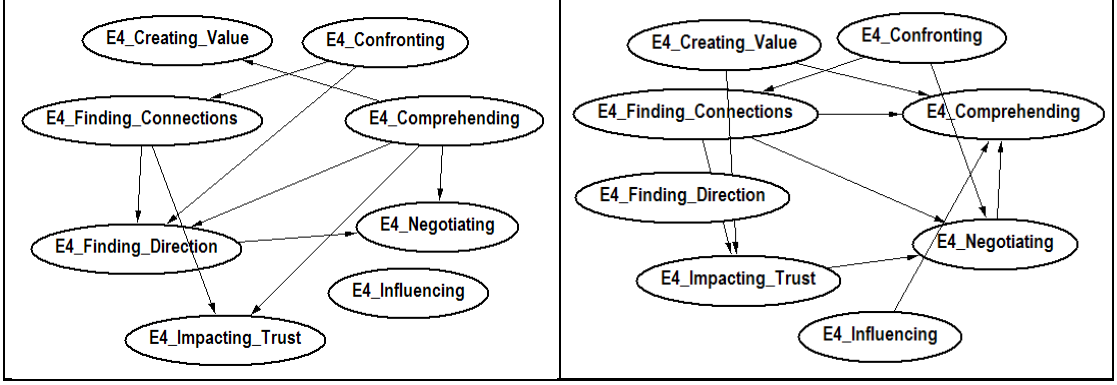
Epochs 2: ITR Debrief, Industry Brief, Draft RFT



Epoch 3: RFT, Tender Evaluation, VfM, Options Evaluation



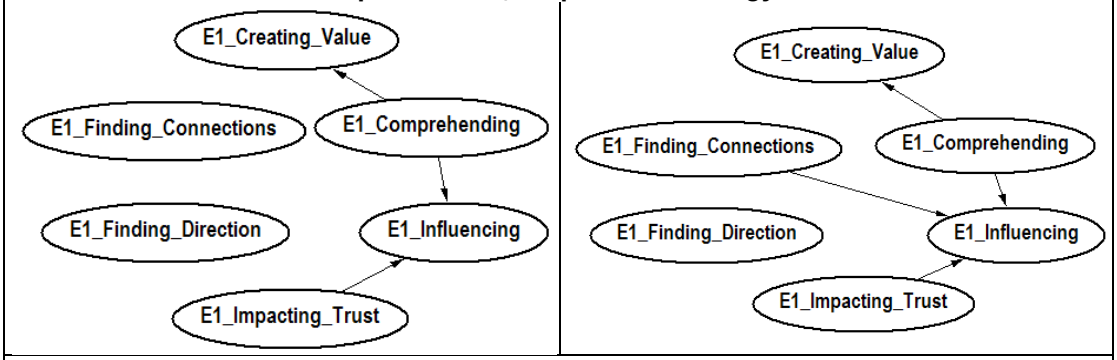
Epoch 4: Negotiations



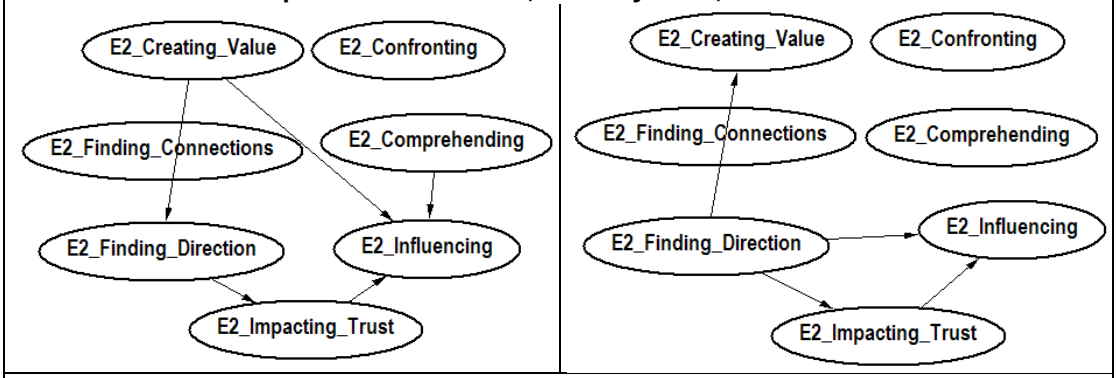
Complexity (Interdependence) of Tendering Purposes – Case L

Finding Connections	Creating Value

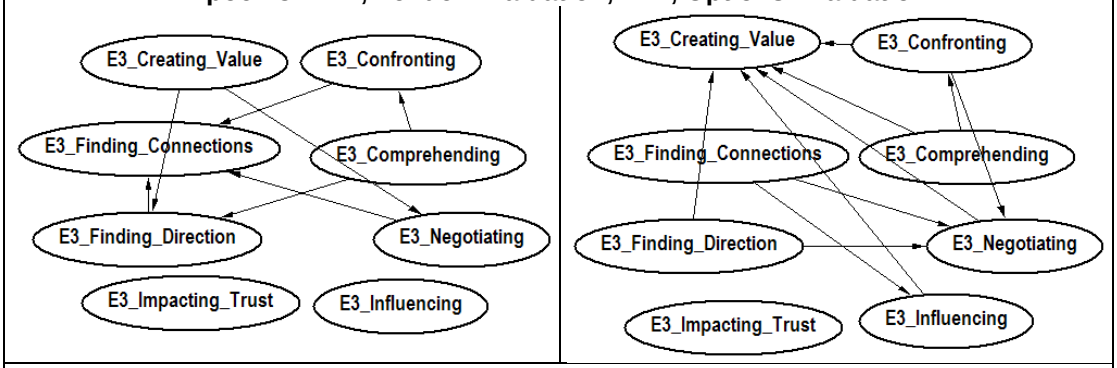
Epoch 1: ITR, Acquisition Strategy



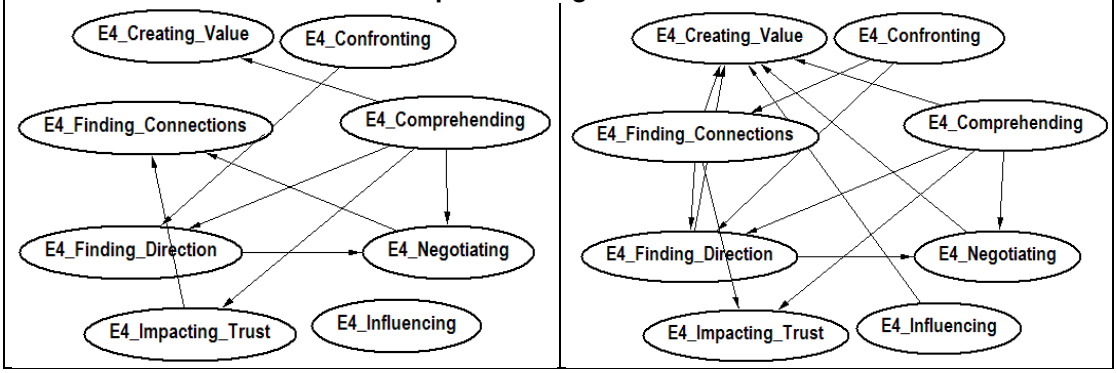
Epoch 2: ITR Debrief, Industry Brief, Draft RFT

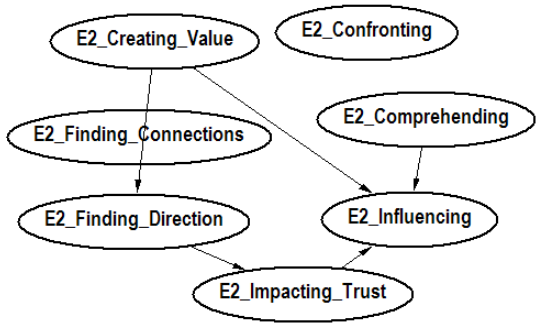
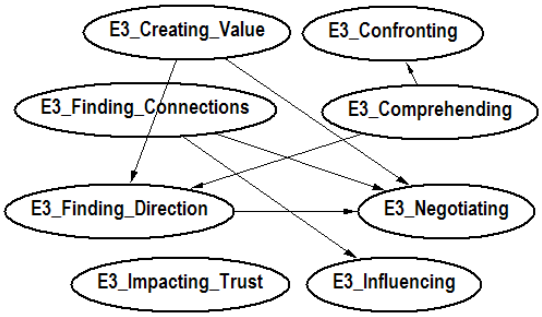
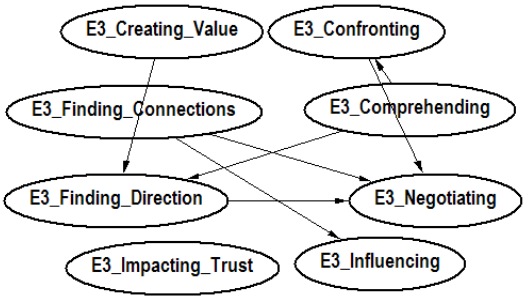
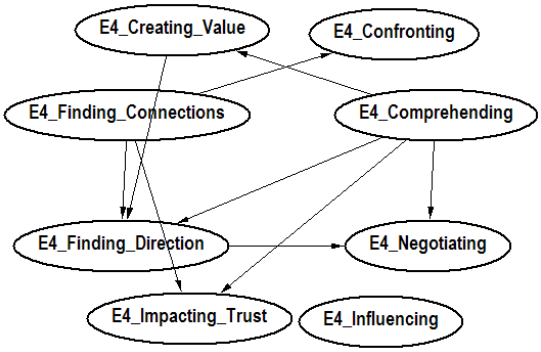
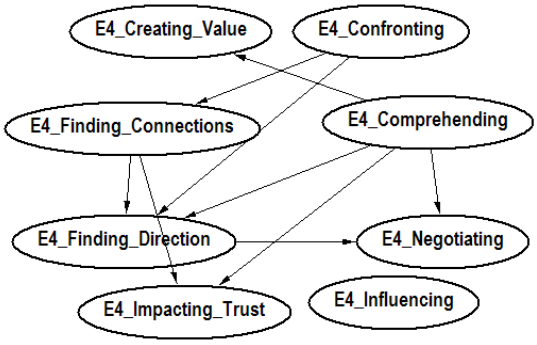


Epoch 3: RFT, Tender Evaluation, VfM, Options Evaluation



Epoch 4: Negotiations



Complexity (Interdependence) of Tendering Purposes – Case L	
Confronting	**Negotiating**
Epoch 1: ITR, Acquisition Strategy	
Epoch 2: ITR Debrief, Industry Brief, Draft RFT	
	
Epoch 3: RFT, Tender Evaluation, VfM, Options Evaluation	
	
Epoch 4: Negotiations	
	

ANNEXURE F. ALGORITHM FOR TRANSLATING SMIS TO SENSE-MAKING ORGANISATIONAL DOMAINS

		Fact	Fact	Pattern	No Facts & No Patterns		
		Could the SMI be Predicted?	Could the SMI be Predicted?	Would you have to wait for an Emergent Behaviour?	Turbulance		
		Would *anyone* in the controlled context be able to identify the SMI and quickly advise the singular cause? No expertise is required. Operating procedures provide sufficient guidance. (Y/N)	Within the controlled context and with sufficient time and resources, could an *expert* predict the behaviour and distinguish one or more current causes? (Y/N)	Is this SMI a pattern of behaviour that was an *outcome* of the controlled context and in the light of history, the behaviour could be traced back to a cause? (Y/N)	Does this SMI represent turbulent behaviour triggered by an agent outside of the controlled context? (Y/N)	**Sense-Making Domain**	**Order/Unorder**
		Y	N	N	N	Simple (S)	Order (O)
		N	Y	N	N	Complicated (C)	Order (O)
		N	N	Y	N	Complex (X)	Unorder (U)
		N	N	N	Y	Chaotic (A)	Unorder (U)
ID	**Sense-Making Item**					**DOMAINS**	
1	01. LHD Client Beauty Contest	Y	N	N	N	Simple (S)	O
2	02. LHD Client Smart Thinking	N	Y	N	N	Complicated (C)	O
3	03. LHD Client Gold Miner	N	Y	N	N	Complicated (C)	O
4	04. LHD Client Cargo Cult	N	N	Y	N	Complex (X)	U
5	05. LHD Client Cock Fight	N	Y	N	N	Complicated (C)	O
6	06. LHD Client Fool's Gold	Y	N	N	N	Simple (S)	O
7	07. LHD Client Masquerade	N	N	Y	N	Complex (X)	U
8	08. LHD Client Vanity Fair	N	Y	N	N	Complicated (C)	O
9	09. LHD Client Winner's Curse	N	N	Y	N	Complex (X)	U
10	10. LHD Client Jungle Jitters	N	N	Y	N	Complex (X)	U
11	11. LHD Client Kashmir	N	N	Y	N	Complex (X)	U
12	12. LHD Client Decree Discordare	N	N	Y	N	Complex (X)	U
13	13. LHD Client Gone to Grandma	N	Y	N	N	Complicated (C)	O
14	14. LHD Client Transponders	N	Y	N	N	Complicated (C)	O
15	15. LHD Client Finding Nemo	N	N	Y	N	Complex (X)	U
16	16. LHD Client Star-Gazing 'Iron Colonel'	Y	N	N	N	Simple (S)	O
17	17. LHD Client The Scorpion	N	N	Y	N	Complex (X)	U
18	18. LHD Client Selective Hearing	N	N	Y	N	Complex (X)	U
19	19. LHD Client Eats Roots and Leaves	N	Y	N	N	Complicated (C)	O
20	20. LHD Client Squawking Crow	N	Y	N	N	Complicated (C)	O
21	21. LHD Client Once Bitten Twice Shy	N	N	Y	N	Complex (X)	U
22	22. LHD Client Unrequited Love	Y	N	N	N	Simple (S)	O
23	23. LHD Client Pin the Tail on the Donkey	N	N	Y	N	Complex (X)	U
24	24. LHD Client Auntie Mame	N	Y	N	N	Complicated (C)	O
25	25. LHD Client Ring-a-Ring-a-Rusey	N	N	Y	N	Complex (X)	U
26	26. LHD Client Speed Dating	Y	N	N	N	Simple (S)	O
27	27. LHD Client Haughty Opportunist	N	Y	N	N	Complicated (C)	O
28	28. LHD Client Menage a Trois	N	N	Y	N	Complex (X)	U
29	29. LHD Client Turf Wars	N	N	Y	N	Complex (X)	U
30	30. LHD Client Machiavelli's Ministrations	N	N	Y	N	Complex (X)	U
31	31. LHD Client Popcorn Machine	N	Y	N	N	Complicated (C)	O
32	32. LHD Client Surprise	N	N	Y	N	Complex (X)	U
33	33. LHD Client Agent 86	N	N	Y	N	Complex (X)	U
34	34. LHD Client Yes Minister	N	Y	N	N	Complicated (C)	O
35	35. LHD Client Call in the Big Guns	N	Y	N	N	Complicated (C)	O
36	36. LHD Client Spoil Sport	N	N	Y	N	Complex (X)	U
37	37. LHD Client Gut Ache	N	N	Y	N	Complex (X)	U
38	38. LHD Client Dr Salk	N	N	Y	N	Complex (X)	U
39	39. LHD Client Snake	N	Y	N	N	Complicated (C)	O
40	40. LHD Client Disneyland	N	Y	N	N	Complicated (C)	O
41	41. LHD Client Pennies from Heaven	N	Y	N	N	Complicated (C)	O
42	42. LHD Client Emperor's Clothes	N	N	Y	N	Complex (X)	U
43	43. LHD Client Feed Forward	N	N	Y	N	Complex (X)	U
44	44. LHD Client Lemons for Sale	N	Y	N	N	Complicated (C)	O
45	45. LHD Client Shotgun Marriage	N	Y	N	N	Complicated (C)	O
46	46. LHD Client Dirty Tricks	N	N	Y	N	Complex (X)	U
47	47. LHD Client I Had a Dream	N	N	Y	N	Complex (X)	U
48	48. LHD Client Wedging	N	Y	N	N	Complicated (C)	O
49	49. LHD Client White Ants	N	N	Y	N	Complex (X)	U
50	50. LHD Client Pissing in the Wind	N	Y	N	N	Complicated (C)	O
51	51. LHD Client P Platers	N	N	Y	N	Complex (X)	U
52	52. LHD Client Who Rules the Waves?	N	Y	N	N	Complicated (C)	O
53	53. LHD Client Spinning Bow Tie	N	N	Y	N	Complex (X)	U
54	54. LHD Client Mother's Choice	N	Y	N	N	Complicated (C)	O
55	55. LHD Client Keeping up Appearances	N	N	Y	N	Complex (X)	U
56	56. LHD Client Free Lunch	N	Y	N	N	Complicated (C)	O
57	57. LHD Client Included Out	N	Y	N	N	Complicated (C)	O
58	58. LHD Client Refilling the Honey Pot	N	Y	N	N	Complicated (C)	O
59	59. LHD Client Seeds of Doubt	N	Y	N	N	Complicated (C)	O
60	60. LHD Client A Moment of Truth	N	Y	N	N	Complicated (C)	O
61	61. LHD Client Stalking Horse	N	N	Y	N	Complex (X)	U
62	62. LHD Client Real Power	N	N	Y	N	Complex (X)	U
63	63. LHD Client To Play the King	N	N	Y	N	Complex (X)	U
64	64. LHD Client Sweet Seduction	N	Y	N	N	Complicated (C)	O
65	65. LHD Client Who's Who in the Zoo	N	Y	N	N	Complicated (C)	O

ANNEXURE G. TYPOLOGY OF SENSE-MAKING ITEMS AND TENDERING PURPOSES

COMPREHENDING

04. Cargo Cult: A party's behaviours result from a history of receiving guaranteed non-competitive work.

09. Winner's Curse: A party realises that it will suffer because it offered a fixed-price to deliver an ill-defined or ill-understood requirement.

15. Finding Nemo: A party knows that there is a game at play but has difficulty defining its parameters and structure.

18. Selective Hearing: A party chooses to be 'led' to a fundamentally different interpretation of the game at play.

22. Unrequited Love: Past superior performance appears to be of academic value only.

23. Pin the Tail on the Donkey: Both parties have a fundamentally different perception of the game at play.

32. Surprise!: A significant unanticipated event occurred.

43. Feed Forward: Political decisions which framed an earlier project are having foreseeable impacts on the current project.

55. Keeping up Appearances: The tendering process progresses conscientiously while a latent political decision has already been made.

63. To Play the King: The risks are so high that the decisions can only be carried by politicians.

CONFRONTING

07. Masquerade: A party displays a 'crafted' pretence for a period of time (particularly in the presence of competitors).

40. Disneyland: The entered environment appears to be carefully orchestrated resulting in a perceived power imbalance.

52. Who Rules the Waves?: Regardless of the client's specification, it must be done our way.

62. Real Power: The political office is called upon to reduce artificial complexity generated by the bureaucracy.

CREATING VALUE

02. Smart Thinking: Attention is focused on a party's business-model (and potential risks).

03. Gold Miner: A party uses this project to advance another project's objectives.

05. Cock Fight: Parties are adversarial and seek to maximise Return-on-Investment or Value-for-Money.

11. Kashmir: A party behaves apprehensively as it perceives that other involved contractors may try to appropriate its current &/or future contract share.

44. Lemons for Sale: A contractor closely monitors the client for any potential contract breach which could sustain a transfer of risk.

48. Wedging: A small negotiation win on one issue can be used to leverage positions on related issues.

61. Stalking Horse: Tenderers believe they are being used as a political 'stalking horse'.

FINDING CONNECTIONS

26. Speed Dating (in a shrinking sample): Potential participants must mate before entering the game.

65. Who's Who in the Zoo: Putting structure to the political issues and players.

FINDING DIRECTION

24. Auntie Mame: Obtaining high-value insights from a non-contracting party.

30. Machiavelli's Ministrations: A powerful stakeholder changes the game.

35. Call in the Big Guns: A party seeks Ministerial dialog.

41. Pennies from Heaven: Unsolicited quality information is received from or about the other side or competitor.

47. I Had a Dream: Receiving impeccable non-attributable political direction.

59. Seeds of Doubt: A low-level bureaucrat or engineer has occasion to make a comment of potential strategic significance to a senior executive.

60. A Moment of Truth: Impeccable official information of strategic importance.

64. Sweet Seduction: Probing for potential intelligence sources.

IMPACTING TRUST

01. Beauty Contest: A party's behaviour concentrates on its presentation values.

10. Jungle Jitters: A party is keen for the work but apprehensive about untested relationships.

12. Decree Discordare: A party believes that another party plays the dual (ambiguous) roles of a team-player while retaining final decision-rights.

14. Transponders: Individuals seeking attention by hovering around the project or communicating their importance.

19. Eats Roots and Leaves: A transient bureaucrat institutes change and avoids on-going accountability by leaving.

21. Once Bitten, Twice Shy: Previous experiences have led to ambivalent or negative feelings.

25. Ring-a-Ring-a-Rusey: A party resents being gamed.

28. Ménage à Trois: A client and subcontractor are negotiating.

31. Popcorn Machine: A negotiator has an unstable authority base.

37. Gut Ache: An aura of doubt pervades the process even though everything appears to be technically correct.

50. Pissing in the Wind: One party's negotiator does not have his principal's approved baseline positions.

51. P Platers: A negotiation team is comprised of rookies.

53. Spinning Bow Tie: I don't trust the middle-man.

57. Included Out: Some potential suppliers receive disproportionate welcoming attention.

58. Refilling the Honey Pot: Enticed participants need constant maintenance.

INFLUENCING

06. Fool's Gold: A party is willing to offer anything that is requested, regardless of the commercial implications.

08. Vanity Fair: A party feels pressure to participate because of the project size and/or its market stature.

17. The Scorpion: The project is implanted with a toxic human agent (common foe) whose presence unites opposing parties or drives them apart.

29. Turf Wars: Bureaucrats compete for involvement.

34. Yes Minister: A superficial game is used to draw attention away from the main game.

42. Emperor's Clothes: A misperception is institutionalised.

45. Shotgun Marriage: Political pressure to consummate a contract or agree to terms.

46. Dirty Tricks: Misinformation is supplied to the highest political level.

49. White Ants: Team members independently seek change from the political office.

54. Mother's Choice: Client suggests the contractor abandons a proposed subcontractor.

56. Free Lunch: A buyer uses incentives to urge a seller to participate.

MEDIATING

13. Gone to Grandma: A subordinate party (subcontractor) appeals to the contractor's client to mediate relations with the contractor.

NEGOTIATING

27. Haughty Opportunist: A temporal situation fortuitously affords one party enhanced power.

33. Agent 86: A surreal personality is active in the project.

39. Snake: Cajoling one party to deliver more than the agreed scope-of-work (or resisting such attempts).

OBSTRUCTING

16. Star-Gazing 'Iron Colonel': A non-aligned bureaucrat focuses on procedural detail to avoid contentious issues which might degrade promotion prospects.

20. Squawking Crow: A transient bureaucrat seeks to discredit the process.

36. Spoil Sport: A losing party or contractor seeks to de-stabilise the nascent marriage.

38. Dr Salk: A game is initiated to thwart the emergence of another game.

ANNEXURE H. MANAGEMENT AUDIT OF FINDINGS

Dr Stephen Gumley – CEO – Defence Materiel Organisation

The research covered the period up to the calling of the Australian General Election on 14 October 2007 because government activity (of which defence procurement decisions are a part) ceases during the caretaker period.

Since then, both of the studied projects have evolved and the impacts and consequences of the various behaviours have become clear. In each case, very significant complexity issues have emerged that should have been mitigated by the tenderers before the conclusion of negotiations with DMO and their respective supply chains. It's clear that too much scarce management time in the Companies in mid/late 2007 was spent on lobbying (what the thesis author calls "influencing"), and not enough of the limited management resources of the companies were spent on managing the buried programmatic "complexity" (technical, relationships, contractual, supply chain, product performance). This is costly. One can predict that a new round of influencing behaviours will emerge if these problems aren't addressed. The thesis leads one to question the amount of mutual shaping that the circular complexity-influencing-complexity cycle creates.

The information acquisition themes on sharing/trusted versus seeking/respected is interesting and resonates with what we observe. Although it is based on just two large projects representing less than 5% of DMO's $100,000 million business under management, I think it is a correct way of analysing based on observations of behaviours on many hundreds of projects and fleet contracts. I have noticed a strong positive correlation between the business success of an industry CEO and the quality of trust he has with the senior DMO leadership which leads to shared information. The obverse also seems true -- untrusted CEOs tend to leave their companies within about a year of the events that led to mistrust occurring. There is a feedback cycle between levels of trust and the ways that lobbying/influencing are attempted.

The concept of "nested" information-seeking behavioural constructs as part of systems understanding is an interesting way of describing the environment in which such Defence projects exist, capable I think of extrapolation to most complex projects.

I agree that future research on the links between the probity environment and the various information seeking constructs developed here would be useful. In hindsight, I reached a conclusion that the author's project L was characterised by perhaps an excessive probity framework that clearly from the author's approach showed up in the

perceptions and behaviours of the various parties. A general question emerges: ....how much does the particular construct of the probity environment cause information gaps that in turn drive the seeking of information from third parties and influencing?

DMO's job is to be the steady hand of reality during these tender/contract processes. DMO must deliver to stakeholders in Defence and Government verifiable facts and data, and to monitor and cut through the clutter of partial information, and at times, misinformation delivered by various parties. Our observations are that it takes both a strong intellect and clear programmatic leadership skills to successfully exploit such commercial opportunities.

From the thesis work, lobbying seems to deliver psychological comfort to the Contractors, though I stand by my early comments that I have yet to see an example where it has caused a Minister to direct a particular outcome. My overall observation is that the most value-adding part of influencing is actually the delivery of hard and trusted information (i.e. not "spin") to stakeholders, which is best done by subject-matter experts and CEOs.

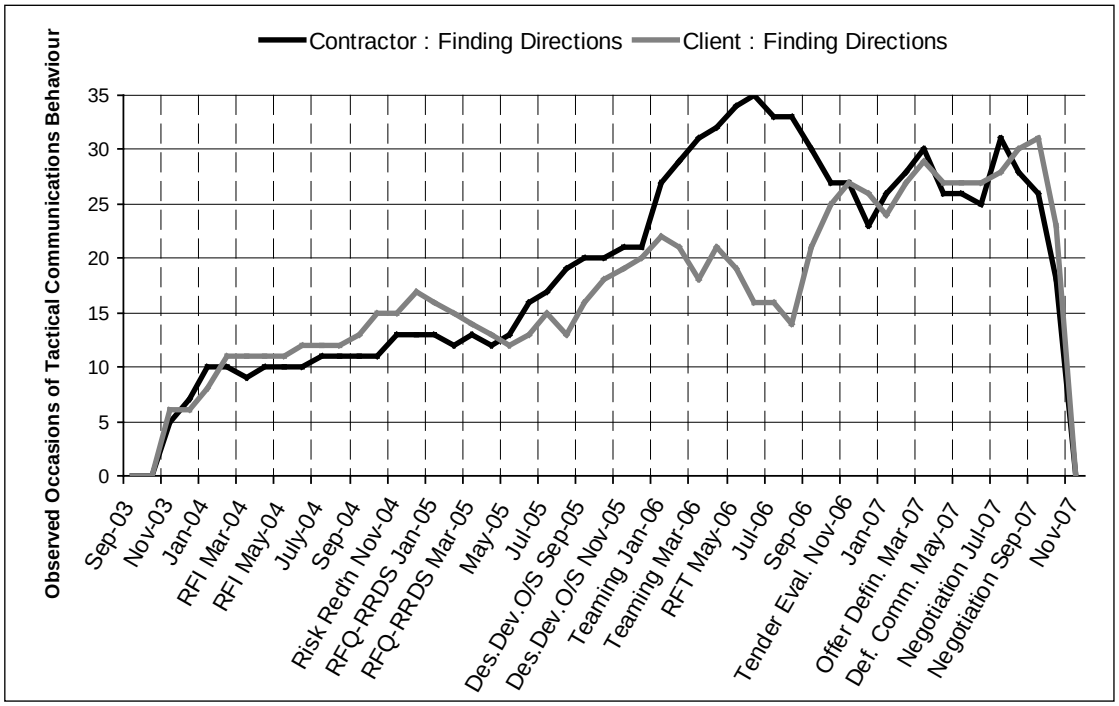
Stephen Gumley
CEO-DMO
August 2009

Mr Kim Gillis – Deputy CEO – Defence Materiel Organisation

Overall Impressions

If you had said that this is a complex project without identifying it and I wasn't involved with it, I could read your graphs and I could interpret for you exactly what the behaviours were.

Commentary on "Finding Directions"



Focus on the significant divergence during the RFT phase as shown in your graph.

That's the time when the contractors wanted significantly more direction but we, the client went into a probity-induced hold. That is, we deliberately stopped offering them direction because we have to be fair to both competing contractors. We are constrained to answering specific formally presented questions. The questions and our replies are shared with all parties. This is a probity requirement to ensure that both tenderers have exactly the same information.

Prior to the RFT, it's an open wall. During the RFT, you put the wall up and it is only when you actually get to the end of the Tender Evaluation process, that is, when you get into Offer Definition, then the communications realign again. The data presents this perfectly in your graph.

The contractors peak during the RFT because they are trying everything they possibly can to gather more information. They will make representations to the Minister for Defence and other political agencies etc., but that is the time when we can't give them strategic direction, we can only answer specific questions.

The objective for us as the client is to enlarge the communications prior to the gap in order to reduce the size of the gap. There will always be a gap, but it is in both of our interest to minimise that.

The cost is multi-million dollars spent during the gap period. It costs about $20 million to do a complete tender like this. The other withdrawn tenderers would have spent about $4-5 million each. Therefore, about $30M is sitting in the system and that has to be recouped by the contractors. Because Defence is a monopsonist purchaser, we end up paying for it later on.

Just after tender evaluation, the contractor stopped giving us information because this is what they are thinking. "I've got a deal, I've probably won (having been advised that they are the preferred contractor) and the client is asking for more information. If I provide more information now, it will reduce the value of my bid." "If I wait for the contract to be signed and then provide more information, there is a good chance that I can make more money through scope changes."

We had to ensure that the contractor realised that it was not in his interest to withhold information.

If I was to describe good practice behaviour, then this graph represents all the things I would expect to see in a complex procurement.

The reason why the contractor was still "finding direction" right to the end, is because they were changing schedule and cost all the way up until the contract signature. They were slipping by nearly a year just before signature.

Before contract signature, we had many issues to clarify. When you get to that stage, every word, every gesture is analysed. All this behavioural stuff is coming to a crescendo.

The graph is showing a joint crescendo where we really want to get absolute synergies. The objective is to get the best synergies you can and then drop off just before contract signature. This is illustrated in the graph.

The rationale for using fixed-price contract is that the project was a ship that could be clearly defined. You wouldn't use a fixed-price contract for a development project. If at the end of the tendering process, you believe that you will have a 95+% agreed statement of work then there is nothing wrong with using a fixed price contract.

When you are at contract signature and when you are at 70%-80% reliability in the statement of work, then you still have a big chunk of unknowns out there. A fixed-price contract will not work. The behaviours you have plotted will just continue on almost forever rather than dropping away as indicated in your graph.

Because your knowledge is spirally developing during the tendering period, you are changing and your communications are maturing. There is always a distance between purchaser and seller up to the contract signature. Now we are a team.

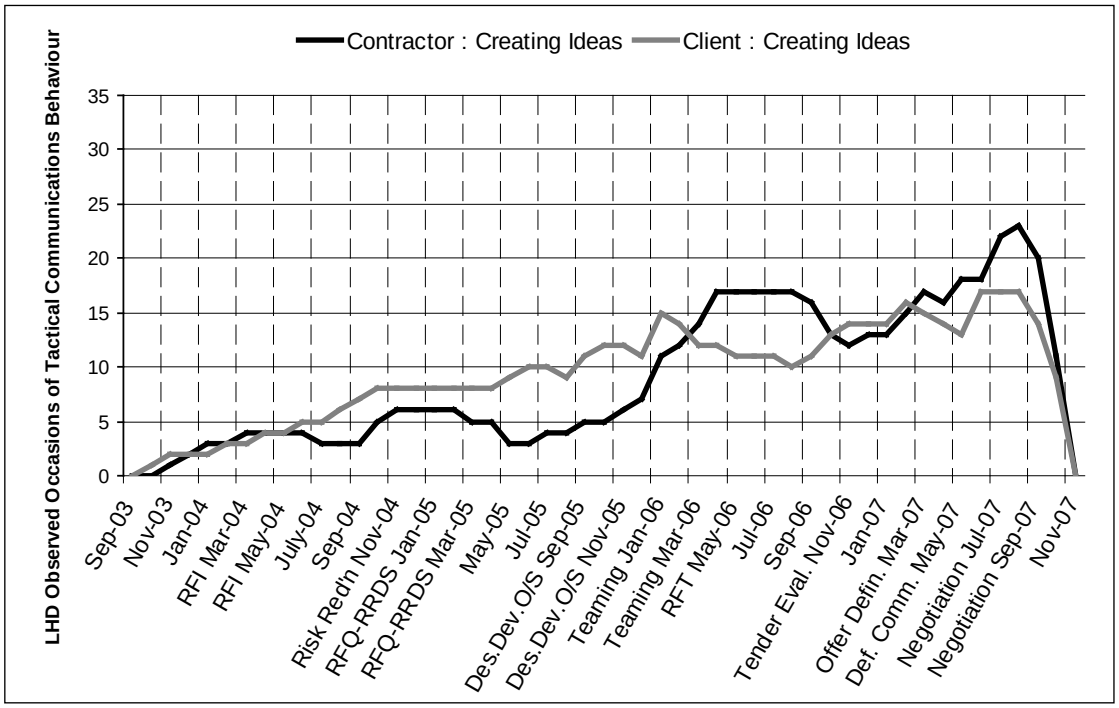
The one big outcome of this research is the 'finding directions' and the large delta during the RFT because this is a very significant waste of resources.

This is almost the key outcome (mother load) that comes out of your research, which is that we now have a process which actually shows that this additional effort by the contractor to “find direction” during the RFT is delivering low value.

They are investing all of this money at this RFT stage and the Commonwealth is going to deliberately bunker down, with the result that little value will be gained from their large investment.

And I would say if you asked the contractors’ program managers for their value propositions from putting all that effort in funding the peak; they got nothing out of it or very little if anything. It was a waste of dollars.

Commentary on “Creating Ideas”



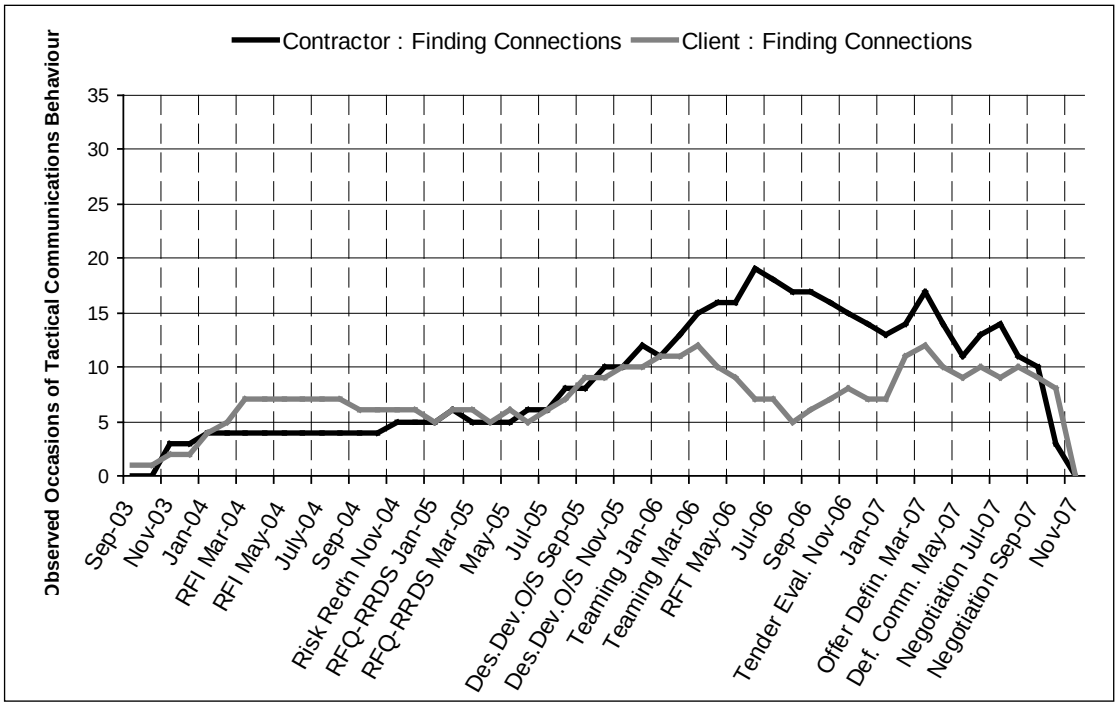
This is good. If I think back then, I was pushing the vast majority of the conceptual thinking and planning up until the end of the Teaming arrangement.

Then I went back and said, “Right over to you guys, you tell me what you can do (RFT stage).” Then at the end of the Offer Definition stage, I was putting it back on them to explain their offering.

So, they peaked where I've actually put the vast majority of the responsibility back on to them.

It was all carefully orchestrated.

Commentary on “Finding Connections”



During the period Design Development through to Teaming, both the client and tenderers were seeking connections. What that indicates is that we were just as active in the teaming arrangements as they were, because we actually participated in the teaming. Our team was having serious discussions etc., watching, putting bounds around them, pushing them in particular ways. We had a lot of behind-the-scenes activity and putting in as much energy as the contractors. This is illustrated in your parallel graphs up to the end of the Teaming phase.

It was almost like analogous to partners at a dance. Initially there were two girls and four blokes and we were the chaperones. So we said, you can dance with this one and you can dance with that one but you are not going to have sex now.

I literally had to say them, I want you to have these discussions but you may not lock in other players. You can't lock in your combat system, etc.

I was actually telling them what the rules were for their partnering relationship as it matured. We were giving them all the rules of the relationship, and so, when they were having their meetings with their major subcontractor, I was also meeting with those subcontractors at the same time to make sure that they also understood the rules. My team had to ensure that the rules were acceptable within commercial and legal bounds.

During the RFT, the tenderers are very engaged with formalising their teaming arrangements. Then I pulled back and said, “Right, now guys you have formalised your team and you have got A and B, now, off you go and develop the rest of your team structure.” This shows up on your graph as we pulled back during the RFT stage. I was controlling them up until the time they advised formally that the team was defined.

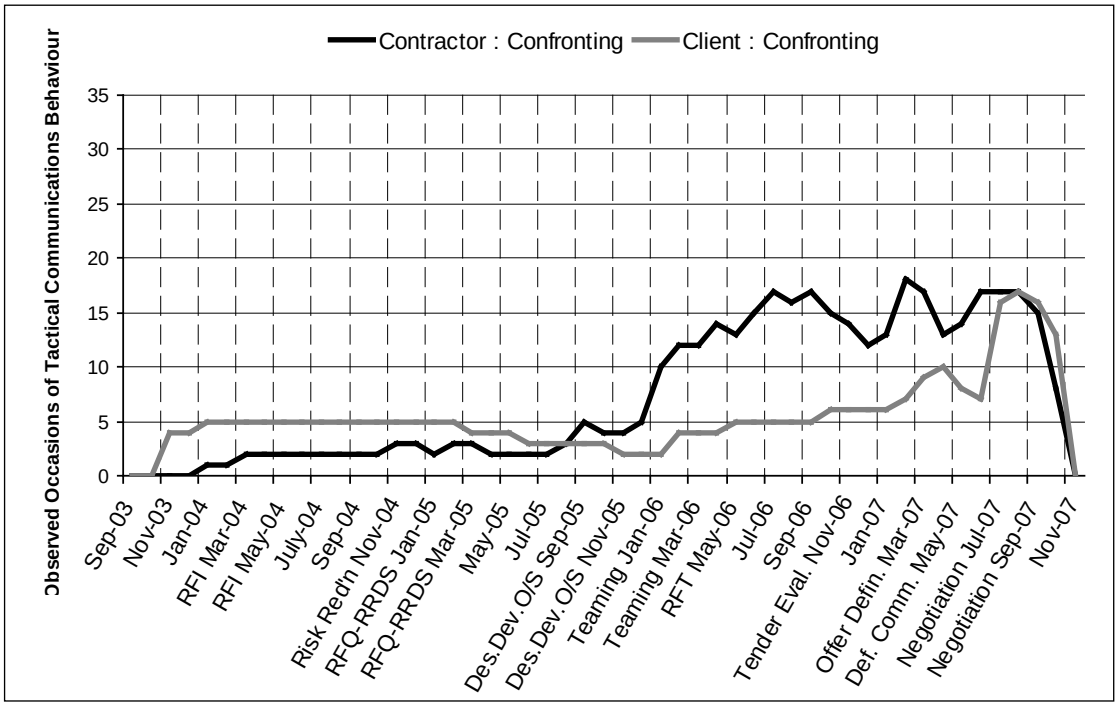
So we controlled it, and then I said stop, and I then told my whole team that you are not to play any more. We are going to let go. They are now the masters of their own destiny.

Around the Offer Definition stage, both sides started to re-engage in the teaming process. At that stage, we knew what their major subcontractor teaming arrangements were, and then we actively engaged with other subcontractors. I had to wait until after the Tender Evaluation before I could go back to being engaged with teaming issues.

The graphs accurately show that Teaming was now fundamentally their responsibility but we were still actively participating, but in a secondary role. Then during deep negotiations, teaming issues were no longer relevant.

So far for 3 out 3 diagrams, we are about 100% [accurate].

Commentary on "Confronting"



During the RFT, the confronting was between the winning contractor and their major and much larger subcontractor. We were still tracking along there but significantly less engaged.

This is a really hard one to analyse who is actually playing with who. Also, these are lower intensities compared to some of the previous graphs. Some of the confrontational issues with us might relate back to some of the behaviours in the previous figures. The previous curves indicate growth at the same time. They were being more creative etc., and I'm being more passive.

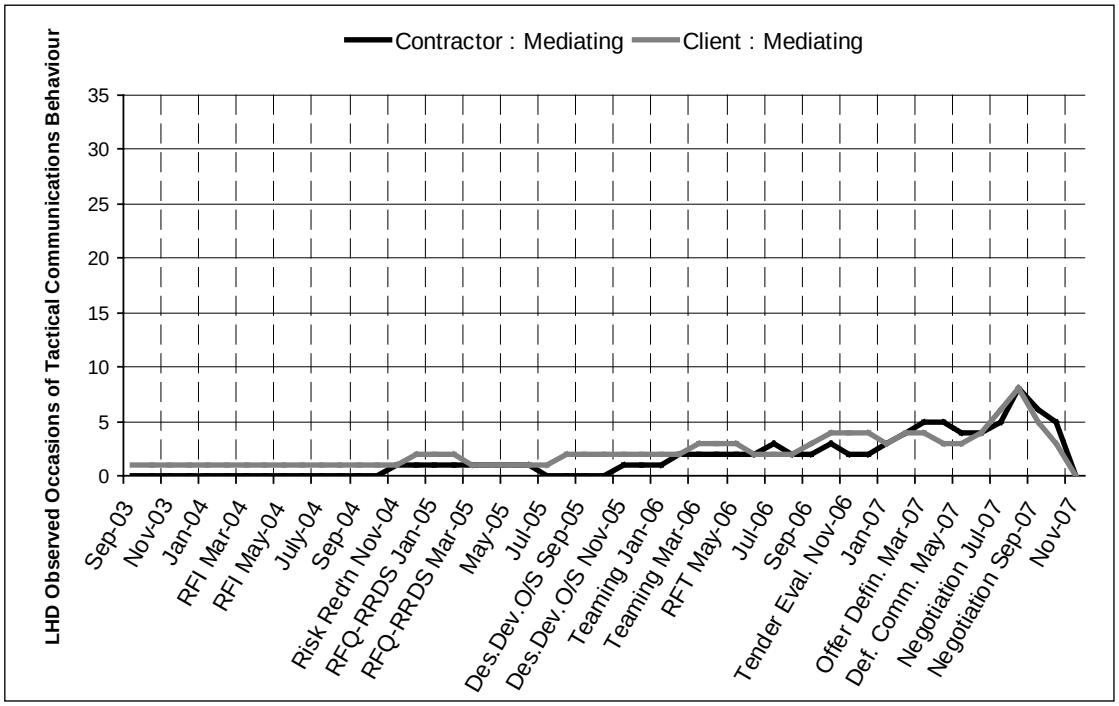
They are lacking direction there, and when you lack direction and you are trying to be more creative, you are confronting more people and having more debates. So there is probably a relationship here.

During negotiations, it was as if we turned a switch on. As program manager, I have to manage the behaviour of our team. I was controlling the behaviours during the processes up to Negotiations. Once in negotiation, it's off. No control on behaviours. It's almost a blood sport.

You don't have to be fair and equitable to everybody. You haven't got another partner there. This is the storming stage of the relationship and you storm all the way through a negotiation.

Negotiations are hard, really tough, and confrontational. But prior to the negotiations phase, I would have stopped any level of confrontation.

Commentary on "Mediating"



The graph shows that the synergies are there, all the way. In context, confronting is done by the team. The team maintains its confrontational environment, but it is the leadership which maintains the mediating mode.

I had fifty people in the confronting mode, and then I and maybe one or two others would be mediating.

I still wanted the team out there and confrontational. In my room, I would have the senior executives of both contractors independently. And I spent a bit of time mediating between prime contractor, subcontractor and their proposed subcontractors.

My team was generally unaware of this activity at the program management level.

I had to sort out this real high peak which you show in the Confronting graph and keep it all running. You can see the close synergy between the program managers from both sides who had to drive the mediations during the negotiations.

The Mediating graph is really a reflection of the two program managers.

In the client organisation, this is a very close relationship and it shows in the graph.

A level of trust and a level of communication are absolutely critical to success. When this breaks down, the equivalent of the graph will be all up and down.

We never went into battle. It was just him and me knowing where we were, and keeping the mediating curve relatively flat. From regular communications and regular phone calls to both competing contractors, I kept the mediating curve flat.

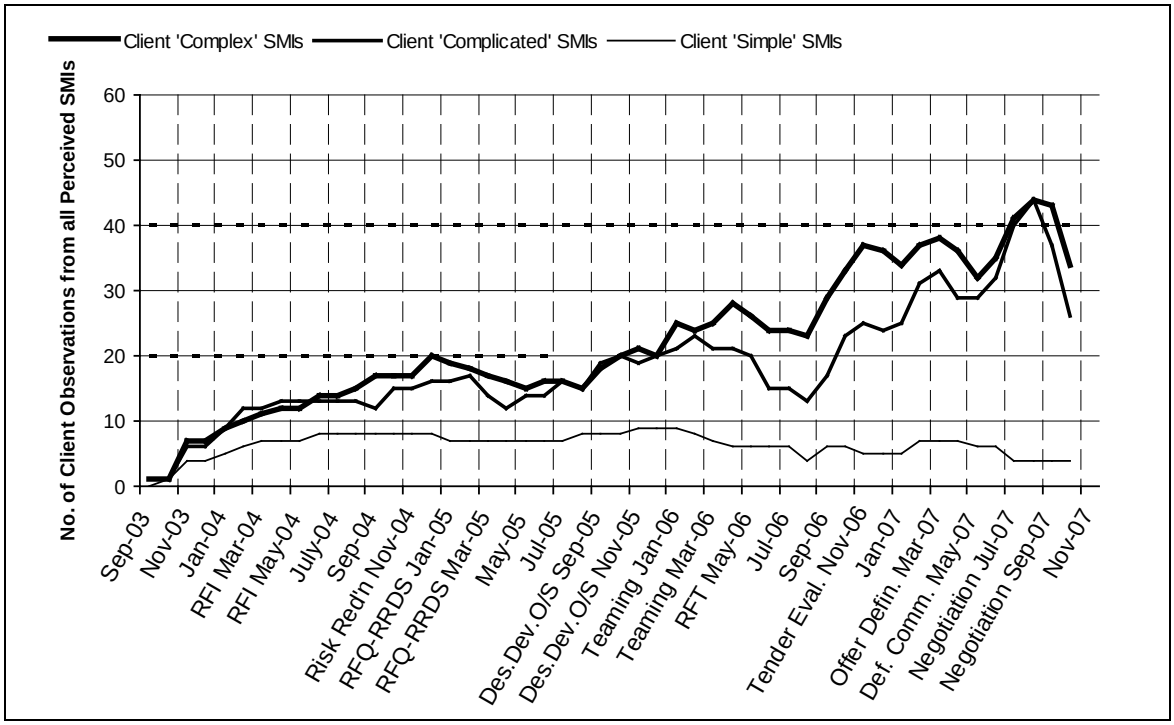
Our program managers hardly ever talk during RFT because they are scared of talking and scared of communicating and scared of dealing with the people at that level. Whereas I wasn't, because I knew that this is the way to keep this thing managed.

Commentary on "Organising Domains – Client".

[Simple Organising Domain = Readily available information – 'known knowns' - Certainty.]

[Complicated Organising Domain = Expert Opinion or Advice – 'known unknowns' – Risk Management.]

[Complex Organising Domain = Complex Emergent issues or patterns of behaviour – 'unknown unknowns' (often political in origin) – Ambiguity and Uncertainty.]



It shows a crescendo of building up and building up until the really big peak, which aligns with the end of the Negotiations which also aligns with the high level of confrontation as shown before.

If anything, this is the '*battle rhythm*' of a complex project. You can't sustain that peak of information gathering. It just has to build up. It peaks at the point when you have the whole picture.

The politically complex issues with respect to national infrastructure, capacity to build etc., are more important on this project.

My view would be, if we were doing something at the $50M mark, you wouldn't have that Complex trend going up there at all. It would actually be inverted significantly.

The nature of this is that it was a complex project.

Project managers use *battle rhythm*. It's a very common term in project management. You have your milestones etc., but what you need to be able to do as a program manager, is to beat the drum faster when you need to be more engaging.

You don't want to build them up too quickly. You want to build them up gradually. It has to align with your need to get the information, and when you have the information, you then have another rhythm regarding the amount of analysis and when.

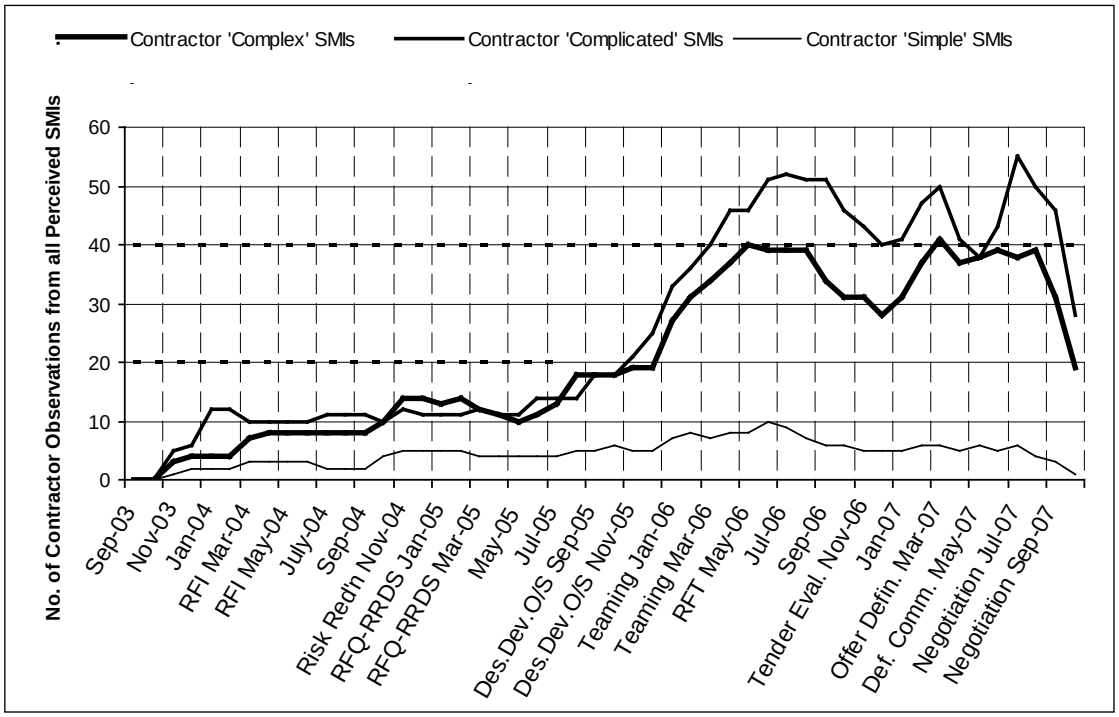
It's all about building the rhythm.

Reflections by the client on the contractor's awareness of communications behaviours with respect to information gap-filling.

[Simple Organising Domain = Readily available information – 'known knowns' - Certainty.]

[Complicated Organising Domain = Expert Opinion or Advice – 'known unknowns' – Risk Management.]

[Complex Organising Domain = Complex Emergent issues or patterns of behaviour – 'unknown unknowns' (often political in origin) – Ambiguity and Uncertainty.]



My role was to manage the complexity and that is why Complexity issues dominated over Complicated issues.

The contractor's role was to manage the (Complicated) detail and to have an underlying strategy for managing the complexity. This and the previous graph show this difference.

Kim Gillis – 18 March 2013

In the Beauty Contest, I was able to talk with the historical customers. Very hard to do this during the actual tender when the government is involved and everyone is very staged.

All TPs were operating during every phase.

During the RFT, DMO is very specific in terms of taking control - re communications etc..

Because it is complex, you get emergent issues that were never planned. You have to adapt. The emergent issues were more numerous at the start and less later on. The emergent issues that happened later in the process became far more critical. They were very important and the outcome could be very different dependent on how those issues were managed.

If you didn't have a level of synergy between rhythms for contractor and DMO would be a really good indicator why a project got really cocked up.

During final negotiations, the contractor has to deal with external subcontractors, internal political of contractor company etc. He has more complexity to deal with.

When he is down selected [short-listed], he's got a monstrous breadth of internal politics, subcontractor politics [trying to take over and work around him] and that is how he is coming to the table to negotiate with DMO.

When you look at the Case L rhythm, it did actually turn into a mess.

Case L was going out of control because of a whole bunch of political influences, because of they didn't have the where with all to get the alignment between contractor and DMO at the end. That is a recipe for failure.

Case L - because the staff were not dealing with the behavioural aspects - the emergent issues in the earlier epochs, what you end up with is pent up emergent issues that were not addressed and you get to the end and then you get the oh fuck moment - the peak of

behaviours in epoch 4. The PM then tries to impose everything over the contractor. There are no choices, there is no relationship, the thing falls into a mess.

Case S: Emergent behaviours during RFT [epoch 3] was not over [the Australian prime contractor] but was with the French. The French proposal was a disaster. They did not meet any of the requirements of the tender. Did not supply a sufficient level of detail. Gillis was dealing with a whole bunch of emerging issues coming out of the French.

If I look at your graphs from watching those two projects, that makes sense. That correlates with my historical understanding that the projects were run because of the cultural, experiential, relationship approach of both teams being very different.

Because somebody makes the rank of Brigadier, he is smart individual, but trying to deal with this level of complexity and business behaviour and ambiguity etc., it's not necessarily their forte. They want to follow a controlling structure. You can't control these things. If you control then you are missing out on listening to the underlying messages. You have to be adaptive.

One of my team left in the middle of the process because he couldn't cope with the plan du jour. You dealt with emerging issues, you listened to them, you adapted etc.

I've seen very large projects run by well meaning but unskilled individuals who are great military leaders; but this is not what they should be doing.

Because he was an army brigadier, he was getting a lot of external influences from the army end user that Gillis could overrule in Case S because he had a good team of people working with him so they could make a judgment call as to what was the right answer for the navy and then advise the respective service chiefs what they will and will not get.

Being a joint project with 3 separate customers, I could introduce ambiguity as a tool. He could play the customers off against each other.

If you are only delivering a project only to the chief of army, there are too many stakeholders that have too many vested outcomes.

When you are making big decisions, everything comes into play. What drives you and motivates you; your self-worth. What perceived status you hold. What alliances and allegiances you have, what outside influences you, what financial position is, you ability to say "stuff you" I don't want to play this game. Your sense of you own security. The lead up to an election, months before an election, these guys are going to be out in six months, I don't have to play with them as much as I did before.

What were the social structures at play that mixed together to produce a causal power that produced a behaviour that was observed?

The point where I became the most effective was when I was the most secure; and I was also the most self aware and self critical.

Why am I doing this? What is motivating me?

I was the most secure in terms of security, money, relationships and career wise, I didn't really care what everybody thought; rather I was able to put the comments of the PM or minister etc, I was able to put it into a relative box [frame the discussion].

I was controlling the mechanisms.

Whereas the brigadier was getting controlled by those external mechanisms far more than I was.

He doesn't have job security beyond a year. He doesn't know where he's going to go. And somebody at a political level or 3 star level, "I want you to go and do X", you just go and do it without thinking.

The more in control of that mechanism as an individual, the more successful you can be. Especially in an environment with absolute emergence and absolute complexity. If you don't understand your self-worth, you will be dragged in an ambiguous environment. If you don't have a moral compass, you won't get a point and you will lose control.

I was able to keep the team relatively small. I had around 38 whereas traditionally something like this would have 100-120 staff. They were not designing something, they were making a decision. The cohesion within that team and getting a unity of purpose was my motivator. I needed them as the experts to challenge me openly. This functional group would just say no Kim, that's not the right way. The breadth of this complexity is that you had to have a large group of people all actively pinging and looking and sensing because if you didn't do that, you couldn't see as far as you needed to see.

I only had a narrow view due to my quite extensive experience and knowledge in the domain. But if I could get them all to feedback then that was important. The size of the group is important because I couldn't cope with a bigger group in order to listen to them; to get the level of internal trust. A lot of the first epoch was spent building that up.

From a personal perspective, it was probably the most secure part of my life because I was back in Canberra with my family and much happier.

Slowly but surely I started to grab the relationships with the major subcontractor and the other foreign contractor. Even today, these relationships are still current at a personal level.

We respect each other; we talked as much as we could.

The first epoch you are building up the team. Then for me the relationship with the three service chiefs, then there was a period for probably a month or two where I was getting the Department of Finance and Treasury on line, and then you were doing government - the Costello - Howard, the defence ministers.

It's all about getting that team engagement; getting the people together which is what I spent most of my time doing.

If you treat it like a game and you don't take it at personal level where there are winners and losers but it needs both the client and contractor to share this outlook.

People who play it really seriously...

One guy is, I went to his funeral and he never knew how to play the game. He took all the stress onboard and he wasn't a good game player. He didn't understand that it really wasn't all that serious.

You take on personas and you play and its game playing with acting.

At the end of the day, we both knew that we were going to get to an arrangement. It’s just how we were going to push and where we were going to push and when we were going to push. It was all about testing each other.

In this level of complexity, the thing that everybody forgets that when that's finished, you've actually got the next 6 years or 8 years in front to you where you have actually got to deliver. And if you have poisoned the well in the way you play the game, you've almost got a guarantee that you haven't either understood each other, you haven't communicated well enough, you haven't resolved outstanding issues, or set yourself up to be successful. Because if you don't use the game for the purpose of actual enjoyment and the betterment of both CEOs, you will lose at the end of the day.

The PM and the defence minister are assessing whether a 'poisoned well' has been the outcome of the tender campaign. Do we have a poisoned well?

I briefed the Treasurer for about two and a half hours. We had a really robust discussion because it is [a] money issue - $3.1 billion - he wanted to know about the politics of what we were doing and how we were doing it. It really came down to, I don't think he really was all that interested in all data I was giving him. It was almost like a job interview. Do I trust this person who has done this job. Because he had three hours, you couldn't contemplate getting across the complexity of a decision like this. It would be beyond any human beings capacity to distil three and a half years of work and probably 500 people across three nations to distil down into a two and a half hour meeting.

It was all about the confidence he might have in me. Fudging means you can't trust someone. It's all about your self confidence. I think you're success in these things can be about your ability to go back to the very simple principle of Maslow's hierarchy of needs, and you get to the self actualisation. If you are not very high on this scale, your ability to understand the way you personally think, you shouldn't play in this game; it's just too tough.

Careers and personalities have been killed as a result of trying to manage these large projects. People know that if you do not manage something well, that the system, the mechanism will come in and eat you alive if you are not successful. If you are not sure of yourself, the mechanism will drive you down a path which is just the most comfortable but it may not necessarily be the best way to win, the best way to be successful, the best way to get the right outcome, the best way to protect yourself.

Somebody who doesn't have the experience and knowledge to deal with high-end complexity. It is a task that is probably too difficult and not fair on the individual to give them that level of responsibility. It's about as tough a shit you're gonna get.

If you, as a project manager, can't influence the outcome, meaning the project is too vested in politics, don't touch the project.

David O'Brien and Drew McMeekin DMO 18 March 2009

Case L

Is the plot of complexity accurate for Case L?

Program Manager: My view is yes it did. That is a reflection of Case L.

Then into the Negotiations, there were a swag of issues.

The dominant issues in Case L were issues of Influencing.

That's reflective of the negotiation model that we adopted the advice that we received in regards to that was all about influencing.

If anything this is a confirmation of the way the money that we have spent on the negotiation model that is obviously having some bite.

The influencing comes into play as we go through the 4 stages.

Trying to get an approach, get it agreed, shape it, stakeholders.

Certainly, as soon as we engage industry, I agree, it is all about influencing.

With contractors, this is our world, what's your world, where they meet and intersect?

That to me, rings true (the influencing).

We found Direction early on, understood the issues were, but those issues were issues of complexity and where the trade-offs had to occur.

At the start we had minimal direction. As we went through the process of understanding the issues, the direction became better.

Again, that makes sense to me.

The increase in understanding enabled the understanding of the increasing complexity.

Trust plot.

I think that's fair. As we started to narrow down the particular companies, at the time of the ITR, I would have thought ...

Greater effort re Trust and the wider project community required greater effort because you are establishing what the Commonwealth needs so you can go forward, making sure how much of what is going on is positional versus factual.

In some sense, issues of Trust are issues of Clarity.

You are clarifying that you truly understand what it is.

You need to be confident that the issues before you are the true issues.

There is an investment there.

As we get deeper and deeper into the process, we find out that we actually know less and less.

Hence, the driver to our complexities.

We could have intuitively gathered that.

Take-away statement.

During a tendering process, how do you track, how do you you assess how it's going?

It seems to be consistent with my recollection of the last 4 years.

How do you gain confidence as the tendering progresses that the required outcomes will be met (in the space of ramping-up complexity)?

At the start, there would be a lot of goodwill, a lot of suspicion, a lot of shaping and influencing. We saw lots of that.

Things that are articulated would be different to what they are thinking.

You have to build trust.

ANNEXURE I. SUPPLY OLIGOPOLY

SUPPLY OLIGOPOLY – CASE L ($3 BILLION)

[COMPILED FROM THE COMBINED PERSPECTIVES OF THE DMO PROJECT MANAGER AND SEVERAL SUPPLIERS' BID MANAGERS]

ORGANISATIONS	EQUIPMENT DELIVERABLES
DMO = Defence Materiel Organisation (the client) The following company names are aliases but their country of origin is correct. Some companies offer their own design, system integration and production. Other companies integrate and assemble from a licensed design. Companies also develop prime and subcontractor relations in varying combinations and with changing allegiances depending on the client's country and/or current capacity for new work. Any one bid is likely to offer several combinations. Companies are oligopolistic and subject to mergers and acquisition. Sovereign influence is material. Some companies have subsidiaries in other countries and/or in Australia. The bid preparation might be done by the parent company, a subsidiary outside Australia, or an Australian subsidiary. All companies are privately owned and some have sovereign stakeholders.	❶ Type 1 (MHC) ❷ Type 2 (LLC) All equipment types require: • Design • System Integration • Assembly line production

Barley (Australia)
BOY (Germany)
BOY-A (Australian subsidiary of BOY)
BOB (USA & France)
BOB-A (Australian subsidiary of BOB) –
Calliper (Austria)
CBF Systems (UK)
CBF Systems (USA)
CBF Systems-A (Australian subsidiary of CBF Systems UK)
Clockwork Orange (UK)
Felix (Australia)
MB (Germany)
MB-A (Australian subsidiary of MB Germany)
MS (UK)
MS-A (Australian subsidiary of MS UK)
Protector (UK)
Protector Holdings (USA)
Rambler (Germany)
Roadliner (USA)
Shock (USA)
Slug (USA)
Slug-A (Australian subsidiary of Slug USA)
Stretchmark (Australia)
T&T (USA)
Towbol (Australia)
Whales (France)
Whales-A (Australian subsidiary of Whales)
Woolball (Sweden)

2003	The defence minister, rather than DMO's project manager, imposes the tendering strategy and will recommend a 'preferred' (subject to negotiations) tenderer to Cabinet. The Australian government requires one Prime Contractor for both Types 1 and 2. Expressions of Interest are sought world-wide. Only one company (possibly **Rambler (Germany)**) can meet the requirements. This outcome is non competitive and government policy requires a competition. In a revised tendering strategy, 8 companies are requested to express interest for Type 1 and any company can tender for Type 2. **Felix (Australia)** and **MB-A (Australian subsidiary of MB Germany)** elect to team for Type 1 and Type 2. Also, **Felix (Australia)** teams with **MS (UK)** and **T&T (USA)** and expresses interest in supplying defence with Type 2. **Felix (Australia)** responds to Type 1 Expression of Interest as prime contractor teaming with **MB-A (Australian subsidiary of MB Germany)** as subcontractor. **MB-A (Australian subsidiary of MB Germany)** uses generally the same bid document but with their roles reversed. **Felix (Australia)** responds to Type 2 Expression of Interest as prime contractor teaming with **MS (UK).** The **T&T (USA)** response to the Expression of Interest includes **Felix (Australia).** **MB-A (Australian subsidiary of MB Germany)** dissolves agreement with **Felix (Australia).**

2004	
2005	Defence announces 8 tenderers for Type 2. This is more than desired, however DMO wants **BOY (Germany)** in the competition. **BOY's** poor response to the Expression of Interest causes defence to revise down the performance specification and this ensures that other otherwise unsatisfactory expressions survive. Defence releases Request for Tender document. **(2000) Calliper (Austria)** sells its IP rights to **Clockwork Orange (UK).** **(2005) T&T (USA)** buys **Clockwork Orange (UK).** **MB (Germany)** buys **Roadliner (USA)**. **T&T (USA)** responds to Type 1 & Type 2 tenders.
2006	**Woolball (Sweden)** withdraws as a potential prime contractor but agrees to be a subcontractor partner to **T&T (USA)**. **Protector Holdings (USA)** buys **T&T (USA).** **MS-A (Australian subsidiary of MS UK)** withdraws. **T&T (USA)** offers Type 1, with **Woolball (Sweden)** supplying as subcontractor. Other (non exclusive) subcontract partners are **Barley (Australia), Stretchmark (Australia), Towbol (Australia),** and **Slug-A (Australian subsidiary of Slug USA).**
2007	**CBF Systems (UK)** buys **Protector Holdings (USA)**. Defence announces **CBF Systems (USA)** as preferred tenderer for Type 1. [Later the government removes this status – see 2008.] **DEFENCE REQUIREMENTS CHANGE SIGNIFICANTLY IN RESPONSE TO OPERATIONAL REQUIREMENTS, BUT THERE IS NO CHANGE TO THE BUDGET OR DELIVERY SCHEDULE.** [END OF FIELD RESEARCH DATA TIMELINE]
2008	Information flow from DMO appears to stall. Government declares that **CBF Systems (USA)** is no longer the preferred tenderer for Type 1. Much company consternation. **CBF Systems-A (Australian subsidiary of CBF Systems UK)** buys **Felix (Australia).**
2009	4 companies participate in a new round for Type 1: **MB-A (Australian subsidiary of MB Germany); Whales-A (Australian subsidiary of Whales)+Shock (USA); CBF Systems-A (Australian subsidiary of CBF Systems UK)+Woolball (Sweden); BOY-A (Australian subsidiary of BOY Germany). BOB-A (Australian subsidiary of BOB USA/France)** declines. The objective is for tenders to be refreshed in light of the revised operational requirements. Each tenderer can claim up to one million dollars for expenses incurred in reworking their bid and the cost of field testing their equipment. DMO requires a meeting with all tenderers to see examples of equipment types. The defence minister places the Type 1 project on the 'projects of concern' list because its delay will impact on theatre operations **CBF Systems (USA)** loses its main production contract for Type 1 to **Shock (USA)**.
2010	Tenders submitted. **CBF Systems-A (Australian subsidiary of CBF Systems UK)** is removed from the competition; possibly as a consequence of **CBF Systems (USA)**.
2011	Type 1 project is removed from the defence minister's 'projects of concern' list.
2012	
2013	**BOY (Germany)** is the preferred tenderer subject to final negotiations. The **MB-A (Australian subsidiary of MB Germany)** offer still stands but DMO is not currently negotiating with them.

ANNEXURE J. COMMUNICATION NETWORKS

The communications networks present in two formats.

The first is restricted to Case S.

The DMO bid manager, the prime contractor's bid manager and the major subcontractor's bid manager manually drafted the communication networks, that are replicated with line graphics.

The lines of communication indicate that the major subcontractor (to the prime contractor) is equally active in communicating with the Minister for Defence and the DMO. The risks for the prime contractor are evident, particularly as the foreign sovereign-owned subcontractor is much larger than the Australian prime contractor is, and could undertake the entire project in their own right.

The active role of lobbyists reflects in these communication networks.

The second presentation is in matrix format and it complements the network illustrations. Importantly, the matrix illustrates the pervasive communication roles of the prime contractor, the subcontractor, the lobbyists, and to a lesser degree, the journalists.

The diminished communication capability of the DMO as client is evident.

Figure 1 Case S – Epoch E1: Construction of conversations drafted by the respondents.

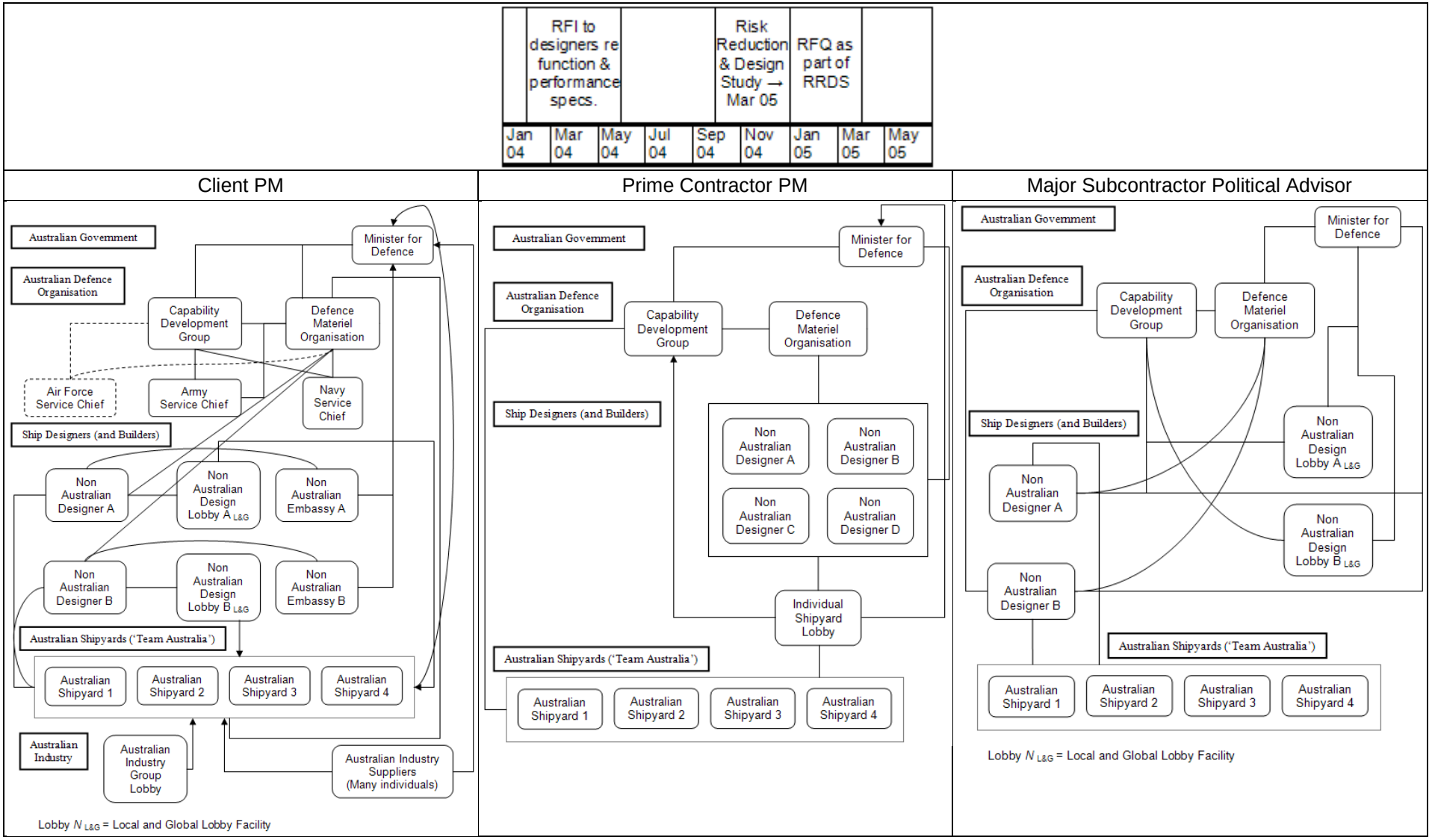


Figure 2 Case S – Epoch E2: Construction of conversations drafted by the respondents.

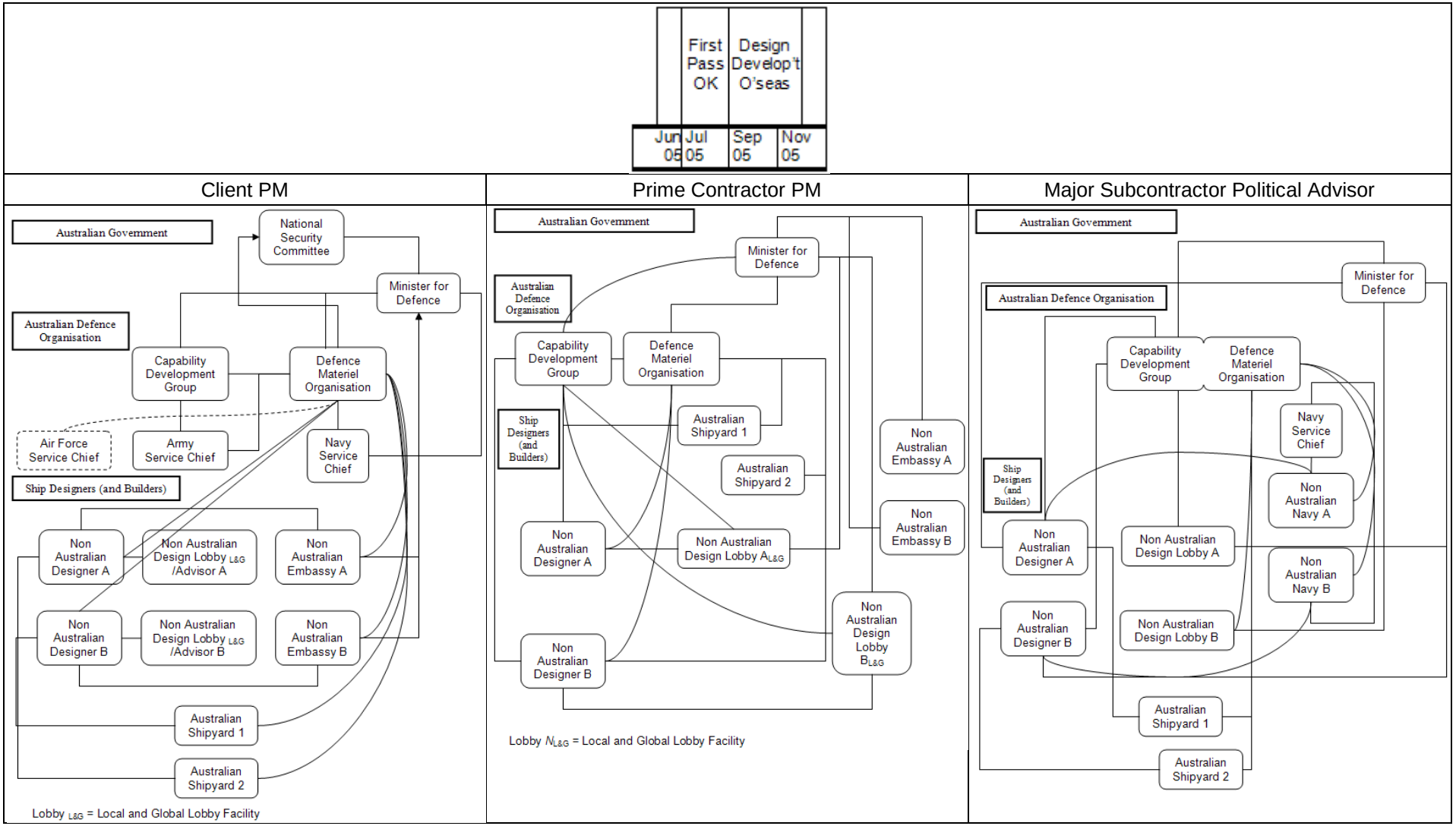


Figure 3 Case S – Epoch E3: Construction of conversations drafted by the respondents.

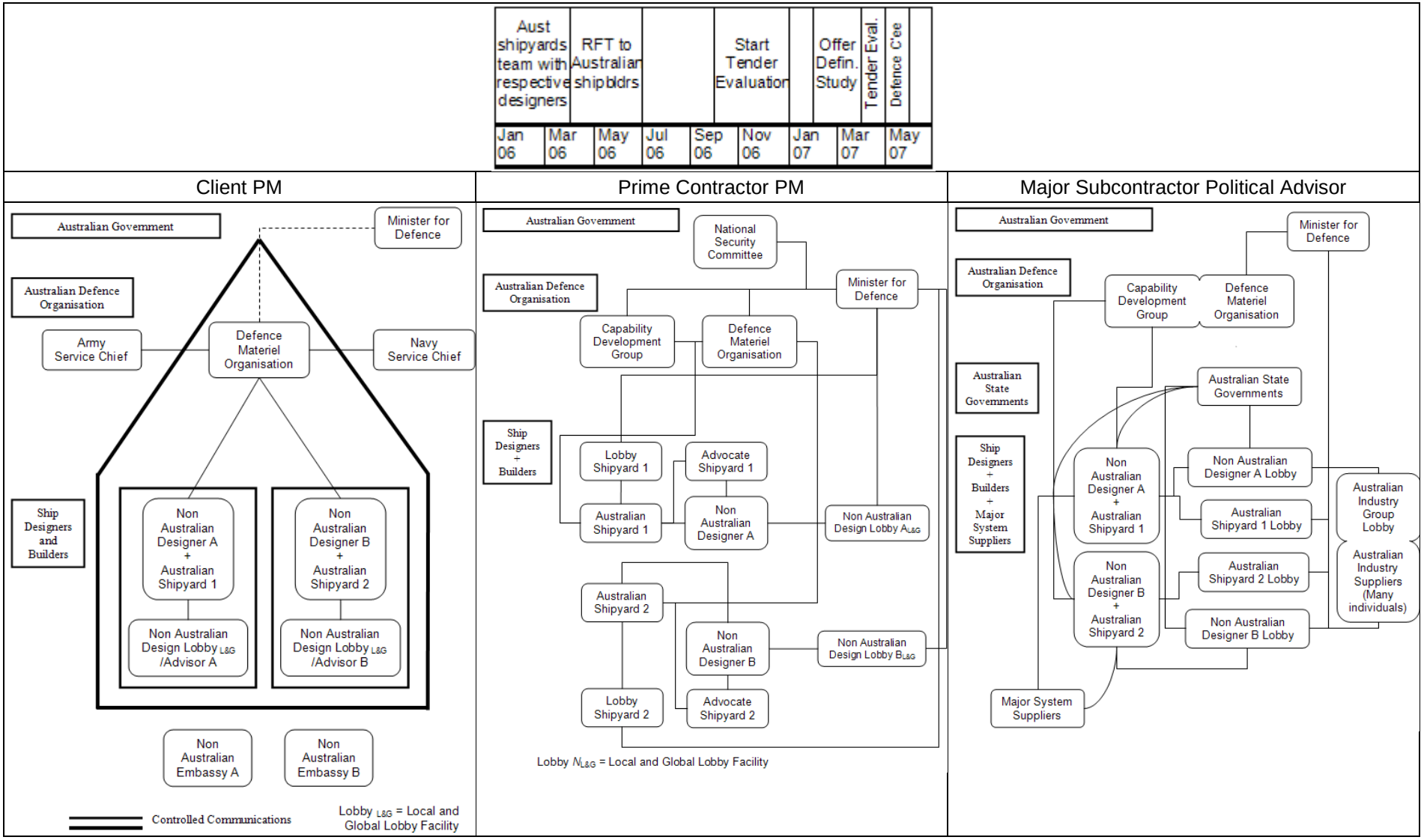
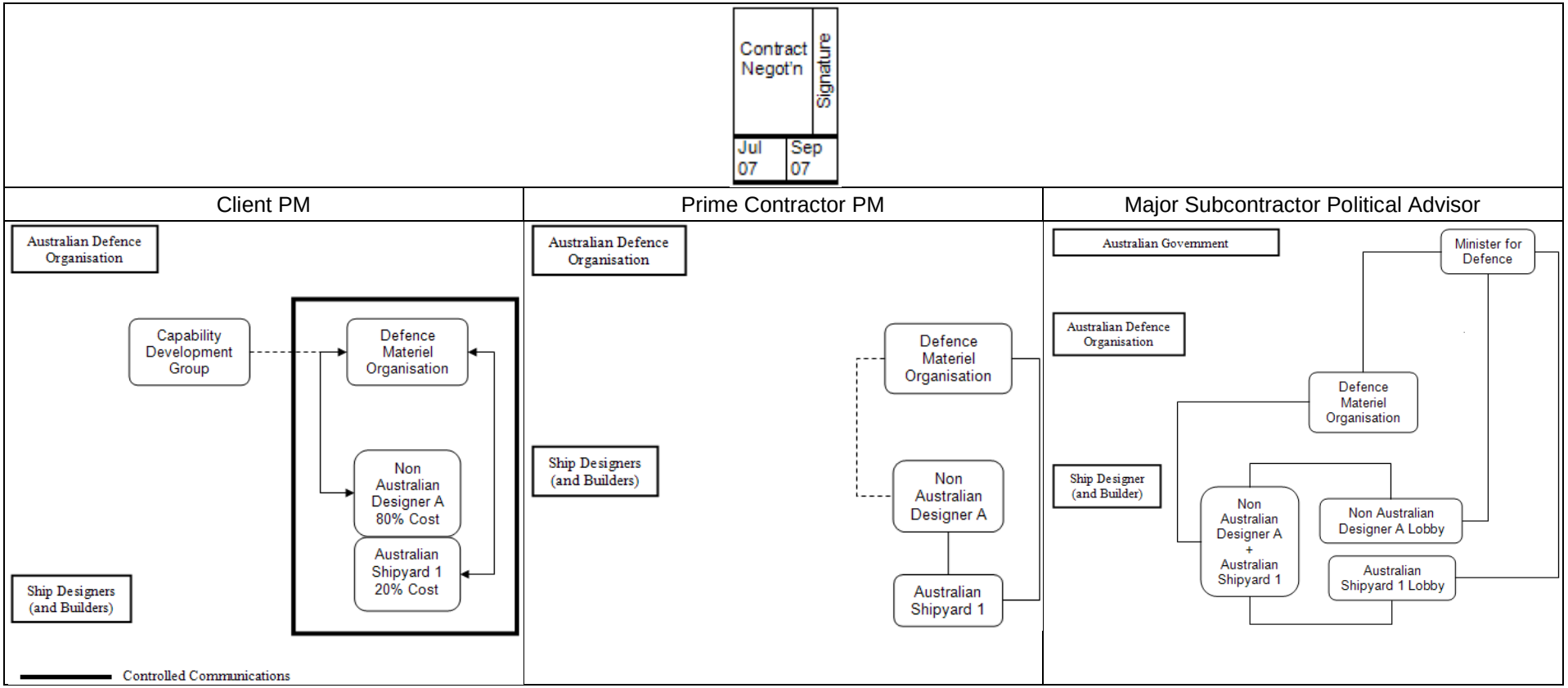


Figure 4 Case S – Epoch E4: Construction of conversations drafted by the respondents.



COMMUNICATIONS BETWEEN STAKEHOLDERS (TENDER CAMPAIGN LANGUAGE GAMES)

TYPE 1: INFORMATION-SEEKING: One party has seeks information believed to be in the possession of another party.

TYPE 2: INQUIRY: The communication seeks evidence to support (or to refute) a developing value proposition missing certain key information.

TYPE 3: NEGOTIATION: The primary goal of each party is to advance its self-interest through bargaining.

TYPE 4: ACTION-SEEKING: One party seeks to bring about a specific course of action by the other party.

Type 4.1: Policy directives are conveyed on behalf of the government or policy propositions are conveyed on behalf of politicians.

Type 4.2: Generally, the mechanism is to persuade gently or to convince.

TYPE 5: CRITICAL DISCUSSION: The basic goal is to prove a thesis in order to resolve a dispute or issue over whether the action in question has value. The primary obligation is a burden of proof. Each party seeks to prove its thesis by some combination of internal proof (substantiating one's position by inference from the other party's concessions) and external proof (appeals to scientific evidence or expert opinions).

TYPE 6: ARGUMENTATIVE OR PERSUASIVE: Used to frame conversations. The rules require relevance, cooperation and informative value.

FRM: ENTITY$_m$ TO: ENTITY$_n$	1. DEFENCE MINISTER	2. MINISTER'S POLITICAL OFFICE	3. DMO ORGANISATION & TENDER PROJECT OFFICE (THE CLIENT)	4. PRIME CONTRACTOR	5. MAJOR SUBCONTR-ACTOR	6. STATE GOVERNMENT	7. FOREIGN GOVERNMENTS	8. LOBBYISTS & INDUSTRY ORGANISATIONS
1. DEFENCE MINISTER		**Type 4.1:** Convey policy positions to other parties	**Type 4.1:** Convey policy positions to other parties	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	**Type 6:** Framed conversation	**Type 6:** Framed conversation	**Type 4.1:** Convey policy positions to other parties
2. MINISTER'S POLITICAL OFFICE	**Type 4.2:** Persuade gently or to convince		**Type 4.1:** Convey policy positions to other parties	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	**Type 6:** Framed conversation	**Type 6:** Framed conversation	**Type 4.1:** Convey policy positions to other parties
3. DMO ORGANISATION & TENDER PROJECT OFFICE (THE CLIENT)	**Type 6:** Framed conversation	**Type 6:** Framed conversation		**Type 2** ✓ **Type 3** ✓ **Type 4.1** ✓ **Type 5** ✓	**Type 2:** Fill knowledge gap	**Type 2:** Fill knowledge gap	**Type 2:** Fill knowledge gap	**Type 4.1:** Convey policy positions to other parties
4. PRIME CONTRACTOR	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	**Type 1** ✓ **Type 2** ✓ **Type 3** ✓ **Type 4.2** ✓ **Type 5** ✓		**Type 1** ✓ **Type 2** ✓ **Type 3** ✓ **Type 4.2** ✓ **Type 5** ✓	**Type 2** **Type 4.2**	**Type 4.2:** Persuade gently or to convince	**Type 4.1:** Convey policy positions to other parties
5. MAJOR SUBCONTR-ACTOR	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	**Type 6:** Framed conversation	**Type 1** ✓ **Type 2** ✓ **Type 3** ✓ **Type 4.2** ✓ **Type 5** ✓		**Type 6:** Framed conversation	**Type 6:** Framed conversation	**Type 4.1:** Convey policy positions to other parties
6. STATE GOVERNMENT	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	**Type 1** ✓ **Type 2** ✓ **Type 4.2** ✓	**Type 1** ✓ **Type 2** ✓ **Type 4.2** ✓	**Type 1** ✓ **Type 2** ✓ **Type 4.2** ✓		**Type 6:** Framed conversation	**Type 4.1:** Convey policy positions to other parties
7. FOREIGN GOVERNMENTS	**Type 6:** Framed conversation	**Type 6:** Framed conversation	**Type 6:** Framed conversation	**Type 2:** Fill knowledge gap	**Type 2:** Fill knowledge gap	**Type 2:** Fill knowledge gap		**Type 4.1:** Imperatives directed to other parties
8. LOBBYISTS & INDUSTRY ORGANISATIONS	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	**Type 2** ✓ **Type 4.2** ✓	**Type 2** ✓ **Type 4.2** ✓	**Type 4.2:** Persuade gently or to convince	**Type 4.2:** Persuade gently or to convince	
9. JOURNALISTS	**Type 1** ✓ **Type 4.1** ✓	**Type 1** ✓ **Type 4.1** ✓	**Type 1** ✓ **Type 4.1** ✓	**Type 1** ✓ **Type 4.1** ✓	**Type 1** ✓ **Type 4.1** ✓	**Type 1** ✓ **Type 4.1** ✓ **Type 6** ✓	**Type 1** ✓ **Type 4.1** ✓ **Type 6** ✓	**Type 2:** Fill knowledge gap

Table 1: Who's who in the zoo. Nine micro stakeholder perspectives engaged with a macro tender mission (Schwandt, 2007, pp. 68-70).

Schwandt, T. A. (Ed.) (2007) The Sage Dictionary of Qualitative Inquiry (3rd ed.). Thousand Oaks CA: SAGE Publications.