

Aspects of Pronunciation in Five Varieties of English

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The University of New South Wales
Sydney, Australia

“Aspects of Pronunciation in Five Varieties of English”

Thesis submitted in fulfilment of the requirements of the degree of
Masters by Research
at the University of New South Wales

School of Languages and Linguistics
The University of New South Wales
31st March 2010

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Originality Statement

'I hereby declare that this submission is my own work and to the best of my knowledge it contains no materials previously published or written by another person, or substantial proportions of material which have been accepted for the award of any other degree or diploma at UNSW or any other educational institution, except where due acknowledgement is made in the thesis. Any contribution made to the research by others, with whom I have worked at UNSW or elsewhere, is explicitly acknowledged in the thesis. I also declare that the intellectual content of this thesis is the product of my own work, except to the extent that assistance from others in the project's design and conception or in style, presentation and linguistic expression is acknowledged.'

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Date: 31 March 2010

Abstract

The English language is one of the most widely spoken languages in the world, being spoken by approximately seven-hundred and fifty million people, with around three-hundred and twenty-nine million of those speaking it as their first language, (Crystal, 2003:109). With this in mind, it is possible to understand why various scholars would suggest that the dissemination of the language may be having an adverse effect upon English. As a result, it seems essential to document this ever-changing language and explore both its current state alongside its potential future developments. The focus of this research is to explore the differences in pronunciation between five major varieties of English; British, American, Australian, New Zealand and South African. Through an examination of the salient phonological differences between these World Englishes provided by primary research and a review of relevant literature, the research consequently aims to make predictions about significant future developments of the language.

The research specifically focussed on the differences in aspects of pronunciation between the five varieties; namely elements such as vowel production, /h/-dropping, glottalisation, the /hw/-/w/ distinction, as well as suprasegmental features such as word stress. The analysis of primary research and relevant literature has explored the three main hypotheses associated with the future development of the World Englishes examined and has postulated predictions. The findings of this research demonstrates minimal support for each of the hypotheses, however does not present enough definitive evidence to provide a firm hypothesis regarding the future development of the English Language, suggesting more long-term research is needed in this area.

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Originality Statement	i
Abstract	ii
Acknowledgements	iii
Table of Contents	iv
List of Figures	viii
List of Tables	x
1. Introduction	1
1.1 Research Background	1
1.2 The Need for the Study	2
1.3 The Purpose of the Study	7
1.4 Research Questions	8
1.5 Limitations	8
1.6 Overview of the Chapters	8
2. The History of English	10
2.1 British English	10
2.1.1 The Old English Period	11
2.1.2 The Middle English Period	12
2.1.3 The Early Modern English Period	14
2.1.4 Colonial Expansion	16
2.2 American English	17
2.3 Australian English	20
2.4 New Zealand English	21
2.5 South African English	23
3. Literature Review	25
3.1 Previous Research	25
3.1.1 The Americanisation of the English Language	26

3.1.2	The Retention of British Roots	31
3.1.3	The Latin Analogy	32
3.2	Phoneme Inventory	37
3.2.1	Vowels	38
3.2.1.1	KIT	38
3.2.1.2	DRESS	39
3.2.1.3	TRAP	40
3.2.1.4	LOT	40
3.2.1.5	STRUT	41
3.2.1.6	FOOT	41
3.2.1.7	SCHWA	41
3.2.1.8	BATH	41
3.2.1.9	FLEECE	42
3.2.1.10	FACE	43
3.2.1.11	PRICE	43
3.2.1.12	CHOICE	43
3.2.1.13	NEAR	44
3.2.1.14	SQUARE	44
3.2.1.15	GOAT	44
3.2.1.16	MOUTH	45
3.2.1.17	NURSE	46
3.2.1.18	GOOSE	46
3.2.1.19	THOUGHT	46
3.2.1.20	CURE	47
3.2.1.21	Recent Vowel Developments	47
3.2.2	Consonants	50
3.2.2.1	/hw/ - /w/ distinction	50
3.2.2.2	/r/	50
3.2.2.3	/l/-vocalisation	51
3.2.2.4	/t/-tapping	53
3.2.2.5	/h/-dropping	53
3.2.2.6	Glottalisation	54
3.2.2.7	Yod Coalescence and Yod Deletion	54

3.2.3	Suprasegmental Features	54
3.2.3.1	Stress	54
4.	Methodology	57
4.1	Aims	57
4.2	Research Questions	57
4.3	Methodology	57
4.4	The Study	60
4.5	Voice Recordings	60
4.6	Questionnaire	61
4.7	The Participants	64
4.8	Ethics	70
4.9	Procedure	72
4.10	Rationale	74
5.	Research Findings	76
5.1	Word List 1	76
5.1.1	Differences between the Five Varieties	76
5.1.2	Word List 1 - Discussion	87
5.2	Word List 2	90
5.2.1	Word Stress	90
5.2.1.1	Polysyllabic Word Stress	91
5.2.1.2	French Loan Word Stress	96
5.2.2	Rhoticity	98
5.2.3	Reduced SCHWA vowel /ə/	98
5.2.4	/t/-tapping	100
5.2.5	Pronunciation Differences	101
5.2.6	Word List 2 - Discussion	108
5.3	Conversation Transcriptions	113
5.4	Questionnaire Results	114
5.5	Application of Results to the Literature	122

6.	Conclusion	126
	List of Appendices	134
Appendix 1	Vowel Distribution Charts (Wells, 1982a, 1982c)	136
Appendix 2	Vowel Charts (Wells, 1982a, 1982c)	137
Appendix 3	Word List 1	138
Appendix 4	Word List 2	139
Appendix 5	Questionnaire	140
Appendix 6	Consent Form	144
Appendix 7	Research Itinerary	147
Appendix 8	Condensed Phonemic Transcription of Word List 1	149
Appendix 9	Full Phonemic Transcription of Word List 1	151
Appendix 10	Phenomena Explored in Word List 2	161
Appendix 11	Condensed Phonemic Transcription of Word List 2	162
Appendix 12	Full Phonemic Transcription of Word List 2	168
Appendix 13	Word List 2 - Results	179
Appendix 14	Transcription Key	181
Appendix 15	RP3's Conversation Transcription	182
Appendix 16	GenAus 4 and GenAus 5's Conversation Transcription	185
Appendix 17	Questionnaire Results	198
Appendix 18	Map of British Participants Birth Places	211
Appendix 19	Map of American Participants Birth Places	212
Appendix 20	Map of Australian Participants Birth Places	213
Appendix 21	Map of New Zealand Participants Birth Places	214
Appendix 22	Map of South African Participants Birth Places	215
Appendix 23	Question 10 Results	216
	Reference List	220

List of Figures

- pg -

Figure 1	‘Concentric Circles of Word Englishes’ Cited in Crystal (2003:107)	4
Figure 2	‘Circle of World English’ Cited in McArthur (1998:97)	5
Figure 3	‘A Circle of International English’ Cited in McArthur (1998:101)	6
Figure 4	Shift of the Seven Long Vowels Crystal, (2003:55)	14
Figure 5	Early English-speaking settlement areas in America Cited in Crystal (2003:92)	18
Figure 6	Movement of the NZ KIT vowel Adapted from Hay et al. (2008:40)	39
Figure 7	BATH Vowel Movement from RP to GenAm and GenAus. Adapted from ‘The International Phonetic Alphabet.’	42
Figure 8	Starting Positions for the MOUTH Vowel Adapted from ‘The International Phonetic Alphabet’	45
Figure 9	The ‘Near-Square Merger’ Cited in Hay et al. (2008:40)	48

Figure 10	Young New Zealand Speakers Vowel Inventory Adapted from Wells (1982a, 1892c)	49
Figure 11	Positioning of Dark /ɜ:/ Adapted from Carr, (1992)	52
Figure 12	Population Sampling Cited in Punch (2005:102)	65
Figure 13	General American Speakers Cited in Trudgill and Hannah (2002:45)	67
Figure 14	Map of New Zealand Cited in Hay et al. (2008:xi)	69
Figure 15	NZ Pronunciation of 'Fir' and 'Fur' Adapted from 'The International Phonetic Alphabet'	88
Figure 16	Franschhoek, South Africa Adapted from maps.google.com.au (2009)	96
Figure 17	Participant Perception of their Pronunciation	119

List of Tables

- pg -

Table 1	Vowel Sound Development from Middle to Present Day English Graddol et al. (1996:272) adapted from Gimson (1989:82)	13
Table 2	Research Results Provided by Sussex (1989) Adapted from Sussex (1989) in Blair and Collins (1989:163)	28
Table 3	Fundamental Differences between Quantitative and Qualitative Research Strategies Cited in Bryman (2008:370)	58
Table 4	New Zealand Use of the KIT /ɪ/ Vowel	77
Table 5	Word List 1 Results	89
Table 6	Participant Age Ranges	115
Table 7	Participant Genders	116

Chapter 1 - Introduction

1.1 - Research Background

The English language, being one of the most widely spoken languages in the world, is constantly evolving. It has a colourful and rich history of repeated invasions alongside the dissemination around the world as a result of pioneering voyages, colonial developments, trade and economic growth. This, supplemented by the current influence of the media, travel, politics and commerce will enable English to continue to spread, change and evolve in the future. English in its present form is believed to be spoken by approximately seven-hundred and fifty million people, with around three-hundred and twenty-nine million of those speaking it as their first language (Crystal, 2003:109).

The focus of this thesis is to explore the differences in pronunciation between five major varieties of English; British, American, Australian, New Zealand and South African. This will be achieved through an examination of the salient phonological differences between these World Englishes and consequently make predictions about relevant future developments. Crystal (1997) cited in Schneider, E. W (2007:1) explains:

“the role of English as the leading world language [is] through a series of subsequent but rather co-incidental processes: English happened to be the language of the British Empire and colonial expansion between the seventeenth century and nineteenth century, of the industrial revolution thereafter, and in the twentieth century of the USA as the leading economic and military superpower and the main agent of today’s economic and cultural globalisation”

Crystal (1997) cited in Schneider, E. W (2007:1)

The history of the British Empire and in turn the English language is one of repeated invasions. Following the withdrawal of the Romans from what is now known as Britain, in the 5th Century AD, the country was fighting a fierce war with the Scots and the Picts, which was then followed by invasions from the Jutes, Angles and Saxons. The country was then subjected to a Viking invasion and settlement in the 8th Century and a Norman French invasion and settlement in the 11th Century. Following this, the English language developed throughout the Middle English (1066 - 1470 AD), Early Modern (1500 - 1800 AD) and Modern English (1800 AD - Present) periods creating the language that is present today. The result of pioneering voyages and settlements saw the language begin to spread around the world from the 17th Century, beginning with America, Australia, New Zealand, South Africa and so on. It is only with an understanding of this history that we can begin to understand the development of the English language as it stands today.

1.2 - The Need for the Study

The focus on the five varieties of English; British, American, Australian, New Zealand and South African is as a result of their close connections with one another. They are all well-established varieties of English and with the exception of British English have similar historical backgrounds, being the linguistic outcomes of colonies settled between 1580 and 1820, penal or otherwise. From British English the other four varieties were derived through colonial expansion within a period of two hundred and fifty years. These colonial varieties have deviated quite dramatically from the pronunciation of their ancestor over the past four hundred years and from amongst themselves through close contact with both indigenous and immigrant languages and dialects since their settlements. Leith (1996) in Graddol et al. (1996:181) explains that;

“there was no single, universal colonial experience. Each colony provided a unique context politically, socially and linguistically. Never-the-less, it is possible to discern a common sequence of

events in many of those colonies where English emerged as a main language: first and original settlement by English speakers; secondly, political incorporation; thirdly, a nationalist reaction which sometimes, but not always led to independence.'

Leith (1996) in Graddol et al., (eds.) (1996:181)

Leith (1996) in Graddol et al. (1996) emphasises the importance of realising that each colony will have had an individual experience regarding its linguistic development. However, at the same time they suggest that it is likely that each colony went through similar stages of development, beginning with the original settlement. They are exploring the notion that the colonials and immigrants would have perhaps initially strived to retain their roots of British English, but social and political developments may have created a nationalist reaction encouraging the settlers to accept their own pronunciation. An example of this is in Australia where many of the convicts felt that they were 'abandoned' by England. As a result they encouraged the notion of creating a different lifestyle and in turn speech, to that of Britain through the natural evolution of the amalgamation of various dialects.

Another decision affecting the inclusion of these varieties was determined by the classification of the English language according to geopolitical models. The three main models that fall within this category were proposed by Kachru (1982), McArthur (1988) and Görlach (1988). In Kachru's (1982) work entitled 'Concentric Circles of World Englishes', he suggested that varieties of World Englishes could be classified into the 'Concentric Circles' of World Englishes, (Figure 1):

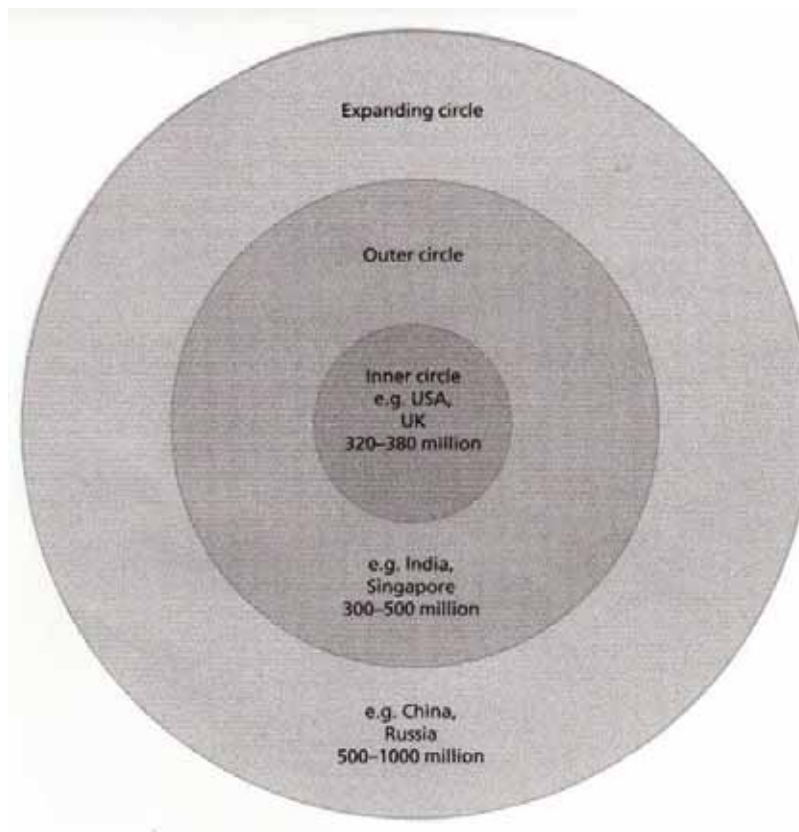


Figure 1
'Concentric Circles of World Englishes'
Cited in Crystal (2003:107)

The 'Inner Circle' refers to the traditional bases of English, where it is used as the primary language, for example the United Kingdom, the United States of America, Australia, Canada et cetera. The 'Outer Circle' is the term used to describe the countries where it has become used within institutions and plays a significant role as a second language' for example, India, Singapore and Malawi. The third, the 'Expanding Circle' refers to nations that recognise the importance of English as an international language, but do not have any history of colonisation by members of the 'Inner Circle' and do not give particular special status to the language either. Examples of 'Expanding Circle' countries include China, Greece and Israel.

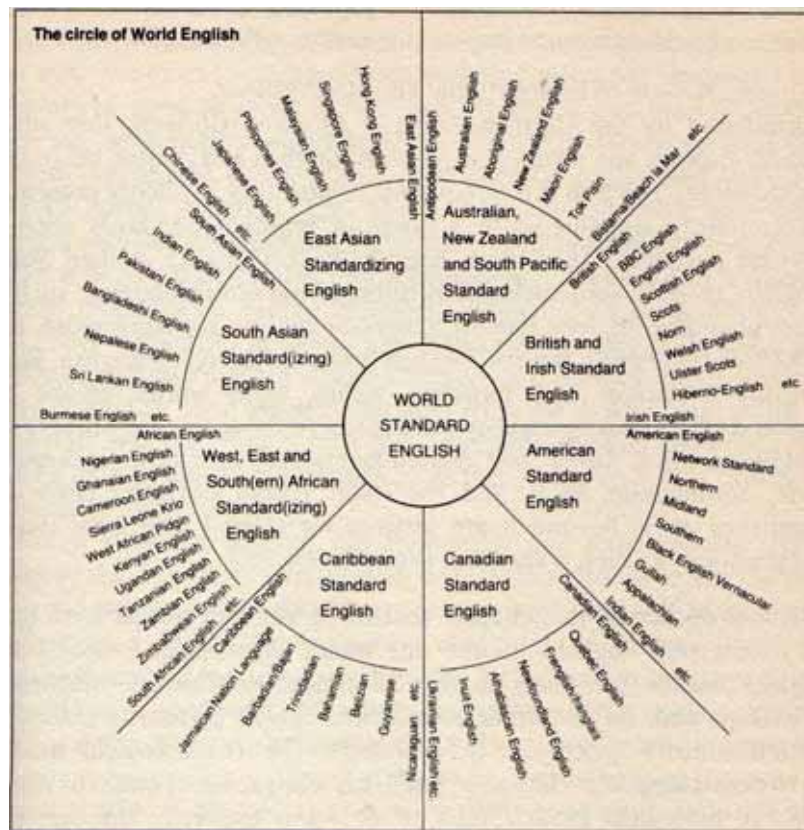


Figure 2
 'Circle of World English'
 Cited in McArthur (1998:97)

Alongside Kachru's (1982) 'Concentric Circles' is McArthur's (1988) 'Circle of World English,' (Figure 2) in which the hub is called 'World Standard English'. From that in an encircling band are examples of regional varieties, for example, American and Canadian English. From these regions are sections highlighting the region's sub-varieties, such as Aboriginal English and Singapore English.

respective countries. Secondly, British English is the parent language of all the other Englishes explored in this thesis, the Empire having transported English to the various countries through colonial expansion. Finally, because with the exception of British English, the varieties all share similar historical developmental paths, all transported to new countries, speakers were all faced with unusual surroundings and native languages which led to a series of changes and adaptations.

1.3 - The Purpose of the Study

It is interesting to document the ever-changing state of the English language, both to have a record of it and to provide a basis for comparison for future researchers. The primary aim of this research is to establish the differences in pronunciation between the five varieties through comparison with British (Received Pronunciation or RP) and American (General American or GenAm). The research is directed towards discovering the likely future changes that may occur in the varieties. RP and GenAm are used for comparative purposes because they are seen as 'reference accents.' RP, also known as the Queen's English, is the standard accent within the British Isles. It is commonly known as educated English pronunciation and socially is a characteristic of the upper and upper-middle class (Wells, 1982a:117). General American is a term applied to approximately two-thirds of the American population who do not speak with recognisably local accents (Wells, 1982a). It is unknown how many different accents there are in both Britain and America at the moment, due to constant evolution and a lack of fixed boundaries. As a result of this it would be difficult to compare all of these accents with Australian, New Zealand and South African English, so the use of the 'reference accents' is to provide a comparison with the 'standard' pronunciation of these varieties.

1.4 - Research Questions

The research is concerned with two questions:

- 1) What differences are there among British, American, Australian, New Zealand and South African English pronunciation? Are these differences consistent?
- 2) If the differences are consistent, do they provide evidence as to the likely future changes in pronunciation for these varieties?

1.5 - Limitations

As with any research project, it is essential to document any limitations that constrain the research. The main limitation of this research is the restricted scope, as all the participants reside within Australia. The study would inevitably have yielded different results had it been conducted within the respective countries of the English varieties. The research reports a small scale study with only eight participants from each of the five documented World Englishes. Consequently the results only represent a small sample of the population, demonstrating a vast age range within the eight participants in each case. The study is also limited due to the time frame, alongside the limited funds available to the researcher as it is only a pilot project.

1.6 - Overview of the Chapters

Chapter 2 explores the historical background of each of the varieties of English, beginning with the influences on, invasions of and changes to British English. It will then trace the external history of each variety; the external history is the history of the speakers, focusing on wars, migration, commerce et cetera. This is in an attempt to gain a fuller understanding of each of the varieties in the study, and to describe their development to the present day.

Chapter 3 aims to establish the direction in which the English language varieties are heading, through the exploration of the relevant literature in the field. Three main hypotheses associated with the future of World Englishes are proffered; the first proposing that the varieties are moving towards American pronunciation, the second suggesting that they are retaining their British roots, or the third proffering that they are each heading in completely different directions. The literature review explores a sample of relevant literature regarding the future of the English varieties, alongside previous studies on the pronunciation of these five varieties. Through the review process, each of the three theories is considered and following comparison with the research results shown here, explores the current situation of each of the varieties pronunciation of English.

In the second part of Chapter 3, the internal history of the English language will be explored; the internal history contains the linguistic changes within each language itself, comparing an inventory of the phonemes of each of the five varieties.

Chapter 4 outlines the methodological processes undertaken in the primary research of this thesis, alongside their rationale. It explores the research questions themselves, the research strategies employed; takes into consideration the ethical implications of the research, the procedure itself and the rationale behind the decisions made.

Chapter 5 presents the results of the primary research and provides a critical discussion, comparing the varieties in detail and considers these findings with the relevant literature.

Chapter 6 presents the conclusions of the research and indicates viable areas of future research.

Chapter 2 - The History of English

The focus of this thesis is on change and development. English is constantly changing and many of these changes are revealed in written records. We are fortunate that these changes have been documented, as it enables us to track the historical development of English throughout the ages. Algeo (2001:1) explains that “the history of a language is intimately related to the history of the community of its speakers, so neither can be studied without considering the other.” From this he explains that there are two types of history, the external and internal history of a language (Algeo, 2001, Leith, 1996). The external history is the history of the speakers of a variety, as history vastly determines the language they use. External history focuses on migration, wars, conquests, religion, commerce, recreations etc, in short every aspect of the speakers’ lives. On the other hand, internal history is the “series of changes in the inventory of linguistic units (vocabulary) and the system by which they are related (grammar),” Algeo (2001:1). With this notion in mind we will briefly explore the external history of the five varieties of English in this section, and then explore their internal histories in Section 3.2.

The history of the term ‘English’ dates back to the sixth century, when the term *Angli* (‘Angles’) was in use. As early as 601 AD King Æthelbert was known as *rex Anglorum* (‘King of the Angles’) and in the seventh century the Latin names *Angli* or *Anglia* were used to describe the country (Crystal 2003:7). From this usage Old Englishes *Engle* is derived, and the name of the language found in Old English texts is referred to as *Englisc* (the <sc> spelling pronounced /ʃ/). It is, however not until c. 1000 that references to the name *Englaland* (‘land of the Angles’) were made, from which *England* is derived.

2.1 - British English

Next we consider the four periods of the development of English and colonial development before addressing the subject of American English in Section 2.2

2.1.1 - The Old English Period

Crystal (2003:24) explains that the history of early English vocabulary is one of repeated invasions with newcomers to the island bringing their own language with them, and leaving a fair amount of it behind when they left, or were assimilated. The origins of British English date back to the fifth century, known as the 'Old English' period, when the remaining Celts, having survived the invasion of the Scots and the Picts, were experiencing the threat of more invasions from the Jutes, Angles and Saxons. Over a period of approximately 100 years the Anglo-Saxon settlements spread to all areas of Britain, with the exception of the highlands of the west and the north and by the end of the fifth century the foundation was established for the English language (Crystal, 2003; Leith, 1996).

Prior to the occupation of the Anglo-Saxons, the language in Britain was Celtic. Leith (1996:98) explains that "Modern Welsh and Gaelic [...] represent the two main branches of Celtic: Brythonic and Geidelic. At the time of the Anglo-Saxon invasions, Geidelic was restricted to Ireland and the Celtic language spoken throughout the mainland was Brythonic". Latin was introduced to Britain as a result of the Roman occupation between 43 BC and AD 410. Celtic language is believed to have had little influence upon Anglo-Saxon English, with the major contribution from Latin, which continued to have an important influence upon English right up until the eighteenth century, mainly through the church and the institutions of law, education and science (Leith, 1996). The literary age of English only began after the arrival of Roman missionaries, led by Augustine in AD 597 and the first texts, dating from around AD 700 are glossaries of Latin words translated into Old English. Many manuscripts were burnt and destroyed during the 8th Century Viking invasion. The Viking invasion which began in 787 AD, continued for approximately 200 years, with regular settlement beginning in the 9th Century. From this 'Old Norse' was introduced, which influenced the English language through the inclusion of Danish place names ('Linthorpe', 'Grimsby', 'Lowestoft') and Scandinavian personal names, ('Davidson', 'Jackson')

alongside a variety of other borrowings, including ‘Thursday,’ ‘awkward,’ ‘reindeer,’ ‘scowl,’ ‘catte’ (cat) and ‘cetel’ (kettle).

2.1.2 - The Middle English Period

1066 AD marked the beginning of a new social and linguistic era in Britain, known as ‘Middle English’, following the accession to the throne of William of Normandy who brought the influence of Norman French to the England and Wales. Pronunciation changed significantly during this period with the restructuring of the Old English vowel system, now known as ‘The Great Vowel Shift’. This shift was one of the most prominent pronunciation changes that occurred in the history of English. Circa 1500 AD (Fromkin et al., (2009:447) a systematic shift occurred that affected the long vowels of English, in which they became ‘closer’ in articulation, moving higher and further forward and those that were already ‘close’ became diphthongs. For example, Old English’s /ɑ:/ moved higher in the back of the mouth, demonstrated by spelling changes which saw ‘ban’ become ‘bon’ as in ‘bone’ and the diphthongs /oɪ/ and /uɪ/ (ancestors for the modern /ɔɪ/ of ‘joy’) were introduced into the language as a result of Norman French loan words. Additional changes included the Middle English vowel /u:/ that is now pronounced in ‘food’ previously being pronounced in a word like ‘cow,’ as well as /i:/ which is pronounced in ‘team’ previously being pronounced in ‘blind’ (Wright, 1996:273).

Table 1, illustrates the differences between the vowel sounds of Middle English, Early Modern English and Present Day English:

	Middle English (c. 1100 - 1450)	Early Modern English (c. 1450 - 1600)	Present Day English
blind	i:	əi	ai
sweet	e:	i:	i:
clean	ɛ:	e:	i:
stone	ɔ:	o:	əʊ
name	a:	ɛ:	eɪ
moon	o:	u:	u:
cow	u:	əu	aʊ

Table 1

Vowel Sound Development from Middle to Present Day English
Graddol et al. (1996:272) adapted from Gimson (1989:82)

The changes are believed to have occurred in a chain reaction formation, beginning with the vowels in Middle English ‘sweet’ /e:/ and ‘moon’ /o:/ and developing onwards from there. Crystal (2003:55) supports the notion that these changes were connected, explaining that a move in one of the vowels caused a move in another and so on throughout the system, however he claims that it is disputed as to which vowel sounds moved first. Crystal (2003:55) postulates two theories for the changes: the ‘pull chain’ that suggests /i/ was first to move, becoming a diphthong, leaving space for the next vowel to move to ‘pulling’ the others upwards in a chain reaction; the ‘push chain’ hypothesises that /a:/ was the first to move further forwards ‘pushing’ the other vowels and beginning an alternate chain reaction. Vowel sounds were likely to have initially changed only in certain words, however, over time were spread throughout the language, through a process of lexical diffusion. They also were likely to have developed at contrasting rates in different parts of the country, giving rise to the northern and southern division in British accents. Figure 4 represents the shift in the seven long vowels and the hypothesised ‘Pull Chain’ and ‘Push Chain’ cited by Crystal (2003:55):

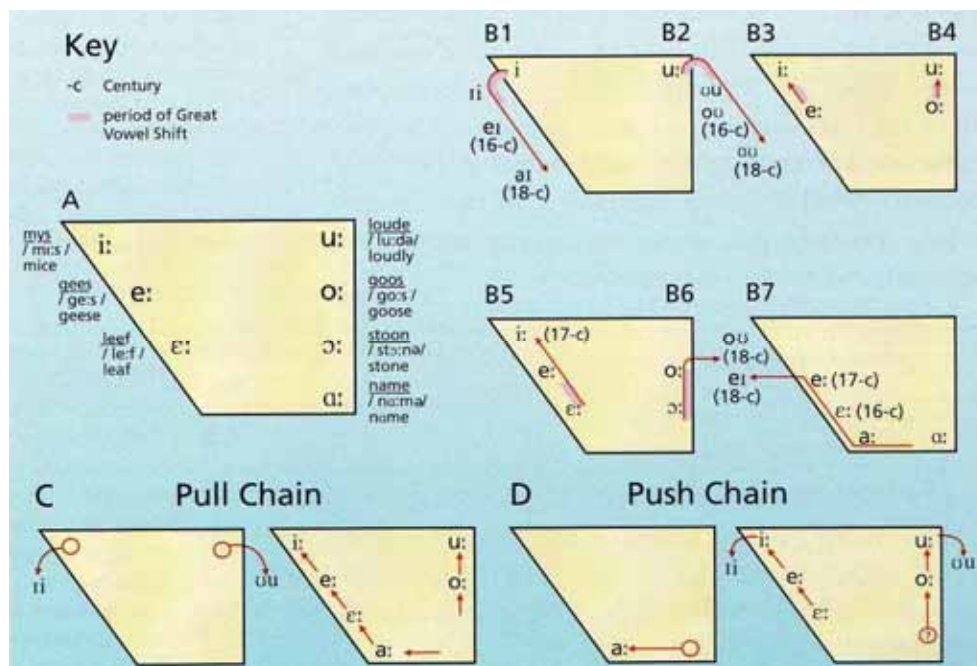


Figure 4
Shift of the Seven Long Vowels
Crystal, (2003:55)

In addition to the changes in vowel articulation, changes began to occur in consonant production. In Old English [h] that had previously appeared in the initial position of some words, for example ‘hring’ (ring) and ‘hnecca’ (neck); however this usage was lost in the early part of the Middle English period demonstrating the first signs of the process of /h/-dropping. The /v/ sound began to emerge in the English language as a result of its regular use in French loan words in this period, alongside the introduction of contrastive phonemes such as /f/ and /v/, /s/ and /z/, as well as /ŋ/ in word final position, which began to distinguish word meanings e.g. ‘thing’ vs. ‘thin’.

2.1.3 - The Early Modern English Period

The ‘Early Modern English’ period then followed, housing another significant milestone in the development of English, the invention of the printing press. In 1476, William Caxton set up his printing press in Westminster, beginning the formation of a standard written language; in the 150 years that followed

nearly 20,000 books were created. (Crystal, 2003:56). Crystal (2003:69) explains that dramatists of their time provide an insight into pronunciation of this time, exemplified by their character's speech, immortalised in writing. He cites from Shakespeare's 'Love's Labour's Lost' (V.i.15)

"I abhor such fanatical phantasimes, such insociable and point-devise companions; such rackers of orthography, as to speak 'dout' fine, when he should say 'doubt'; 'det' which he should pronounce 'debt' - d,e,b,t, not d,e,t. He clepeth [calls] a calf 'cauf,' half 'hauf'; neighbour vocatur [is called] 'nebour'; neigh abbreviated 'ne,' this is abhominable - which he would call 'abbominable'.

Shakespeare, W., in Kerrigan, J. (ed.) (1982)

Shakespeare voices his concerns regarding the pronunciation of the time in relation to the spelling through the voice of his characters. Crystal (2003) suggests that there were evidently two styles of pronunciation present during the late 16th Century, the more conservative one, mentioned previously by Shakespeare, reflected spelling and was preferred by the educated. During this period some of the major pronunciation changes occurred that prefigured present day English. The distinction between RP /ʌ/ (cut, son, run) and /ʊ/ (put, pull, wolf) developed in the 17th Century, where previously both types of words had the high, back rounded /ʊ/ vowel. This led to the new phonemic distinction shown in the emergence of the contrasting pairs e.g. 'luck' /ʌ/ and 'look' /ʊ/. This period was also believed to be rhotic, with /r/ pronounced both in the word-initial and word-final positions. However, during the 18th Century final /r/ began to be dropped with effects on the preceding vowel, sometimes lengthening the vowel or causing the vowel to become a diphthong. Two new consonants emerged, with /ŋ/ being recognised as a single contrastive unit after final [-g] was dropped in words. It had previously been pronounced, but had always been followed by [g] or [k] and thus never

had any independent status. The /z/ also emerged in the 17th Century, a development of /zj/ appearing in the middle of words such as 'measure' and 'garage'. During this period many of the words used today were produced with different stress patterns, seeing words such as 'antique, 'convenient and 'distinct all placing stress on the first syllable, ad'vertise, cha'racter and de'monstrate placing stress on the second syllable and as'pect, ex'pert and pa'rent seeing the stress on the final syllable.

Following this, during the 18th Century, English lost most of its noticeable remaining features of Early Modern English and with a few exceptions the language is very similar to what it is today, thus moving into a Modern English period of the English language.

2.1.4 - Colonial Expansion

Finegan (2006:385) explains that "we can infer a good deal about colonial English from what is known of English in Britain in the 1600s and 1700s, [...] by the ordinary forces of language evolution the English spoken by the disembarking colonists began immediately to differentiate itself from the English they had spoken in Britain." With the knowledge of the history of British English, we are now able to explore the branches of English as a result of colonisation. Walker Read (2002) cited in Bailey, (ed.) (2002) explains that the notion of branches is apt for describing the relationship of the different forms of English, in that they are all valid forms of communication, resulting from a colonial relationship that develops into 'self-respect' for each individual branch. American, Australian, New Zealand and South African English are all branches that stem from the same root, British English. With this in mind, next we will begin to explore the external and internal history of each of these varieties of English, in an attempt to understand their development.

2.2 - American English

The history of American English began in 1584 when an expedition was commissioned by Sir Walter Raleigh to the 'New World'. The voyage landed near Roanoke Island, in present day North Carolina and established a small settlement. However the expedition failed as a result of conflict with the natives and some colonists returned to England for help and more supplies. A second expedition set sail in 1590 and when they returned to America, none of the original settlers could be found. The first permanent settlement dates back to 1607, when an expedition arrived in Chesapeake Bay and settled, calling its settlement Jamestown (after James I), in Virginia (after the 'Virgin Queen' Elizabeth) (Crystal, 2003:92). This settlement was soon followed by more along the coast and nearby islands. In November 1620 the first group of English Puritans arrived on board a ship known as the Mayflower. The ship was bound for Virginia but hit bad weather and drifted north, so instead established a settlement at Cape Cod Bay, (now Plymouth, Massachusetts), (see Figure 5). Before disembarking, all of the men signed a document drafted by the leaders of the enterprise, promising obedience to its laws and ordinances. This was known as the 'Mayflower Compact' and was seen as the first real effort to establish a formal self-government in the New World (Svartvik and Leech, 2006:75).

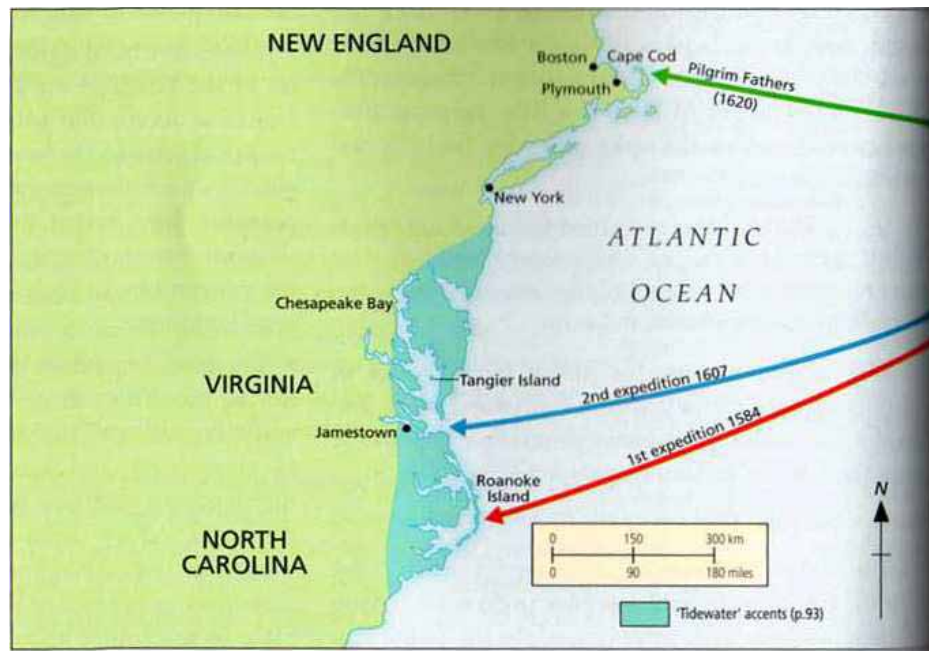


Figure 5

Early English-speaking settlement areas in America.

Cited in Crystal (2003:92)

The settlers' first winter in Plymouth was harsh and by April 1621, when the Mayflower set sail back to England, only 54 people were still alive. However, things began to improve and after the first harvest of 1621, Governor Bradford proclaimed a day of thanksgiving and prayer shared by all the colonists, and the neighbouring native population. Over the first twenty years, approximately 15,000 new immigrants arrived, proving the colony a huge success. Discontented settlers, who disliked the religious and political inflexibility of Massachusetts, began to move out of the colony into neighbouring areas, such as present day Connecticut and Rhode Island.

Previously in 1619, a Dutch ship called at Jamestown and sold some 20 black Africans to the colonists. There was a need for cheap labour on the plantations where tobacco, sugar, and later cotton were grown. The trade grew fast, serving not only the British colonies, but also other European powers in the New World. By 1681 there were around 2,000 slaves in Virginia and by the mid 19th Century the slave population in America had risen to more than 4 million.

Svartvik and Leech (2006) propose that the settling of the United States with immigrants falls into three periods, corresponding to political and social events of important consequence for the English Language. The first is the 'Colonial Period' that began from the settlement in Jamestown in 1607 through to the end of the colonial times, around 1790 when the last of the colonies ratified the constitution as the first census was taken. The second period, known as the 'National Expansion Period' extends from 1790 until 1865. In this period, the expansion of the original thirteen states occurred, with settlements spreading into the south and later to what was known as the Old Northwest Territory. The later part of this period saw a large influx of migrants from Ireland, Scotland and Germany. The 'Third Period' runs from the end of the American Civil War in 1865 to 1929, when the immigration laws were changed. During the first two periods the vast majority of immigrants were slaves from Africa or free settlers from the British Isles and Northern Europe and in the third period, especially after 1890, a large percentage, almost 75% of immigrants came from Southern and Eastern Europe. Throughout the seventeenth century, ships from Europe arrived with immigrants, many Quakers from the Midlands and Northern England settled in Philadelphia and other parts of Pennsylvania. Early in the eighteenth century there was a large influx of German immigrants, who settled mainly in the farmlands between Philadelphia and the Blue Mountains, an area which was later known as the 'Pennsylvania Dutch Country.' At the start of the 1720's, a large number of Scottish-Irish immigrants arrived in Philadelphia and by 1760 it was estimated that the city was one third English, one third Scottish-Irish and one third German. In 1776, the Continental Congress adopted the Declaration of Independence, in which the original thirteen states declared themselves independent. This was as a result of a series of new taxes being imposed by Britain and the split between the mother country and America became more irreconcilable. At this time around 10% of all Americans were thought to be Scottish-Irish and a census taken in 1790 showed the ex-colonial population of America had grown to around 4 million people. Many Americans believed that America should split with Britain in language as well; however it

was decided that it would be more convenient to keep the English language, but there was a general notion that:

“English in America should be ‘improved and perfected’ and given its own identity.”

Svartvik and Leech (2006:84-85)

In 1848, gold was found in California, sparking major movement west in the hope of discovering riches. In 1825 the opening of an inland waterway, the Erie Canal, led to New York becoming the port of entry for the largest migration in history. The waterway led to the movement westward of American settlers, giving them access to rich land and resources of the west, as well as making New York the “pre-eminent commercial city in the United States”, (Svartvik and Leech, 2006:89). Between 1865 and 1920 more than five million Italians arrived in the United States and between 1880 and 1910 a large number of Eastern European Jews, mainly from Poland and Russia arrived. Many settled in the Lower East Side of Manhattan and some moved into the entertainment business, creating the Hollywood Studios.

2.3 - Australian English

In 1768 Lieutenant Cook was sent on a scientific expedition from England to the pacific region to observe the transit of the planet Venus across the Sun. He accomplished his mission and found a then unknown southern continent, Australia, which he navigated the coast of and claimed the land for Great Britain, under the name of New South Wales. In 1788, after an eight month voyage from Portsmouth, eleven British ships anchored at Botany Bay on the East Coast of Australia. The ships, known as the ‘First Fleet’ contained a combination of convicts, marines and civilians. Arthur Philip, the captain of the First Fleet and first Governor of New South Wales, found the bay an unsuitable landing site and continued on to Port Jackson (now Sydney Harbour) anchoring there on the 26th January 1788, later known as Australia Day. The

eleven ships carried over 1,000 men and women, three quarters of whom were convicts being transported to a penal colony of New South Wales to serve a seven year term of hard labour. Over the next eighty years more than 160,000 convicts were sent to Australia. The discovery of gold in Australia in 1851 accelerated immigration and ten years later the Australian settler population had reached almost 1.2 million. The first large scale non-British/non-Irish immigration did not occur until after the Second World War. Since 1967 Australia has re-orientated itself from being the British base in the southern hemisphere to a being multi-cultural country.

2.4 - New Zealand English

The Maori population had been living in New Zealand (or Aotearoa) for at least 600 years before the arrival of settlers from the Northern Hemisphere. In 1769, before arriving in Australia, James Cook had navigated the coast of New Zealand and claimed it for the British Crown. In the beginning New Zealand was a lawless and ungoverned settlement of the New South Wales colony in Australia with approximately 2,000 Europeans living there in 1839 (Hay et al. 2008:4). Initially the British Government was reluctant to add it to its colonial possessions, but in 1840 Captain Hobson was sent to negotiate a treaty with the Maori. That year the 'Treaty of Waitangi' was signed between the Maori chiefs and representatives of the British crown, marking the beginning of the British Sovereignty over New Zealand. Unlike Australia, New Zealand was never a penal colony and in the early days (1840-50) the majority of the settlers came from a higher social strata or rural areas of Britain. The regular contact between the Maori and Europeans had a devastating effect upon the Maoris, resulting in thousands being killed or enslaved through tribal warfare or European disease. Fifty years after the 'Treaty of Waitangi' was signed, the Maori population had dropped to 46,000, which was a reduction of approximately 50%; this led to fears that it was becoming a dying race.

The arrival of Europeans in New Zealand can be divided into three waves (Hay et al. 2008:5). The first saw immigrants arriving through the privately owned 'New Zealand Company,' which was formed in 1839 by Edward Gibbon Wakefield, to promote the 'systematic' colonisation of New Zealand. This saw five separate 'planned' colonies being set up along the coastline, in Wellington, Nelson, New Plymouth, Otago and Canterbury, in which the intention was to have a "vertical slice of British Society with the top and bottom layers removed" Hay et al. (2008:5). Auckland, an unplanned settlement, was important in the early years of New Zealand's history, functioning as the seat of government. The second wave came after 1861 when gold was found in Otago. This ruined any intentions of 'planned settlements.' The Irish who had previously been excluded from the settlements arrived in force, alongside Chinese miners, who were New Zealand's first significant group of non-European settlers. The 1860's saw the emergence of conflicts between certain Maori tribes and Europeans, over land disputes on the North Island. These became known as the 'New Zealand Wars,' which saw more than 10,000 British imperial troops arriving in New Zealand alongside 2,000 Australians and 10,000 locally recruited soldiers. The third wave occurred in the 1870s with the population of New Zealand doubling due to the development of a policy of assisted immigration. Over 100,000 settlers arrived through this scheme, despite the journey taking between three and six months. More and more land was made available to European settlers and in the 1870s and 1880s country towns were linked by railways making parts of the country more accessible. At the beginning of the twentieth century New Zealand began to develop a sense of identity declining of an offer to join the Australian Federation and changing its status from a 'colony' of Great Britain to a self governing 'dominion.'

New Zealand's population reached 4 million in 2003 and the country is now very ethnically diverse in comparison with 150 years ago. New Zealanders are of mainly European ethnicity, at about 79%, followed by Maoris, at 14.1% and Asians at 6.6%.

2.5 - South African English

In 1652 the 'Dutch East India Trading Company' set up a permanent post at the Cape of Good Hope and brought the Dutch Language to the southern tip of Africa. The English language had its beginnings in South Africa around 150 years later when Britain bought the Cape from the Dutch. English really began to take root from 1820 with the first organised immigration of British settlers to the Eastern Cape, the majority coming from rural south-east England (Bowerman, 2004). In the mid-1800s a second, large group of English speaking immigrants arrived and settled in Natal, just beyond the borders of the Cape. They were different from the first group of British settlers, in that they represented higher social strata and came from further north, more often from regions like Lancashire and Yorkshire. They had little contact with the Dutch settlers and no conflicts with the indigenous communities (Bowerman, 2004). In the 1860s the British settlers in Natal began to import Indian labourers to work on their plantations, bringing a new aspect of language to South Africa and in the 1870s the discovery of valuable minerals led to drastic changes both economically and socially. This discovery sped up immigration from Britain and in the last quarter of the century more than 400,000 immigrants arrived in South Africa. From 1899 to 1902, Great Britain and two Afrikaner (Boer) Republics; (the South Africa Republic (Transvaal) and the Orange Free State) fought the Boer War. The Boer's eventually lost the war and their independence; however, they retained their language and culture. In 1910, Britain unexpectedly gave South Africa independent dominion status. After the First World War, South Africa was dominated politically by the Afrikaners, whose history made them unfavourably disposed towards anything British. However, they realised it was valuable to maintain constitutional connections with Britain and kept their membership of the British Commonwealth of Nations until 1961, when the dominion became a republic. From 1948 until 1994, South Africa was racially segregated under a system known as the 'apartheid,' Afrikaans for 'separateness'. In the early 1990s negotiations began between the governing nationalist party and the previously illegal ANC (African Nation Congress) and as a result in 1994 the

first free elections were held. The ANC won and Nelson Mandela, an international symbol of resistance to apartheid during his long years of imprisonment became the first black President of the Republic of South Africa.

Having outlined the development of the English Language and the role of colonisation we next turn to the literature on the topic of the English varieties.

Chapter 3 - Literature Review

3.1 - Previous Research

This study responds to a number of recommendations in the literature for up-to-date comparative research on the World Englishes. Kuiper (2003:31), in an article in *English Today*, suggested that a definitive study of World Englishes would be valuable, especially with a focus on the contrast between the English of the UK and America, alongside Australia, New Zealand and South Africa. Kuiper (2003:32) further suggested that a number of MA and PhD theses would be an appropriate approach to this kind of comparative research. This idea is further supported by Taylor (2001) cited in Blair and Collins (eds.) (2001:317), who explains the need for more research comparing Australian English with other Englishes, exploring both the influences from and influences on Australian English.

Within this thesis the differences in pronunciation between the five major varieties of English - British (or BrE), American (or AmE), Australian (or AusE), New Zealand (or NZE) and South African (or SAfE) are explored, in an attempt to discover potential future changes that may occur in the varieties. The research reported in this chapter deals with specific aspects of pronunciation, namely vowel and consonant production and suprasegmental features such as word stress. This focus is narrower than the aspects suggested by Kuiper (2003) and Taylor (2001). Through comparison of the varieties, the research aims to identify whether the cited specific varieties are retaining their British roots, moving towards American pronunciation, or heading towards mutual unintelligibility. Research in this area enables us to formulate three main alternative hypotheses:

- 1) Americanisation: Research suggests that with the economic influence of the United States of America, Americanisation is occurring within all varieties of English, both in lexis and pronunciation. The USA's

influence is believed to be in its infancy at present but will build momentum, eventually engulfing the varieties of English.

- 2) The Retention of British English Roots: American, Australian, New Zealand and South African English all derive from British English as a result of colonisation and some researchers suggest that the varieties have retained their roots in British English. This hypothesis suggests that either the varieties have only progressed with changes similar to those that have occurred in British English, with little evidence of differences between the varieties and British English, or that there has been a push to return to the British pronunciation in an attempt to prevent infiltration of other external influences.
- 3) Diversification. Research has suggested that the varieties of English may eventually diversify so much that they will follow in the path of Chinese, and become a written language system of mutually unintelligible dialects, or the fate of Latin, and split into different languages altogether.

Through the examination of the previous research the aim is to identify the current viewpoint on this matter from various leading researchers. Each of these hypotheses is examined next.

3.1.1 - The Americanisation of the English Language

The notion of the Americanisation of English has developed over the past century as a result of the influence of the United States of America in domains such as economic power, trade, travel and the media. The concept of Americanisation has provoked both negative and positive comment, dividing researchers. Some suggest the influence of AmE is necessary for the development of the language and others indicate that it is destroying the English language. Leading scholars in this field include Svartvik and Leech (2006) (World Englishes), Taylor (2001) (Influences upon World Englishes), Bell

(1998) (English and the Media), Peters (1998) (Americanisation of Australia), McArthur (1996) (World Englishes) and Sussex (1989) (Americanisation and the Media). Svartvik and Leech's (2006:230) extensive exploration of the two varieties, through historical, orthographic, phonological, lexical and suprasegmental analysis suggests that America has a significant impact upon the youth of today, through the promotion of television series', movies, computer games and music. This idea is supported by Bell (1998), whose analysis of early media details the initial introduction of television and the programmes transmitted to Australia:

"Looking back to the first two decades of Australian television, however, one finds little evidence for a distinctive, local voice. American programs and formats dominated commercial channels."

(Bell, 1998:194)

Sussex's (1989:163) chapter in Collins and Blair (1989) provides statistical results relating to the percentage of North American English (NAmE) in Australian and British television advertising. Sussex's (1977) study was organised along three parameters: elapsed transmission time, types (the number of different advertisements) and tokens (the total number of advertisements, whether repeats or not). The data analysed was based on seven hours of taped advertisements from three of Melbourne's commercial television stations and two hours from Thames Television and London Weekend in Britain. A pilot study was conducted in Britain and Australia prior to their study to explore the pronunciation differences between North American which provided no noticeable differences. Advertisements were judged to contain NAmE if more than half of the linguistic material was presented in this accent, whether genuine or imitated. Some advertisements contained mixed linguistic types, explaining why the percentages in the columns exceed 100%.

	Time	Type	Token
Australia			
North American	30%	29%	35%
Broad Australian	24%	34%	39%
Other	48%	39%	39%
	Time	Type	Token
Britain			
North American	11%	9%	11%
Regional UK	14%	17%	14%
Educated UK	76%	75%	77%

Table 2

Research Results provided by Sussex (1989)

Adapted from Sussex (1989) in Blair and Collins (1989:163)

The results were checked against a number of factors which may have influenced the decision to present the advertisement in NAmE. It was also noted that these advertisements were recorded in the run-up to a general election, which may have provided additional Australian English pronunciation in advertisements. 35% of advertisements in the seven hour period in Australia contained NAmE, in comparison to 39% presented in Broad Australian and 30% of the seven hours (approx. 2.1 hours) contained advertisements that consisted of NAmE pronunciation in comparison to 24% of the seven hours (approx. 1.6 hours) containing Broad Australian. This demonstrates a significant amount of advertising presented with NAmE pronunciation. The study provides an interesting exploration of the direct influence upon Australians; however it is important to remember that this analysis was completed thirty years ago. Sussex (1989) does however suggest that American television shows have become such a part of everyday life that the speakers are not necessarily identifying its influence upon them, and explains that “American television and cinema had a long history of influence in Australia”, Sussex (1989:160).

McArthur's (1996) impressionistic article relates the dominance of AmE to the size and influence of its population, economy, technology and media when compared to other English speaking countries. Crystal (2006:426) adds to this by stating that as the United States' economy grew, so did its population, rapidly overtaking that of Britain and adding greatly to the number of World English speakers, thus suggesting that the dominance of America over the kind of English spoken is natural and to be expected.

These scholars however do not suggest that the AmE influence is having a particularly negative or positive effect upon our language. Taylor's (2001) chapter in Blair and Collins (eds.) (2001:317) provides a survey of the scholarly literature in relation to AusE's interaction with other Englishes. He demonstrates the influence of America on English being felt all around the world when he cites a letter written to the *Sydney Morning Herald* in 1996 by Margaret Groves complaining of how her children had traces of American accents and how she was "sick of reading Australian magazines with American spelling", (Taylor, 2001:317). This feeling is confirmed in an impressionistic article written by Harvey (2008) in the Australian *Daily Telegraph* (04/07/08) stating that the pronunciation, grammar, spelling and vocabulary of young Australians is being Americanised. This is especially noticeable in the intonation of words, seeing emphasis placed upon the first syllable of a word, as in /'læbrə,tɔri/ in comparison to RP /lə'bɒrətɹi/. In contrast, Svartvik and Leech's study (2006:164-166) provides evidence that suggests that Americans also place primary word stress on the second syllable, for example in words loaned from French such as 'ballet' /bæ'leɪ/ and 'café' /kə'feɪ/, as well as data that demonstrates RP's primary word stress placement in the initial position:

"In some polysyllabic words there is variation in the placing of the main stress. In G[en]A[m] there is usually only one option, but in RP the 'American' pronunciation co-exists with a 'British' pronunciation:"

MAINLY AME	BRE ONLY	MAINLY AME	BRE ONLY
<u>applicable</u>	<u>applicable</u>	fragmentary	<u>fragmentary</u>
<u>aristocrat</u>	<u>aristocrat</u>	<u>hospitable</u>	<u>hospitable</u>
<u>controversy</u>	<u>controversy</u>	<u>premature</u>	<u>premature</u>

Svartvik and Leech (2006:165)

This area will be discussed further in Chapter 5. Taylor (2001) considers that Americanisation is facilitated by the language usage of younger speakers. Young people tend to be highly influential with regards to the development of a language, as their learning process of a language is influenced by older generations and their peers. Additionally, they are the future of a language, therefore if a generation acquires a specific saying, or pronunciation then they will be likely to pass it on to their children, beginning a change in that language. Even as early as the 1960s Baker's (1969:400) overview of Australian English noted that "our juveniles have become highly susceptible to U.S. linguistic influences."

Svartvik and Leech (2006:230) commented that the United Kingdom also appears to be aiding the 'Americanisation' of popular culture, through the promotion of movies, television series and computer games to youth both within the United Kingdom and internationally. Baker (1969:398) noted back in the 1960s that AmE was having a distinct influence on AusE speech; however, he said "... we need have no fear that we will not be able to survive the tide of Americanisms. Environment and geography are primary factors that keep our Australian English individual". Maley (1985:30) suggests that English speakers should be appreciative of America's use of the English language by explaining that after World War Two the British political empire was largely replaced by the American economic empire. Consequently, "the fate of the English language is inextricably bound up in the expansion of economic influence from the USA", (Maley, 1985:30).

3.1.2 - The Retention of British Roots

An alternative viewpoint is that the three non-reference varieties, AusE, NZE and SAfE are all retaining their roots in BrE. That is, to suggest that they are still displaying distinct characteristics of BrE pronunciation, as opposed to AmE. Harvey (2008) cited in the *Daily Telegraph* (05/10/08) suggests that AusE pronunciation is beginning to lose its broad and cultivated accents, and as a result is descending back to its roots, explaining that “within a few decades, the vast majority will speak with one standard accent, just as we did in the 19th century” (Harvey, 2008). Although this article is specifically about AusE, it highlights the way in which pronunciation can do a full circle and return to its roots. Research by Taylor’s (1989) earlier study in Collins and Blair (eds.) (1989:225) states:

“I have regarded not merely FL’s [foreign languages] and AmE [American English], but also BE [British English] including SEE [Standard English of England], as potential sources of foreign influence on AusE [Australian English].”

Taylor (1989) cited in Collins and Blair (eds.) (1989:225)

Taylor (1989) describes in his publication which focuses on AusE, that as well as AmE, BrE continues to influence AusE. This claim is supported by Hay et al. (2008) who demonstrate that there are both American and British influences upon NZE; however in New Zealand until recently the populace tried to resist the influence of Americanisms, not wanting to be associated with America, instead wanting to retain their cultural identity. Svartvik and Leech (2006) confirm this claim by detailing that historically New Zealand’s ties with Britain have been strong and before the 1970s young New Zealanders’ were encouraged to partially complete their education in England, as part of a working holiday. It was only for commercial and cultural reasons that after the 1970s New Zealand re-orientated itself towards Asia and the Pacific. This apparent resistance, alongside the letter noted by Taylor (2001) from

Margaret Groves (*SMH*, 1996) highlights the fact that people are conscious of the influence of AmE on their varieties. This is contrary to Sussex's (1989) claim, instead suggesting speakers are striving to retain their roots and individuality rather than conforming to and following American pronunciation.

With regard to the pronunciation of vowels and consonants, discussed in Section 3.2, Leitner's (2004:108) detailed phonetic analysis of AusE provides a comprehensive, in-depth exploration of contact linguistics. He postulates that "Australia's accent is firmly grounded in EngE [British English]" and he notes that Pilch (1971:25) "was struck by the high degree of isomorphism with RP", however this is not the case between GenAm and RP. (Leitner, 2004:108). It is also interesting to explore the perceptions of the speakers of the non-reference varieties, with most of the older generations disliking any association between their speech and the speech of America and favouring some influence of Britain. The younger generations appear to be indifferent, having been exposed to AmE pronunciation from an early age as a result of American media and not realising that the stress pattern or pronunciation of a vowel sound they use is American. This will be briefly explored in the primary research outlined in Chapter 4.

3.1.3 - The Latin Analogy

The third approach to the future of the English language is known as the 'Latin Analogy'. Research in this area is largely speculative, based upon the linguistic analysis of historical phonological or orthographic evidence. Dialect archaeology alone is by no means substantial evidence for predicting the future. However it would be impossible to examine the future of a language without referring to the changes that have occurred in the English language in the past. The hypothesis often referred to as 'Latin Analogy' suggests that English could eventually suffer the same fate as Latin. This suggests extensive diversification of the language in which it splits up into geographical dialects, which eventually become different languages, Svartvik and Leech, (2006:222); Crystal (2006); Bailey (1985); Maley (1985). Crystal (1999:56) cites the

statistics provided by the 1999 Summer Institute of Linguistics survey which established that there were fifty-one languages with only one speaker left, almost five hundred languages in the world with fewer than one hundred speakers and identified that ninety-six per cent of the world's languages are spoken by only four percent of the people. He concludes the paragraph commenting "no wonder so many are in danger" Crystal (1999:56). With this happening to so many languages it is easy to question if English is next. Bailey's (1985:5) article provides an earlier perspective on the notion of diversification and World Englishes, written before the recent major advancements in technology. He notes that as the concept of English as a world language was formed, scholars began to see a parallel to the previous European world language. "The subsequent history of Latin after the collapse of the Roman Empire suggested to some that English might split into variously related, but separate languages, just as Latin had developed into French, Spanish, Italian, Portuguese, and the other Romance Languages", (Bailey, 1985:5). We must however, take into account that times are very different to the period following the collapse of the Roman Empire around the fifth century. Crystal's (2006:432) survey analysis of information in the field addresses the same question. He asks if the 'multidialectism' is likely to become 'multilingualism' and continues to answer his question by explaining:

"the forces of the past fifty years, which have lead to so many new Englishes, suggest this outcome. If such significant change can be noticed within a relatively short period of time, must not these varieties become even more differentiated over the next century, so that we end up, as McArthur (1998) argues, with a family of languages.'

Crystal (2006:435)

Smith (1988) cited in Bolton and Kachru (eds.) (2006:68) provides an overview regarding the spread of World Englishes and the issues of intelligibility. He claims that there has never been a language in recorded history to match the

present global spread and use of English and with this spread comes a frequently voiced concern; the possibility of speakers of the different varieties becoming mutually unintelligible. Smith (1988) is very vocal about his stance on this subject:

“My response to such a statement is that for at least the last two hundred years there have been English-speaking people in some parts of the world who would have not been intelligible to other English-speaking people in other parts of the world. It is a natural phenomenon when a language becomes so widespread. It is not something that is “going to happen” but something that has happened already and will continue to occur.”

Smith (1988) cited in Bolton and Kachru (eds.) (2006:68)

Smith (1998) then continues to explain that he finds it unnecessary for all users of English to be intelligible to one another and that our speech and writing only need to be intelligible to those with whom we wish to communicate. Bailey (1985:5) disagrees with the concept implied by Smith (1988) by predicting that the ‘information revolution’ consisting of instant transmissions of English from one part of the world to another will serve to sustain the unity of the English language. Maley (1985:32) supports this claim by adding that now our opportunities for contact, as a result of growth in air transport and international tourism, alongside the formation of multi-national companies and agencies, the development of international journalism, radio and TV broadcasting all have a ‘cohesive force.’ Maley (1985:32) then postulates:

“What is perhaps more likely to happen is the development of a greater heterogeneity of Englishes. Internationally there will be a widely understood and used variety.”

Maley (1985:32)

This idea seems more plausible than complete mutual unintelligibility as a result of the continued contact between the varieties in the present day. Ilson (1985:11) provides a brief phonological, orthographic and lexical analysis of BrE and AmE before making conclusions regarding the future of the varieties. He suggests that speakers of the individual varieties of English might indeed support the idea of being different, by explaining that “the Americans and the British want to understand each other, but they also want to be recognisably different” (Ilson, 1985:11). This is not to the extent of mutual unintelligibility; however we must be aware that the idea of national identity in the language is not necessarily a negative concept. According to Crystal (2006:432):

“Language is an immensely democratising institution. To have learned a language is immediately to have rights in it. You may add to it, modify it, play with it, create in it, ignore bits of it, as you will. And it is just as likely that the course of the English language is going to be influenced by those who speak it as a count, in language as by those who speak it as a mother tongue.”

Crystal (2006:432)

Crystal (2006:435) suggests that with this in mind, the history of language has shown that fragmentation has been a frequent phenomenon (for example, Latin), however the history of a language is no longer a guide. Instead the ideas of particularity and identity could operate, but be counterbalanced by a pull imposed by the need of intelligibility, making the varieties increasingly similar.

The evidence could suggest, had the travel and the journalism sectors not become international, alongside the development of multi-national corporations, we could be facing a similar fate to Latin, however, for English, this is not the case. Alternatively, we can hypothesise that we may develop

an ‘International English,’ a form of a lingua-franca that is widely accepted as a tool for international communication, or alternatively we may find that with the rise of other Englishes, such as Singapore, Chinese and Indian Englishes as a result of economic development, that we may have a common written form (perhaps Standard English), accompanied by various mutually unintelligible spoken dialects of that written language. None of this disallows the possible development of a family of English languages in a sociolinguistic sense; however the idea of mutual intelligibility can not be the basis of such a notion, any more than it has been in relation to intra-national accents and dialects (Crystal, 2006:435). Crystal (1999:58) in an earlier publication also asks ‘is language death such a disaster?’ He explains that diversity holds such a central place in evolutionary theory because it enables a species to survive in different environments through adaptation, this too could be the case for language, in which language diversity, birth and death is essential for language development.

These hypotheses presented provide three differing views on the changes that have occurred and may occur within the English language. The formation of the three hypotheses is as a result of a culmination of both impressionistic and statistical data on the future of World Englishes. Hypotheses such as the ‘Latin Analogy’ can only be substantiated by impressionistic, or historical data as the analogy itself may not be realised for a significant period of time. Support for the British and American hypotheses can be attributed to the analysis of phoneme inventories for the varieties, accompanied by impressionistic sociolinguistic evidence (for example, speaker attitudes towards influences upon their varieties).

Having explored the literature associated with the three alternate hypotheses regarding the future of World Englishes we may locate the results reported in this thesis. It is, however essential to also explore the previous research on the specific vowel sounds of the five varieties. This will be addressed in Section 3.2.

3.2 - Phoneme Inventory

When exploring the differences among the pronunciation of World Englishes it is important to detail the contrasts through the use of phonetic transcription. A vast amount of research in the field has explored the pronunciation of the World Englishes. Given this wealth of knowledge, the primary research of this thesis will attempt to predict the direction of the varieties under discussion.

The research for this thesis compares British (RP), American (GenAm), Australian (GenAus), New Zealand (NZ) and South African (SAf) English pronunciation. Specifically, we explore the perceived standard pronunciations; General American, Received Pronunciation, General Australian, New Zealand English avoiding the Southland area of the South Island, and 'Conservative' or 'Respectable' South African English. We begin by noting any major differences between all the varieties, and will then compare AusE, NZE and SAfE with the reference accents of BrE and AmE. This exercise should yield some conclusions regarding the future of the five varieties of World English.

With this in mind, it is apt that two varieties are used as the reference varieties for our comparison. AmE, like AusE, NZE and SAfE is a descendant of BrE. However unlike AusE, NZE and SAfE, AmE has become a prominent variety of English in its own right, due to the global influence of the United States of America. Svartvik and Leech (2006) state that unlike spelling, which has been more or less standardised, pronunciation varies amongst the hundreds of millions of people who speak English as their first language.

This chapter critically surveys previous research on the pronunciation of the different varieties. It explores previous findings through the discussion of each vowel sound, as well as identifying any notable consonantal and suprasegmental features. This information will then be applied to the analysis of the participants' pronunciation.

3.2.1 - Vowels

Wells (1982a, 1982c) provides useful descriptions of the vowel sounds of each variety through the production of vowel charts, cited in Appendix 1. Using these charts as a base, in conjunction with more recent research we are able to gain an understanding of the differences between the pronunciations of the vowels in the different varieties. Gramley and Pätzold (1992:337) explain in their publication that “with vowels there is a clear difference in the number of phonemes available: RP has twenty, GenAm, sixteen. This may be credited to the fact that GenAm has no centring diphthongs.” Wells’ (1982a, 1982c) charts show that RP has nineteen vowel sounds, GenAm has sixteen, GenAus has nineteen, NZ has nineteen and SAf has twenty. Wells (1982a, 1982c) however, does not include the SCHWA [ə] as a vowel sound in RP, GenAm and GenAus, suggesting that this may be the reason behind the difference in the numbers in Gramley and Pätzold (1992) and Wells’ (1982a, 1982c) phoneme inventories.

3.2.1.1 - The KIT Vowel

The KIT vowel [ɪ] is produced as a close, unrounded, front vowel in Received Pronunciation (British); henceforth RP, General American; hereafter GenAm, Australian (GenAus) and South African English (SAf), whereas in New Zealand (NZ) it is produced in a close, unrounded central position represented as the SCHWA [ə], (Wells, 1982a, 1982c; Fromkin et al., 2007). Hay et al. (2008:23) explains that their study of the NZ KIT vowel shows it to be a mid-central vowel [ə] and that there is no audible difference between the KIT vowel and the neutral vowel SCHWA. Holmes and Bell (1990) cited in Cox and Palethorpe (2001:20) also note the KIT vowel in GenAus is beginning to bear some similarities to the SCHWA vowel of NZ English and is becoming more centralised, possibly as a result of close contact between the two countries. Hay et al. (2008:41) also explain that one of the most interesting findings of the ONZE Project was that very few NZ speakers born in the nineteenth

century used a centralised KIT vowel in comparison to the present day, with it beginning to emerge between 1910 and 1930. Figure 6 shows the change in position between the GenAus and NZ KIT vowel, demonstrating the NZ movement to the central position:

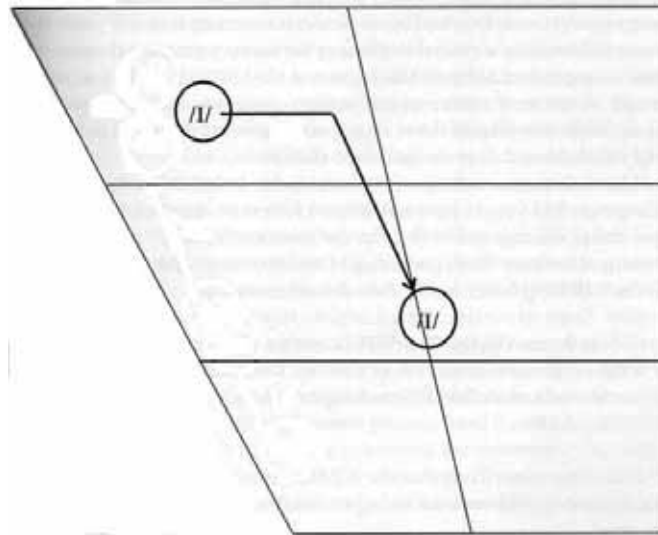


Figure 6
Movement of the NZ KIT vowel
Adapted from Hay et al. (2008:40)

Bowerman (2004) in Schneider et al. (eds.) (2004:936) adds that in some SAf speech there is an allophonic variation split between [ɪ] and [ə] for the KIT vowel, with the front vowel [ɪ] occurring in velar and palatal environments and the central [ə] occurring elsewhere.

3.2.1.2 - The DRESS Vowel

The DRESS vowel [e] is formed in the front, unrounded, close-mid position in RP, GenAus, and SAf English. GenAm produces the [ɛ] front, unrounded, open-mid position and NZ produces the [e] in the higher front, unrounded, close position (with a latter degree of diphthongisation) (Fromkin et al., 2007:405). Hay et al. (2008:24) mention that the DRESS vowel is very high in

NZ and sounds like a BrE or AmE KIT vowel. Wells (1982c:613) explains that the DRESS and TRAP vowel tend to be closer in SAmE. Holmes and Bell (1990) cited in Cox and Palethorpe (2001:20) suggest that as a result of it being raised, the DRESS vowel in GenAus is becoming similar to the pronunciation of the NZE vowel sound.

3.2.1.3 - The TRAP Vowel

RP, GenAm, GenAus and SAmE produce the TRAP vowel [æ] in the front, unrounded, open position, whereas NZ pronunciation is formed in the front, unrounded, mid position. Holmes and Bell (1990) cited in Cox and Palethorpe (2001:20) also mention that NZE appears to have influenced the GenAus TRAP vowel, raising it slightly to mirror the NZE positioning.

3.2.1.4 - The LOT Vowel

The LOT vowel, represented as [ɒ] is produced in the open, rounded, back position in RP, GenAus and SAmE, and in NZ is produced slightly higher in the back mid position. Bowerman (2004) in Schneider et al. (eds.) (2004:937) adds to Wells (1982c) interpretation by explaining SAmE often ranges between [ɒ] and [ɔ] for the LOT vowel, and some young General SAmE speakers produce [ʌ]. GenAm uses the [ɑ] to represent the LOT vowel positioning it in as a front, open, unrounded vowel. Gramley and Pätzold (1992) and Carr (1999:136) comment on how GenAm does not have the /ɒ/ phoneme, instead using either /ɑ/ (as previously mentioned) or in some cases /ɔ:/. They continue to explain that /ɑ:/ is generally present before /l/, /m/, and /n/ as well as before stops, and before /ʃ/ whereas /ɔ:/ is present before voiced velar consonants, before the velar stop /g/, the velar nasal /ŋ/, before /r/, and unvoiced fricatives /f/, /s/, and /θ/. They do however clarify that there are exceptions to these rules, for example the presence of /ɑ:/ when /r/ or a

fricative follow and emphasise that this only corresponds to words that would use the /ɒ/ LOT vowel in RP.

3.2.1.5 - The STRUT Vowel

The STRUT vowel [ʌ] is realised in the open mid, central, unrounded position in RP and NZ; in GenAm and SAmE, it is produced in the back, open-mid, unrounded position and in GenAus, it is created in the open-central position.

3.2.1.6 - The FOOT Vowel

The FOOT vowel [ʊ] is produced in the back, close position in all five varieties of English.

3.2.1.7 - SCHWA

The SCHWA sound [ə], as previously mentioned represents the [ɪ] in NZE, being produced in the close, unrounded central position. It is also present in the vowel inventory of SAmE produced in the central, mid position, which can be interchanged with the KIT vowel [ɪ] in SAmE speech. As previously mentioned Wells (1982a, 1982c) does not include the SCHWA [ə] in his inventories for RP, GenAm and GenAus, however he does note their presence by explaining that they are the sounds representing the word final sounds in ‘letter’ and ‘comma’ (see Appendix 2).

3.2.1.8 - The BATH Vowel

The BATH vowel is represented by [ɑ:] in RP, in the central, open position, whereas it is represented in the back, open, unrounded position in SAmE. GenAm represents it using the TRAP vowel [æ] and GenAus produces the [ɑ:] sound in the open, central, unrounded position. NZ produces the un-

lengthened [a:] in the open, central unrounded, position. The International Phonetic Alphabet places the RP [ɑ:] in the back, open, unrounded, lengthened position, whereas, GenAus [a:] is produced in the front, open, unrounded and lengthened position. Figure 7 demonstrates the movement of the RP vowel [ɑ:] to the TRAP [æ] in GenAm and to the GenAus [a:]:

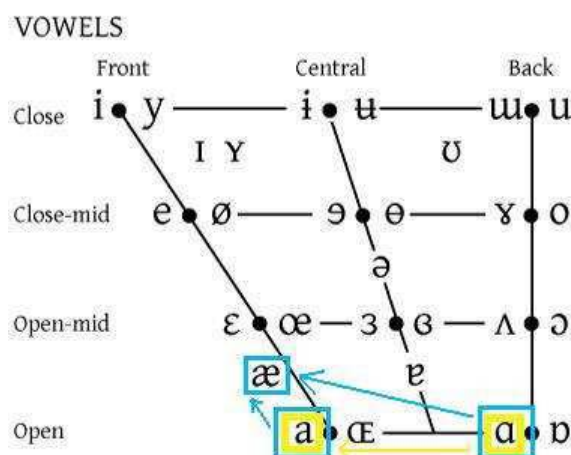


Figure 7

BATH Vowel Movement from RP to GenAm and GenAus
Adapted from 'The International Phonetic Alphabet.'

Moore (2008:xvii) then suggests that the pronunciation of [ɑ:] (or [a:] according to Wells (1982c) in Australian English is produced slightly higher as the TRAP vowel [æ], explaining that the vowel sounds in a word such as 'hard' sounds closer to the RP sounds in 'had' as a result of fronting.

3.2.1.9 - The FLEECE Vowel

The FLEECE [i:] vowel is produced as front, close, lengthened and unrounded in RP, GenAus, NZ and SAfE, whereas in GenAm it is produced as [i] in the same position (front, close and unrounded) however is not lengthened.

3.2.1.10 - The FACE Vowel

The FACE [eɪ] vowel is produced in the front, close-mid position in RP and GenAm. Wells (1982c) suggests that it is represented as [ʌɪ] in GenAus and NZ, both in the front, close-mid position and is represented as [əɪ] in SAfE, which is produced in the close-mid central position. Bowerman (2004) in Schneider et al. (eds.) (2004:938) disagrees with Wells (1982c) saying that the FACE vowel in SAfE is pronounced as [eɪ] like RP and GenAm, and Lass (2002) in Mesthrie (ed.) (2002:117) adds that the onset in the SAfE FACE vowel is sometimes more open, producing [æɪ]. Fromkin et al. (2007:225) also suggests that in GenAm the FACE vowel could also be represented as a monophthong [e] rather than a diphthong.

3.2.1.11 - The PRICE Vowel

The PRICE vowel [aɪ] is produced in the open, central position in RP, GenAm and SAfE. Bowerman (2004) in Schneider et al. (eds.) (2004:938) highlights that some SAf speakers have a tendency alongside GenAus and NZ to produce [ɑɪ], slightly further back in the back, open position. Fromkin et al. (2007:225) suggests that the PRICE vowel could also use [aj] as an alternative notation for GenAm, suggesting that the second part of the diphthong [ɪ] is moving closer to the [j] sound.

3.2.1.12 - The CHOICE Vowel

The CHOICE vowel [ɔɪ] formed in the back, open-mid position in all five varieties, however, Fromkin et al. (2007:225) again suggest that the CHOICE vowel could also use [ɔj] as an alternative notation for GenAm.

3.2.1.13 - The NEAR Vowel

The NEAR vowel [ɪə] is produced in the front, close position in RP, GenAus, NZ and SAfE. In GenAm, due to the rhoticity of the variety it is produced using the KIT [ɪ] vowel followed by the phoneme /r/ [ɪr]. Gramley and Pätzold (1992:337) support this notion by mentioning in their publication that there are no centring diphthongs in GenAm. Hay et al. (2008:27) comments that for many younger NZ speakers, there is no longer any distinction between ‘ear’ and ‘air’ (NEAR vowel and SQUARE vowel). This sees the majority of speakers using the SQUARE vowel.

3.2.1.14 - The SQUARE Vowel

The SQUARE vowel is notated as [ɛə], produced in the front, open-mid position, or as [ɛ:], a free steady state vowel in RP. In GenAus, NZ and SAf it is represented by [eə] and produced also in the front, open-mid position. Wells (1982c) explains that in SAfE the vowel tends to be closer than in RP. GenAm, again being rhotic, represents the sound with the DRESS vowel [ɛ] again followed by /r/ [ɛr]. Bowerman (2004) in Schneider et al. (eds.) (2004:938) again highlights the tendency to monophthongise the DRESS vowel, producing [ɛ] in SAf speech.

3.2.1.15 - The GOAT Vowel

The GOAT vowel [əʊ] in RP and SAfE is produced in the front, close-mid position, whereas it is represented by [o] in the back, close-mid, rounded position in GenAm. (Carr, 1992:137; Wells, 1982a, 1982c). In GenAus and NZ, it is represented as [ʌʊ] produced in the back, open-mid position. Gramley and Pätzold (1992:338) adds to Wells’ (1982a, 1982c) interpretation by explaining in their comparison of RP and GenAm, RP used the central schwa

vowel in the first element of their GOAT vowel [əʊ] whereas in GenAm it produced as a diphthong beginning with a back vowel [oʊ].

The MOUTH vowel [aʊ] is formed in the front, open position in RP, GenAm and SAf. SAfE speakers also occasionally monophthongise the diphthong into [ɑ:] according to Bowerman (2004) in Schneider et al. (eds.) (2004:938). The MOUTH vowel is notated as [æʊ] in GenAus and NZ, being produced also in a front, open position. Fromkin et al. (2007:225) suggest that GenAm speakers MOUTH vowel could alternatively be represented as [aw]. Moore (2008) also comments on the use of [æʊ] in Australian English, explaining that the starting point in Australian [æ] is further forward than the starting point in RP [a] (see Figure 8) resulting in the different diphthongs for the MOUTH vowel.

Figure 8

Adapted from 'The International Phonetic Alphabet'

3.2.1.17 - The NURSE Vowel

The NURSE vowel [ɜ:] is produced in the open-mid, central, lengthened position, in RP, GenAus, NZ and SAfE. Hay et al. (2008) mentions that NZ's most striking feature is the lip rounding of the NURSE vowel, in which the word 'terms' sounds rather like 'tombs.' Overall NZ tends to have a lack of lip rounding, however the lip rounding of the NURSE vowel is believed to be 'one of the most characteristic sounds of this variety' (Hay et al., 2008:24). In GenAm it is produced by creating an un-lengthened NURSE vowel [ɜ] which is articulated in the front, open-mid position, followed by /r/ [ɜr]. This analysis is supported by Gramley and Pätzold (1992:337).

3.2.1.18 - The GOOSE Vowel

The GOOSE vowel [u:] in RP, GenAus and NZ are produced in the back, close, rounded, lengthened position. In SAfE, it is produced slightly further forward in the central, close, rounded, lengthened position. (Wells, 1982c; Bowerman, 2004) In GenAm, the GOOSE vowel is notated as [u] and is produced in the back, close, rounded position, but is un-lengthened (Wells, 1982c). Hay et al. (2008:24) adds that in their research the GOOSE vowel in GenAus and NZ are both very central.

3.2.1.19 - The THOUGHT Vowel

The THOUGHT vowel [ɔ:] in RP, GenAus, NZ and SAfE is produced in the back, open-mid, rounded, lengthened position, whereas in GenAm it is notated as [ɔ] produced in the same position, however un-lengthened. Bowerman (2004) cited in Schneider et al. (2004:938) explains that in addition SAf speakers also occasionally have higher articulation of the THOUGHT vowel, producing [o:].

3.2.1.20 - The CURE Vowel

The CURE vowel [ʊə] is produced in the back, close position in RP and SAfE, and is occasionally present in GenAus and NZ English. There is believed to be some variation within GenAus, with the pre-lateral [u] (GOOSE) being pronounced in some areas of Australia, namely Adelaide. Research in SAf has also suggested that General SAf speakers are beginning to move towards the Broad SAf pronunciation of the CURE vowel, by having a tendency to monophthongise the vowel producing [o:] when the vowel does not occur after [j]. In GenAm, due to the rhoticity of the variety, it is created by producing the FOOT vowel [ʊ] followed by /r/ [ʊr]. Gramley and Pätzold (1992:337) also mention this in their publication with regards to GenAm pronunciation. More recent research conducted by Hay et al. (2008:27) suggests that for many NZ speakers CURE is no longer a diphthong, with 'sure' and 'tour' being homophonous with 'shore' and 'tore'. Alternatively, it is now pronounced as two syllables, with 'tour' being pronounced as /tuə/, which sees the GOOSE vowel followed by SCHWA.

3.2.1.21 - Recent Vowel Developments

Hay et al. (2008) discusses the merging of the NEAR and SQUARE vowels in NZ (as previously mentioned). They cite a study completed by Gordon and MacLagan, in which they tracked the progress of the change by analysing the speech of schoolchildren between 1983 and 1998. In 1983 approx. 35% of the children kept the word pairs 'here/hair,' 'cheer/chair,' 'fear/fair,' 'shear/share' etc., separate, and 15% merged them. By 1998, only 10% kept the vowels distinct and almost 80% merged them so that both 'ear' and 'air' sounded like 'ear' as demonstrated by Figure 9:

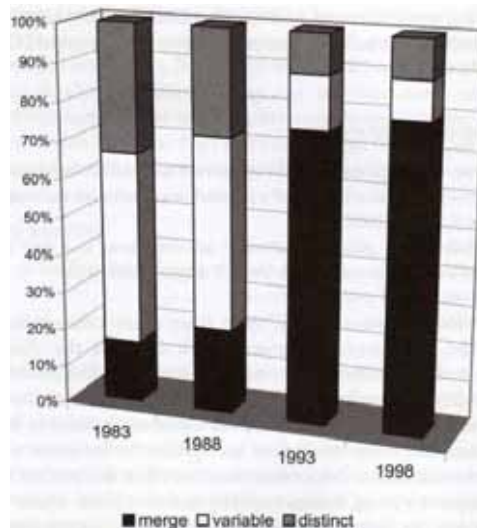


Figure 9

The 'Near-Square Merger'

Cited in Hay et al. (2008:40)

Another interesting element to explore is also suggested by Hay et al. (2008:44), involving the lexemes 'the' and 'to' present before words beginning with vowels. Traditionally both the words have full vowels, /ði/ and /tu/, when appearing before a word starting with a vowel, and reduced vowels, /ðə/ and /tə/, before a word starting with a consonant. However, more recently younger speakers appear to be using the reduced forms, /ðə/ and /tə/, regardless of what they precede.

This notion presented by Hay et al. (2008:44) regarding 'the' and 'to' being produced in the reduced form in addition to Gordon and MacLagan's study regarding the merging of NEAR and SQUARE presents evidence that suggests the vowel sound inventories of young NZ speakers are reducing. Gordon and MacLagan's study provides data that indicates there has been a significant increase in the percentage of young NZ speakers merging the NEAR and SQUARE vowels since 1983. It was also noted that for many NZ speakers CURE /ʊə/ is no longer a diphthong, with 'sure' and 'shore' pronounced as homophones. This evidence suggests that a young New Zealander's vowel

inventory would look similar to Figure 10 with the omission of the CURE /ʊə/ and SQUARE /eə/ vowels:

New Zealand English											
e	ə	ʊ	i:			ɪə					u:
æ	ʌ	ɒ	ʌɪ		ɔɪ	ɜ:	ɔ:				ʌʊ
					oɪ	a:		æʊ			

Figure 10

Young NZ Speaker's Vowel Inventory
Adapted from Wells (1982a, 1982c)

The FLEECE /i:/ and GOOSE /u:/ vowels have not been removed from the inventory as they are still present in young New Zealanders' speech in words other than 'the' and 'to' before vowels, such as 'meat' and 'boot'. Following the removal of the CURE /ʊə/ and SQUARE /eə/ vowels, the research would suggest that the total number of vowel phonemes in a young New Zealander's speech would be reduced to seventeen.

The vowel sounds analysis provides a useful insight into the pronunciation of the five varieties of English, demonstrating the similarities in vowel sound production, with the exception of slight positioning differences. It has also highlighted areas of attention which can be explored, such as the differing accounts of the articulation of the LOT /ɒ/, FACE /eɪ/, SQUARE /ɛ:/ and MOUTH /aʊ/ amongst phenomena such as the NEAR - SQUARE merger. The literature provided by the phonemic inventory does not suggest that any of the non-reference varieties has a particular affiliation with either BrE or AmE, allowing this to be explored further through the research results.

3.2.2 - Consonants

Having explored the vowel sounds of the varieties, we will next address the production of consonants, again enabling us to identify any specific areas to be attended to in the research conducted here.

3.2.2.1 - /hw/-/w/ distinction

Gramley and Pätzold (1992:337) in their comparison of RP and GenAm explain that “the consonants of RP and GenAm are identical. Both varieties contain the same twenty-four phonemes. The only possible difference lies in the maintenance of the /hw/ - /w/ distinction (as in where vs. wear) in some of the regions where GenAm is spoken, though the use of /hw/ seems to be recessive.” Gramley and Pätzold (1992:337) are also supported by Upton (2004) cited in Schneider et al. (2004:228) who explains that /hw/ was previously common in ‘traditional-RP’, however is less common in the speech of today’s RP speakers. The /hw/ - /w/ distinction is an aspect of pronunciation that is also present in some NZE pronunciation. This is an element that will be explored through the research reported here. With regards to the /w/-/hw/ distinction, Wells (1982c:618) explains that /hw/ in SAfE is a rare variant, which is associated with the formal style of the speech conscious. Hay et al., (2008:32) explains that many of the first speakers who came to New Zealand made a contrast between /w/ and /hw/ in words such as ‘Wales’ and ‘whales’, however, today the contrast has almost vanished. Almost all people in NZ now only use /w/ in words, but occasionally use /hw/ for emphasis. Fromkin et al. (2007:225) suggests that /hw/ can be better represented phonetically as [ʍ].

3.2.2.2 - /r/

Gramley and Pätzold (1992:338) note that the main difference between RP and GenAm consonants surrounds the realisation of /r/. “In GenAm, there is a strong tendency for /r/ to be retroflex [ɻ] (made with the tip of the tongue

turned backwards), while it is often the constricted continuant [ɹ] in RP (made with the tongue raised and tensed in the area just behind the alveolar ridge with relatively little retroflexion). In addition, a /r/ between two vowel sounds, (as in *very*) is sometimes articulated with a single flap of the tongue against the alveolar ridge [ɾ] in RP. It is also not particularly unusual to hear RP speakers who colour their /r/ with a /w/-like sound, so that *rap* becomes a bit like *wap*.” AmE pronunciation is rhotic, unlike RP, AusE, NZE and SAmE. RP only has an /r/ where there is a following vowel, for example ‘red,’ this includes when a vowel is in the following word, known as a ‘linking /r/’, when the two words may be connected or linked into a single phonetic unit, for example ‘tear + up’, Upton (2004); Gramley and Pätzold (1992). Non-rhotic varieties often also have the presence of ‘intrusive /r/’, which occurs when no <r> is present in spelling, for example in ‘law officer’ /lɔːrɒfɪsə/. This phenomenon occurs when the speaker is unconsciously extending a pattern already present in their accent and is produced after word final [ɔ:] [ə] [ɜ:] and [ɑ:], before a vowel in the following word. SAmE also is known to have ‘linking /r/’ and ‘intrusive /r/’, but one often finds that the /r/ sandhi is avoided by using instead a glottal stop [ʔ]. GenAm, however regularly pronounces /r/ where the spelling indicates; it does not know an intrusive /r/.

3.2.2.3 - /l/-vocalisation

“The /l/-sound differs inasmuch as GenAm tends to use a dark [ɫ] in most positions, where RP has clear [l] before vowels ‘loop’ and dark [ɫ] before consonants ‘help’, at word end ‘sale’ or where [l] is syllabic ‘bottle’” (Gramley and Pätzold, (1992:338)). Carr (1992:137) adds to this, explaining:

“there is an allophonic rule in many accents of English, including GenAm and RP, to the effect that /l/ is realised as a velarised

(‘dark’) lateral when it occurs in rimes, but is realised as a non-velarised (‘clear’) lateral when it occurs in onsets.”

Carr, (1992:137)

Carr (1992) is suggesting that the /l/ is made darker [ɫ] in the rime position, of the word, for example in the word ‘lull’:

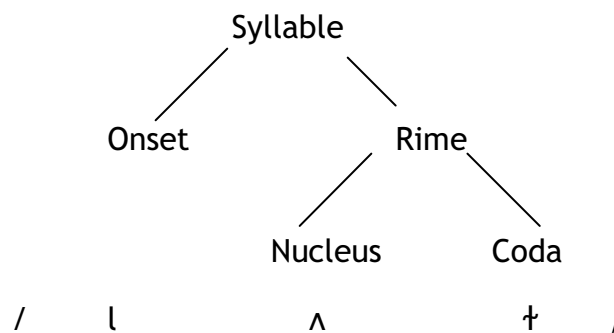


Figure 11

Positioning of Dark /ɫ/
Adapted from Carr, (1992)

They explain that the sound quality of /l/ is darker than the velarised [ɫ] in Australian English; it is, rather, pharyngealised [l̠] in all positions (Carr, 1992:137; Gramley and Pätzold, 1992:398). Wells (1982c) recognises that SAf /l/ is not really dark in any environment, whereas Bowerman (2004) cited in Schneider et al. (2004:940) suggests that /l/ is clear in the initial position but is dark [ɫ] in the final position. Hay et al. (2008) cites a study completed in 2007 in which they tracked the /l/-vocalisation in NZ through the Canterbury Corpus. They discovered that at the present time, the younger, lower-class speakers vocalise approximately 70 per cent of /l/, when reading a word list, whereas the older, higher-class women vocalise less than 40 per cent of /l/ when reading the same word list. Hay et al. (2008) comment that the percentage of higher-class women vocalising /l/ was 40 per cent and this was mainly evident in spontaneous speech. They also suggest that the presence of

/ɫ/ in higher-class speech is evidence of how acceptable it is becoming. Hay et al. (2008:35) also mention that the lack of complaints to newspapers seems to be evidence of it becoming acceptable. However, they also state that “This is probably because it is difficult for people to hear the difference between dark /l/ with alveolar contact and a vocalised /l/ where the tongue tip contact has been lost”, Hay et al. (2008:35).

3.2.2.4 - /t/-tapping

The process of /t/-tapping (also known as /t/-flapping) sees some varieties of English realise the orthographic <t> as a tap which involves a rapid movement of the tongue tip against the alveolar ridge when it occurs between two vowels. This is a feature present in GenAm and distinguishes it from the pronunciation of BrE, (Reetz and Jongman, 2009:40). This process is similar to the aforementioned tapped [ɾ] of RP in words such as ‘very,’ however in GenAm it is usually perceived as a /d/. Intervocalic /d/ is also flapped in GenAm, which leads to the belief that ‘latter’ and ‘ladder’ are homophonous. Among AusE pronunciation there is the tendency to flatten and voice intervocalic /t/ before an unstressed syllable, which sees the production of ‘butter’ [bʌdə] as homophonous with ‘budder’, (Gramley and Pätzold, 1992:398). In NZE speech it is more common in spontaneous dialogue. The Canterbury Corpus reveals that male, lower-class speakers use it the most, although it is even occasionally present in higher-class, female speakers’ spontaneous speech suggesting that it is slowly presenting itself in NZ pronunciation.

3.2.2.5 - /h/-dropping

Gramley and Pätzold (1992:398) note that GenAus contains a certain degree of /h/-dropping. Hay et al. (2008:34) explains that /h/-dropping is not at all common in twenty-first century NZE. It was previously a feature in the nineteenth century that has since disappeared.

3.2.2.6 - Glottalisation

Upton (2004) cited in Schneider et al. (2004:228) claims that glottalisation is a common feature of RP. It is believed to be most associated with /t/ in a syllable-final position preceding a non-syllabic consonant, for example in words such as *rat trap*, *post box* and *Gatwick*.

3.2.2.7 - Yod Coalescence and Yod Deletion

The coalescence of /tj/, /dj/, /sj/, and /zj/ into /dʃ/, /dʒ/, /ʃ/, and /ʒ/ is noted as a feature of RP by Upton (2004) cited in Schneider et al. (2004:228) and is believed to becoming more apparent in RP speech.

3.2.3 - Suprasegmental Features

Having examined the segmental phonemes of the five varieties, next we explore the suprasegmental features. Suprasegmental features are vocal effects that usually span more than one sound segment, such as intonation and word stress.

3.2.3.1 - Stress

“When syllables are uttered in sequence, in polysyllabic words for example, they are perceived as having different degrees of prominence, or stress” (Giegerich, 1992:179). The positioning of lexical stress in a word differs in each of the five varieties explored in this research. As previously discussed in 3.1.1 Svartvik and Leech (2006:165) noted the differences between RP and GenAm word stress placement, commenting that for GenAm speakers there is usually only one option, the ‘American’ form whereas for RP speakers both the ‘British’ and ‘American’ forms co-exist:

MAINLY AME

BRE ONLY

MAINLY AME

BRE ONLY

<u>ap</u> plicable	ap <u>p</u> licable	frag <u>m</u> entary	frag <u>m</u> entary
ar <u>i</u> stocrat	ar <u>i</u> stocrat	hosp <u>i</u> table	hosp <u>i</u> table
con <u>t</u> roversy	con <u>t</u> roversy	prema <u>t</u> ure	prema <u>t</u> ure

Svartvik and Leech (2006:165)

Svartvik and Leech (2006:165) also noted further differences, for example in words ending with ‘-ary’, ‘-ery’ and ‘-ory,’ GenAm produces the word with a full vowel and secondary stress, whereas RP used a reduced schwa vowel, or does not pronounce the vowel sound at all:

Inventory	GenAm: /'invən,ɔtri/	RP: /'invəntəri/
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Adapted from Svartvik and Leech (2006:165)

GenAm speakers also often assign stress to the last syllable in French loan words, as in the French pronunciation:

Frontier	GenAm: /frʌn'ti:r/	RP: /'frʌntiə/
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Adapted from Svartvik and Leech (2006:165)

Hay et al. (2008) discusses the patterns of words stress in NZ, commenting that NZ tends to be close to RP stress patterns; however it also displays some evidence of GenAm patterns:

“Traditionally the noun [in NZ] is stressed on the first syllable, ‘*import*’ whereas the verb is stressed on the second syllable *im’port*. [...] However for pairs like *an import* (noun) vs. *to import* (verb) where both are in common use both the verb and noun tend to be stressed on the first syllable.”

Hay et al., (2008:29)

This may be as a result of GenAm influences, or could alternatively be a movement towards a common stress pattern of English.

Burridge and Mulder (1998:67) note that in many English dialects word pairs are distinguished by their stress pattern, for example nouns are stressed on the first syllable and verbs on the second (e.g. ¹record (noun) and re¹cord (verb)). However, in their discussion of the differences in word stress between Australia and New Zealand, they note that for many speakers of NZ “it is common to hear first-syllable stress as in **research** (verb) and **protest** (verb)”. They continue to state that in both varieties nouns show variation from the expected stress patterns, with some displaying stressing on the first syllable, others the second and some on either and that “the trend is increasingly towards stress on the first syllable” (Burridge and Mulder, 1998:67). The notion of word stress will be briefly explored in the study detailed in Chapter 4.

This chapter surveyed the relevant research regarding the phoneme inventories of RP, GenAm, GenAus, NZE and SAfE. We can now use this information in considering the results of this study. Thereafter an in-depth analysis of the different pronunciation of the five varieties is presented in Chapter 5.

Chapter 4 - Methodology

4.1 - Aims

The aim of this study is to establish the differences in pronunciation between five varieties of English; BrE, AmE, AusE, NZE and SAfE. Comparing them with BrE (Received Pronunciation) and AmE (General American), the study attempts to discover any potential future changes that may occur in the varieties. The aim is to establish whether the varieties are retaining their roots in BrE, moving towards the more influential and modern AmE, or alternatively to establish whether these varieties are headed towards becoming mutually unintelligible dialects of a written language system. The research will also attempt to understand what may have caused these changes and movement, if any, and why these changes have occurred.

4.2 - Research Questions

The study will aim to answer two questions:

- 1) What differences are there among British, American, Australian, New Zealand and South African English pronunciation? Are these differences consistent?
- 2) If the differences are consistent, do they provide evidence as to the likely future changes in pronunciation for these varieties?

4.3 - Methodology

When conducting primary research it is of course necessary, to explore the differing methodologies available in order to establish which is best suited to the aim of the research. One of the first aspects to consider is whether the research needs to be of a quantitative or qualitative nature in order to answer these questions. Table 3 illustrates various proposals of the different

research paradigms and proposed fundamental differences between these two research strategies:

Fundamental Differences between Quantitative and Qualitative Research Strategies

	Quantitative	Qualitative
Principle Orientation to the Role of Theory in Relation to Research	Deductive: testing of theory	Inductive: generation of theory
Epistemological Orientation	Natural science model, in particular positivism	Interpretivism
Ontological Orientation	Objectivism	Constructionism

Table 3
Differences between Research Strategies
Cited in Bryman (2008:370)

Bryman (2008:22) suggests that quantitative research is deductive, in which it tests the theory, whereas the qualitative is inductive, in which it generates the theory. Quantitative research in broad terms can be described as:

“entailing the collection of numerical data, as exhibiting a view of the relationship between theory and research as deductive and a predilection for a natural science approach (positivism in particular, and as having an objectivist conception of social reality.”

Bryman (2008:140)

Whereas, according to Punch (2005):

“Qualitative researchers study spoken and written representations and records of human experience, using multiple methods and multiple sources of data.”

Punch (2005:168)

Bryman (2008:366) claims that qualitative research is inductivist i.e. the theory develops from an analysis of the data. He also claims that the research is constructionist, i.e. that social properties are the outcomes of interactions between individuals and interpretivist, i.e. stress is on the understanding of the social world through examination and interpretation of its participants.

The research strategy of this thesis is of a primarily qualitative nature, using both questionnaires and the recording of the pronunciation of the participants, through two pre-determined word lists and a conversation. Punch (2005:168) explains that the interview is one of the main tools of data collection in qualitative research. He highlights that the interview itself takes a variety of forms. He explains that it can be in the form of face-to-face verbal interchange, questionnaires; both self-administered and mail, telephone surveys and group interviews. It can also be structured, semi-structured and unstructured. The main type of interview in this study is written questionnaire which is administered by the researcher and is completed alone by the participant. A questionnaire is a set of questions that are designed to be answered by a respondent on a specific topic or group of topics. This enables the researcher to ask questions which gain direct results. The use of open questions yields more to the researcher, as they allow the participant to elaborate on their answer to the question, as opposed to providing a yes or no answer. Wray et al. (1998:167) states:

“Many linguists feel that questionnaires are best used with other types of data elicitation, because a fuller picture of the data can be accessed if it is approached from more than one angle.”

Wray et al., (1998:167)

Keeping this in mind, the study incorporates recordings alongside the questionnaire. The recordings consist of two different types; one in which the participant reads pre-determined lists of words in their variety of English and the other, a recording of a spontaneous conversation or interview.

4.4 - The Study

The primary research for this thesis was based upon an idea mentioned in Hughes et al.'s (2005) publication, in which the authors use recordings to identify the differences among the accents of English in the British Isles. Hughes et al.'s (2005) main methods of data collection consisted of two sets of recordings for each variety that they analysed. The first recording was of a list of fifty-two words, which aimed to get their participants to make all the available vowel sounds for their variety. This was accompanied by a short conversation or interview that was also recorded, which aimed to document some of the dialectal features of the participant's speech. Furthermore Hughes et al. (2005) would identify the features of each particular variety of British English and then accompany it with a transcription from a conversation or interview. The interview or conversation, alongside a recording of the list of fifty-two words would also be available on an audio CD to listen to. The research of this thesis is only exploring the pronunciation of the five varieties of English; BrE, AmE, AusE, NZE and SAfE, so the research method has been adapted to suit the context. Following the analysis of the phoneme inventories of the five varieties, two word lists have been compiled, based upon Hughes et al. (2005) study, with the addition of words to elicit the production of phenomena specific to the varieties detailed further in Section 4.5.

4.5 - Voice Recordings

Using Hughes et al.'s (2005) study as a basis for the investigation, the concept of using voice recordings was adapted. The study used the same list of fifty-two words as mentioned in Hughes et al. (2005), with the inclusion of seven additional words. These additional words were incorporated to examine the concept of the contrast between /hw/ and /w/, and were included in research by Hay et al. (2008:33). The researcher asked the participants from each variety to read the word list (cited in Appendix 3) whilst being recorded

on a Dictaphone. The participants were then asked to read a second word list, also recorded on a Dictaphone. This list consisted of thirty-four words and was compiled from results of research by Svartvik and Leech (2006) (cited in Appendix 4). This word list focuses on the intonation of the participant's speech, as well as exploring phenomena such as /t/-tapping and the use of the reduced 'schwa' vowel /ə/. Both of these lists were transcribed and each variety's participants were compared with each other, as well as against British (RP) and American (GenAm), in an attempt to identify any interesting features that have arisen.

The participants were asked to take part in an approximately three minute conversation or interview which was also recorded. The use of the recording of the conversation or the interview was to allow a direct comparison between it and the word list, in the event of any discrepancies arising. Saville-Troike (1989:128) notes that participants sometimes answer in a way that they believe will please the researchers. This could have been the case with the word list, in which the participants pronounced the words as they believe the researcher requires. As a result, the inclusion of the conversation, in a relaxed environment, allowed participants to talk freely without being conscious of their pronunciation. Thus, this provided the researcher with a comparison for the word list in the event of any incongruities, enabling them to discover if the word list is a true representation of the varieties' pronunciation.

4.6 - Questionnaire

Alongside the voice recordings a questionnaire was administered, to obtain information about the participants' linguistic background. The questionnaire was a short document consisting of ten questions and was in a written format. The questionnaire was administered by the researcher and then completed by the participant alone. As the researcher was in a 'one-to-one' or group situation with the participants, she was available to answer any questions about the questionnaire and as a result administered the questionnaire

personally. This therefore provides the rationale for the participants being guaranteed confidentiality, but not anonymity, as the researcher was aware of which participant completed each questionnaire. To adhere to ethical guidelines, the researcher assigned a code to each participant to retain confidentiality; at the same time this enabled the researcher to compare the results of the recordings with the questionnaire. There are advantages and disadvantages to the researcher being present. The advantages are that there is guaranteed high completion rate of the questionnaire and the participants are able to ask questions if they are unsure about something. A disadvantage, however is that the researcher may be able to influence their participants' responses by guiding them towards a particular response (Frazer and Lawley, 2000; Oppenheim, 1992). This was taken into account in the design of the research and the researcher only answered queries about the questions themselves if the participant does not understand, however they did not attempt to influence the participants in any way. Wadsworth (1997) explains that even though questionnaires are seen as a common research technique, they take a high degree of skill to administer as various decisions have to be made. For example, only questions that are deemed important by the designer are asked and as a result questionnaires can generate immense amounts of important and relevant information.

The questionnaire (provided in Appendix 5), addressed demographics such as age, gender, place of birth, occupation etc. Questions 1 and 2 were both scaled response questions, which were highly appropriate for factual questions (Gillham, 2000) and Questions 3 and 4 were open questions. Question 5 addressed the educational background of the participant, which alongside details of their occupation (Question 4) enabled the researcher to establish their socio-economic background. Question 6 asked the participants to list the different places of their residence throughout their lives, in an attempt to establish whether their locations have had a direct negative impact upon the variety they use. This allowed the researcher to discard any participants whose variety may have been contaminated, for example, by prolonged periods of time outside their native country. Question 7 follows on

from Question 6 as it asked all non-Australians how long they have lived in Australia. The inclusion of this question is to provide an understanding of the degree of potential influence living in Australia may have had on the participants' pronunciation. In order to gather data that provided as true a representation of the varieties of English as possible, participants were recorded that had been living in Australia for less than seven years. There is no cross-dialectical statistical analysis that provides a definite dividing point between an individual's pronunciation being classed as 'influenced' or 'not influenced' by another variety. One would postulate that the degree of influence would increase the longer the individual has lived in Australia, following a steadily increasing continuum. Each individual participant's case would be different and would be dependent upon factors including the individual's age, gender, degree of contact with other speakers of their variety and degree of contact with Australians. The adoption of AusE pronunciation of words can be almost instant, if for example the individual is learning a new word, native to Australia, or can be severely delayed as a result of resistance on the individual's part to adopt AusE pronunciation. As a result, deciding on a cut-off point proved near impossible. Instead the participants that volunteered were asked to provide details as to their length of residence in Australia. This information was then applied to the participants' results and if the participant displayed unusual pronunciation that did not generally adhere to their variety, then their results were discarded. The longest period of a participant's residence in Australia was seven years and the shortest, 6 weeks.

Questions 8, 9 and 10 all addressed the question of the speaker's pronunciation being more British or American, and what they thought influenced their speech. These questions aimed to get the participant to think about anything they notice in their speech that is typically British or American. This could then be compared with their speech from the voice recordings. These final questions were a combination of scaled and open response questions. They aimed to explain to the participant what the researchers want to know, and then give them the opportunity to expand

upon the restrictions of the scaled questions and give their experiences and opinions. Gillham (2000:34) notes that these kinds of questions can be motivating for the participant, and in turn enables the researcher to explore information that could not be obtained from only closed questions. He says:

“One or two questions of this type can be a good way of finishing the questionnaire, which can otherwise easily leave respondents with the impression that their personal opinions or experiences have to fit in the straitjacket of prescribed answers.”

Gillham (2000:34)

Wadsworth (1997:44) states that questionnaires are quite a formal mechanism and likens them to something being performed by remote control, as they are unable to clarify the meanings of any of the responses, refine them or gain access to any further information. It is thus essential to ensure that the wording of the questions elicit enough information required for the research questions. In this instance, the process of researcher-administered questionnaires is beneficial, as the researcher could question any discrepancies they may have with the responses whilst the participant is still present.

4.7 - The Participants

The selection of the participants is a crucial element of the study, as the incorrect sampling of participants can lead to the research becoming invalid. Bouma and Ling (2004:112) state that sampling is a very important aspect in research, in which “part of the whole is studied and the results are taken to be an accurate reflection of the whole.” (Bouma and Ling, 2004:112). They also say that a sample can be shown to represent a larger population and if that sample is not representative, it must be explained that the findings only apply to that sample. As a result, the sampling must be conducted in a way that will represent the whole, not just the sample, if you wish to project

reliable information. Here the key concepts are the population and the sample; the group we wish to represent and the group we will use to represent them. Punch (2005) represents this notion through the use of a diagram:

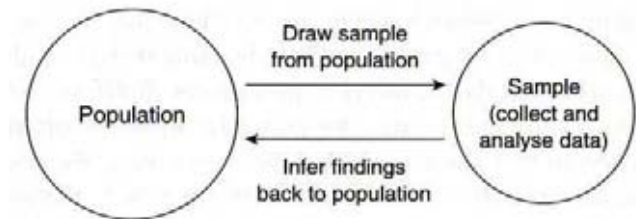


Figure 12
Population Sampling
Cited in Punch (2005:102)

Punch (2005:101) states that the researcher analyses the data from the sample, but also uses the data to make statements about the whole population from which the sample is taken. As a result, the sample has to be a representative sample of its population.

Sampling is used to reduce time, cost and energy in studying a vast group of people or a population. Due to time constraints the method of sampling that was used for this research is ‘quota sampling’ (Burton, 2000; Bouma and Ling, 2004). This is a type of non-probability, non-random sampling because it attempts to “approximate or represent the population characteristics by dividing the sample according to a number of specific characteristics such as gender, age and social class.” (Burton, 2000:312). This type of sampling was appropriate, as with a limited amount of time, it enabled the researcher to obtain a sample of speakers from each variety with differing ages, genders and socio-economic backgrounds. The researcher was aware of human judgment interference; however the participants were recruited from advertising that aims to generate representation of each variety. They were not, thus, handpicked.

In an attempt to gain a representative sample of the varieties of English that are examined, there were specific criteria. In order to gain a true representation, the participants must have been of mixed gender, with the sample consisting of approximately half male and half female participants for each variety. They must also have been of varying ages and socio-economic backgrounds. This information was gained through the questions addressed in the questionnaire. The participants must also have been subject to other criteria regarding their specific variety of English. This was to gain a true and just representation of their variety of English, which can be claimed to represent the speakers of their variety.

In this study BrE and AmE are used as reference varieties, as the aim is to establish whether or not the other varieties of English in the study; AusE, NZE and SAfE are becoming more Americanised. As a result these reference varieties need to be examples of standard pronunciation in both Britain and America. In Britain, the prestige, or Standard English accent variety of pronunciation is known as Received Pronunciation (or RP), (Wells, 1982a; Hughes et al. 2005; Collins and Mees, 2005). It is a region-less accent which is traditionally associated with the educated, and members of the community at the higher end of the social scale. In North America, the pronunciation of the American variety can be divided into three main accent areas; General American, Southern and North Eastern (Trudgill and Hannah, 2002). From these, General American (or GenAm) is seen to be the reference accent of America (Wells, 1982a) and according to Collins and Mees (2005:6) is an “amalgam of the educated speech of the northern USA, having otherwise no recognisably local features”. Figure 13 shows the area of America which General American, speakers tend to come from:

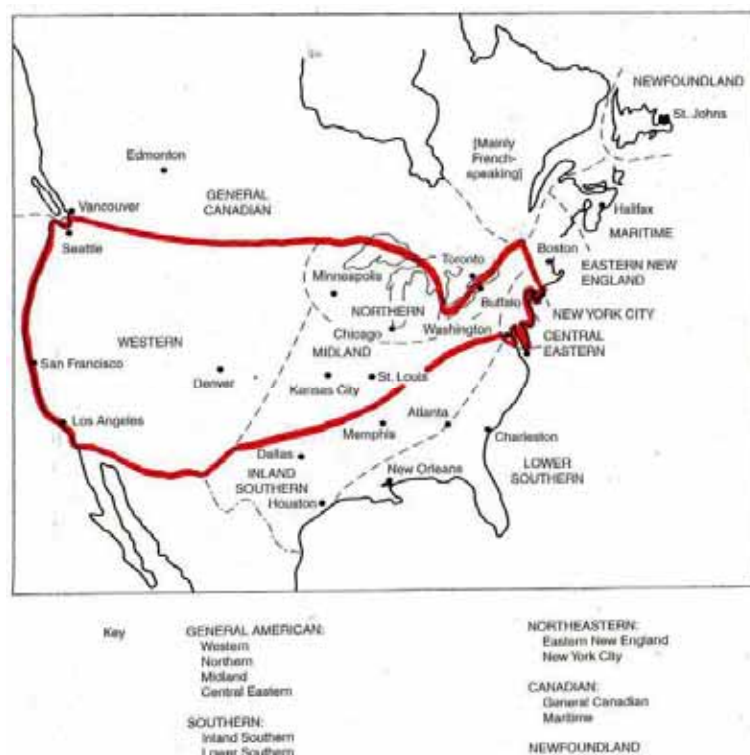


Figure 13
General American Speakers
Cited in Trudgill and Hannah (2002:45)

Figure 13 shows that GenAm speakers tend to come from the Western, Northern, Midland and Central Eastern states of America, and as a result the research records only participants from those areas.

Research by Collins and Mees (2005), Cox and Palethorpe (2001), BurrIDGE and Mulder (1998) and Mitchell and Delbridge (1965) concludes that there are three differing types of Australian English pronunciation, not as a result of regional variation, but of social variation instead. These varieties of Australian English are known as ‘Broad Australian,’ ‘General Australian’ and ‘Cultivated Australian English.’ Collins and Mees (2005:6) explain:

“The first is the kind which most vigorously exhibits distinctive Australian features and is the everyday speech of perhaps a third of the population. The last is the term used for the most prestigious variety (in all respects much closer to British NRP);

this minority accent is not only to be heard from television and radio presenters but is also, in Australia itself, taught as a model to foreign learners. General Australian, used by the majority of Australians, falls between these two extremes.”

Collins and Mees (2005:6)

Horvath’s (1985) study however contradicts the research by Collins and Mees (2005), Cox and Palethorpe (2001), Burridge and Mulder (1998) and Mitchell and Delbridge (1965). Horvath’s (1985) analysis describes the linguistic variation in Sydney and concludes:

“I find no justification for classifying individual speakers as Broad, General or Cultivated if that classification is to be interpreted as meaning that the individual speakers use only (or even predominantly) B, G, or C vowel variants.”

Horvath (1985:174)

Horvath’s (1985) analysis of Sydneysiders details the vowel quality of each vowel produced by their speakers, discovering that Sydneysiders all used a ‘fair amount’ of General Australian vowels, however a continuum is believed to exist with Broad and Cultivated vowels as the extremes and General Australian vowels in the centre. She also explains that social characteristics, such as age, gender and socio-economic class play an influential part in an individual’s vowel production. However, Horvath (1985) gives a general perspective of the notion of Broad, General or Cultivated Australian English, explaining that it is likely that both the broad and cultivated variants have never been dominant and explains that the teenagers in her sample appear to have clustered in the General region of the B-G-C continuum.

With this in mind, the Australian participants selected for the study were General Australian (or GenAus) speakers. Despite Horvath’s (1985) discussion, the majority of research in this area (Collins and Mees (2005); Cox and

Palethorpe (2001); Burridge and Mulder (1998); Mitchell and Delbridge (1965)) states there are three variations of Australian English and Horvath (1985) herself lists General Australian as the middle of the B-G-C continuum. However, when exploring the differences in the pronunciation of the five varieties, it is essential to remember Horvath's (1985) point that every speaker of Australian English uses vowel sounds from each of the three areas of the continuum. This is something to also consider in relation to the other four varieties of English studied in this research. In accordance with this, speakers were selected who mainly resided in Australian cities, in an attempt to eliminate the regional pronunciation of country residents from the extreme ends of Horvath's (1985) continuum.

Collins and Mees, (2005:6) say that "New Zealand English has distinct 'South Island' types of pronunciation." Hay et al. (2008:98) confirms this by explaining that Southland (see Figure 14) is the only place in which speech is significantly different to the rest of the country. As a result the research avoided participants from this area:

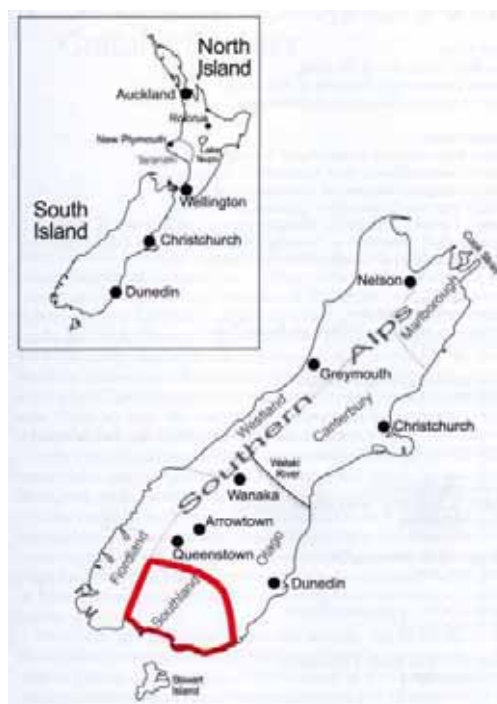


Figure 14

Map of New Zealand
Cited in Hay et al. (2008:xi)

For the South African participants the researcher only included participants with 'Conservative' or 'Respectable' South African English speech, as they are seen to be representative of the English speakers of South Africa (Gramley and Pätzold, 1992:411).

4.8 - Ethics

An essential part of conducting research using participants is to ensure that the study is ethical and that no harm comes to the participants. Walliman (2004:149) states that "whenever dealing with people, you must be sensitive to issues of privacy, fairness, consent, safety, confidentiality of information, impartiality..." and Becker (1978) (cited in Bynner and Stribley (eds.), 1978:325) echoes this by explaining that the research must not violate confidences, or bring harm to the participants of the study. Homan (1991) states that:

"According to this provision researchers must set out the nature and purposes of the research, the demands in time upon its subjects, the procedures to be adopted, any aspects of the research design that are experimental, information about likely risks and discomforts which the subject might suffer, a description of any probable benefits whether to the subjects or to others, a statement of any alternative procedures of treatment that the subject may prefer, a statement of procedures adopted respecting the confidentiality of subjects and the maintenance of records, a statement of any compensations or treatments that are available should the risks be more than minimal, the name of a contact who may give further information or explain points relating to the rights of subjects and a statement clarifying the voluntariness of participation and assuring subjects that no penalty attaches to refusal."

Homan, (1991:69-70)

With this in mind, it was essential to consider all the aspects mentioned by Homan (1991) when planning the research. The nature of the research is an exploration of the differences in pronunciation, in order to document its current state, and aims to identify in which direction the varieties are headed in the future. The full aims of the research were not disclosed to participants. Instead they were told that the aim of the study was to explore different varieties of English. It was not necessary to divulge that the research will also compare the varieties of English and examine if they are more American or English based, as this may have affected participants' performance in the research. The investigation's time demands, (approximately fifteen minutes), upon the participant were mentioned in the advertisement. As a result, when they agreed to take part, they already knew the length of the session, and the procedures were outlined in a research itinerary given to the participants at the beginning of the session. The experiment did not pose any risks or create any major discomfort for the participants; however the participants were informed that they were free to withdraw at any time, and if they felt uncomfortable with any of the situations they did not have to participate. The study did not provide any immediate benefits to the subjects; however they were informed that they were welcome to be notified of the results of the research, when it was completed, if they wished. The issue of confidentiality was addressed through the administration of a consent form, which was signed by the participant. The researcher continually reiterated that the research would be kept confidential as well as explaining that the research would be kept in a secure location in the main supervisor's office, and would only be disclosed to the researcher, the supervisors and the necessary markers at the University of New South Wales. The risks for the research were no more than minimal, so it was unnecessary to address any compensation to the participants; however they were given the contact information of the Ethics Secretariat, whom they could contact for further information regarding the rights of participants, complaints and withdrawal. It was also explained to the participants that there was no penalty attached

to refusal and that their participation was completely voluntary, both verbally and through the consent form.

Cryer (2006:84) remarks that institutions usually require research completed under their auspices to be approved from an ethical standpoint. The research for this thesis was submitted to a Human Research Ethics Advisory Panel at the University of New South Wales. The application process consisted of completing a form, writing a description of the research and submitting copies of the information given to the participants during a proposed research session. The form addressed the potential harm to participants, their recruitment, informed consent, privacy, observation of records, confidentiality, data storage, deception, debriefing and conflict of interest. It was accompanied by a project description, a copy of the questionnaire, recruiting advertisements, participant consent form, research itinerary and word lists. The application was approved by the Human Research Ethics Advisory Panel, Ref No: 08 2 028.

4.9 - Procedure

The research took place in a quiet comfortable environment that suited both the researcher and the participant, for example, in the comfort of the participant's home, or in a library study space. The research session began with the researcher verbally introducing herself to the research participant, and thanking them for agreeing to take part in the research. The participant was then given a consent form (see Appendix 6) and the researcher explained to them that they needed to read it through as it explained the procedure. If the participant was happy with the information provided, they were asked to sign the final page of the consent form, print their name and write the date. The researcher then collected the consent form, and provided them with another copy, explaining that if at any time after the research is completed they decide to revoke their consent, they needed to fill in the bottom section of the final page of the consent form and return it to the address provided.

Following the completion of the consent form, the researcher provided the participant with a copy of the research itinerary (see Appendix 7) and explained the procedure to them. The researcher explained the order of the interview, beginning with the questionnaire, consisting of ten questions, followed by the participant being asked to read out two lists of words, followed by participation in an approximate three minute conversation or interview. The researcher also explained that the word lists and the conversation or interview were to be recorded on a Dictaphone, and ensured that the participant was comfortable with that. The researcher again reminded the participant that their information will be kept confidential and that they were free to withdraw at anytime.

The participant was then given a questionnaire and was asked to fill it out. Upon completion, the questionnaire was collected and the researcher provided the first word list. The researcher asked the participant to read the word list slowly aloud and explained that everything would be recorded by a Dictaphone. Once the participant had agreed that they understood what was expected of them they were told that the researcher was going to turn on the Dictaphone, and that they were free to start reading aloud. When the word list was completed the researcher turned off the Dictaphone, collected the word list and thanked the participant, and then began the same procedure for the second word list.

After the recording of the second word list was completed, the researcher then clarified that the final aspect of the research was the conversational element. The researcher explained that the Dictaphone would be turned on and placed on the table whilst the researcher and the participant had a short conversation. The conversational element consisted of colloquial conversation and took place in a relaxed manner. Upon completion of this the researcher turned off the Dictaphone and thanked the participant again. The researcher then asked if the participant had any questions, and if they did; she tried to address them. Following this the researcher began to debrief the participant by thanking them for their participation in the research and asked them if

they would like to receive any feedback upon the completion of the research. Subsequently, the researcher again reminded the participant that all information would be kept confidential. The researcher and participant then ended the research session.

4.10 - Rationale

The reasoning behind the inclusion of the questionnaire in the research was in an attempt to gain an understanding of the participant's linguistic background, and their social background in a non-invasive manner. It asked questions about age, which is measured in nine year blocks, gender, educational background, and occupation, in an attempt to gain knowledge about the participants, in the hope of obtaining a fair representation of society as a whole. It also asked questions regarding how the participants perceived their pronunciation and also what they felt influenced the way in which they speak. These were used to explore if the participants are aware of the way in which they speak and also to examine what participants felt were influencing their pronunciation. The use of a questionnaire enabled the participant to confidentially disclose information, without having to verbalise information to the researcher which they may have felt sensitive about, for example, age, by giving the participant choices, in the form of scaled-response questions. It also gave the participant the opportunity to omit questions if they did not feel comfortable about answering them and enabled the participants to avoid any questions that they felt were obtrusive or inappropriate.

The use of the word lists, to be read by the participants and recorded, enabled the researcher to gain an in-depth knowledge of the participant's pronunciation through the examination of both vowel and consonant sounds. The word lists also provided the researcher with the material for comparison amongst the varieties, as they provided an insight into the specific varieties of English being explored. The accompaniment of the conversational element of the research allowed material for comparison, to ensure that the word lists

production was a true representation of the varieties in the event of any incongruities arising. The conversational elements took place in a relaxed environment so that the participants spoke spontaneously and were not conscious of the recording equipment, thus providing the researcher with unaffected speech.

This chapter has examined the methodology of the primary research, alongside the rationale behind the methods applied. It has also detailed the procedure, ethical implications and sampling methods employed. With an understanding of the methodology, Chapter 5 will now present the findings of the primary research.

Chapter 5 - Research Findings

5.1 - Word List 1

In order to explore the differences in aspects of pronunciation between the five varieties; BrE, AmE, AusE, NZE and SAfE, primary research was undertaken which was partially based upon a study used by Hughes et al. (2005). The first aspect of the research saw a recording made of each participant producing a list of fifty-nine words (cited in Appendix 3), which was used to elicit vowel sound production from the participants. Appendix 8 (located on page 149) provides a condensed phonemic transcription of the word lists, demonstrating the sounds used by the participants of each variety. Appendix 9 (cited on page 151) shows the phonemic transcription of the word list for each individual participant. The results of the first word list yielded sixteen main differences between the five varieties of English.

5.1.1 - Differences between the Five Varieties

The first word list was used to gain an understanding of participants' pronunciation of vowel sounds. The first main difference in vowel sound articulation was for the 'pit'. The RP, GenAm and GenAus participants all pronounced it as /pɪt/ however the NZ and SAf participants produced both /pɪt/ and /pæt/. This coincides with the research presented in Chapter 3, which identified the use of the KIT vowel /ɪ/ in RP, GenAm and GenAus and the use of the central vowel /ə/ in NZ and SAf. Bowerman (2004) also noted an allophonic variation split between /ɪ/ and /ə/ in SAf which is highlighted by the primary research and is supported by Wells (1982a, 1982c) (see Appendix 1 and 2). The split between /ɪ/ and /ə/ in NZ, however, is not noted by previous researchers, with most scholars noting the use of the central vowel /ə/ in place of /ɪ/.

The use of the KIT vowel /ɪ/ in NZ is an unusual occurrence and warrants further discussion. This usage could be as a result of a variety of influences, including the current location of the participants (who all currently reside in Australia), the age of the participants, the length of time they have lived in Australia. Hay et al. (2008:33) notes that for NZE, the KIT is usually a mid central vowel with “almost no audible difference between KIT and the neutral vowel schwa” (Hay et al., 2008:33). Table 4 provides a summary of this data, detailing the participant’s age, length of residence in Australia and their pronunciation of ‘pit’:

	NZ 1	NZ 2	NZ 3	NZ 4	NZ 5	NZ 6	NZ 7	NZ 8
Age	51 - 60	31 - 40	21 - 30	21 - 30	51 - 60	21 - 30	51 - 60	21 - 30
Length of Residence in Australia (yrs)	0.11	6	1.8	4	6	4	3	4
Pronunciation of ‘pit’	pɪt	Pɪt	pət	pɪt	pɪt	pət	pɪt	pɪt

Table 4
New Zealand Use of the KIT /ɪ/ Vowel

This table demonstrates that the use of the KIT vowel /ɪ/ is not specific to any one particular age group of participants, with participants between the ages of 21 and 60 using /ɪ/ rather than /ə/. This phenomenon is also not a characteristic of participants’ that have resided in Australia for a certain length of time. NZ 1 had only resided in Australia for 11 months and NZ 5 had lived in Australia for six years, yet both used the KIT /ɪ/ vowel in the word ‘pit’. Further research also provided no correlation between the participant’s location of birth and the usage of /ɪ/ suggesting that this is not a phenomenon specific to one of the two New Zealand islands.

The lack of correlation between the length of residence in Australia and production of KIT /ɪ/ or alternatively age and pronunciation of KIT /ɪ/

suggests that this phenomenon is something that requires further detailed research. This usage could provide evidence of a pronunciation levelling among the five varieties or demonstrate the result of alternative influences to that of Australia. Unfortunately the data from this study does not provide any indication of the cause and as a result an understanding of this is beyond the scope of this thesis.

The words ‘pet’ and ‘pat’ are pronounced similarly throughout all five varieties, with all participants producing them as /pet/ and /pæt/ respectively. RP, GenAm, GenAus, NZ and SAf participants all pronounced ‘put’ as /pʊt/. Speakers of all five varieties enunciated ‘putt’ as /pʌt/, ‘pot’ and ‘bee’ as /pɒt/ and /bi:/ respectively, alongside all producing ‘bay’ and ‘buy’ as /beɪ/ and /baɪ/. The lexemes ‘boy’, ‘boot’, ‘boat’ and ‘bout’ were pronounced as /bɔɪ/, /bu:t/, /bəʊt/ and /baʊt/ correspondingly in all five varieties.

‘Beer’ was pronounced as /bɪə/ by the RP and GenAus participants, whereas GenAm rhoticity appeared to be demonstrated in the AmE pronunciation of /bɪər/. The NZ and SAf participants’ pronunciation of ‘beer’ also appeared to be rhotic, producing a split between /bɪər/ and /bɪə/. Unfortunately the limited scope of this thesis means that the researcher was not able to specifically explore the occurrence of F3 lowering in GenAm, NZ and SAf participants, due to the lack of time and resources allocated to the research. There is, however a variety of studies that suggests that rhoticity may be present in NZ and SAf pronunciation. With regards to New Zealand, Hay et al. (2008:98) explains that Southland, an area in the south of the South Island is the only region of New Zealand with a recognisably different dialect, attributed to its early settlers mainly originating from Scotland. As a result, “in Southland some people still pronounce post-vocalic /r/” Hay et al. (2008:98). Although none of the participants hailed from the Southland area of the South Island, their pronunciation could be influenced by this dialect

and as a result this could be one of the reasons for the presence of /r/ in some of the NZ participants' pronunciation.

In the case of South Africa, Hartmann and Zerbian (2009:136) argue that the claim that SAcE is non-rhotic is not necessarily correct, explaining that the main argument behind this claim is that SAcE is a '19th Century English', created by settlers from mainland English varieties who had already lost rhoticity. They argue, however that "many SAcE varieties show at least some degree of rhoticity due to language contact" (Hartmann and Zerbian, 2009:136). They continue to explicitly explain that this has been postulated for 'English-Speaking South African English' (i.e. white speakers with English as their first language) detailing that the entry of rhoticity into varieties of SAcE is as a result of the influence of Afrikaans, which consistently produces all orthographic <r>'s, thus has subsequently been partially adopted into SAcE. (Hartmann and Zerbian, 2009:136; Wells, 1982c:617). Lass and Wright (1986:204) continue with this debate by claiming that "many SAcE varieties are 'semi-rhotic'; i.e. they show variable occurrence of postvocalic /r/ in environments where non-rhotic dialects have none" (Lass and Wright, 1986:204). They provide various reasons for this, including the perception that rhotic speech in South Africa occurs in people from lower socio-economic backgrounds as well as highlighting the fact that Afrikaans is fully rhotic. Lass and Wright (1986:205) state that SAcE and Afrikaans have an intimate contact history with each another, resulting in 'borrowing' from one language to another, thus concluding that "on both historical and sociolinguistic grounds, SAcE semi-rhoticity must therefore derive from Afk [Afrikaans] rhoticity, or at least from the (semi-) rhoticity of Afk speakers of English" (Lass and Wright, 1986:205).

Similarly to NZE, the inclusion of rhoticity in SAcE could be attributed to influences from other varieties. Brown (1988) however suggests that the presence of post-vocalic /r/ in both these varieties could instead be attributed to the influence of AmE. He explains that numerically, rhoticity is found among the majority of speakers in the English speaking world and

“nowadays we must appreciate that American English is more influential throughout the world than British English” (Brown, 1988:146), suggesting that through media such as television, films, popular music, travel etc., foreigners are more likely to be exposed to the rhotic American pronunciation. Each of these suggestions, either alone or in combination could have contributed to the rhotic pronunciation of the NZ and SAf participants, however without the presence of statistical evidence of this phenomenon these suggestions are only speculative and the data is not reliable in suggesting the rhotic nature of NZE or SAfE.

The lexeme ‘bear’ was produced with a split between /bɛ:/ and /bɛə/ for participants from Britain, Australia and South Africa, whereas the American participants again pronounced the /r/ in the word final position /bɛər/. The NZ pronunciation of ‘bear’ is also split, sounding more like the aforementioned rhotic ‘beer’ /bɪər/ alongside the rhotic /bɛər/ and non-rhotic /bɛə/. The pronunciation of /bɪər/ by some participants is in line with Hay et al.’s (2008:27) comment (see 3.2.1.13) that for many younger NZ speakers there is no distinction between word pairs like ‘ear’ and ‘air’ and ‘beer’ and ‘bear’, which are pronounced as homophones with most speakers who merge NEAR and SQUARE starting the diphthong relatively high in the mouth, close to the position of the NEAR diphthong. ‘Bird’ was articulated as /bɜ:d/ in RP, GenAus, NZ and SAf and as expected, GenAm speakers pronounced the rhotic /bɜrd/. This is the same for ‘bard’ and ‘board’ with RP, GenAus, NZ and SAf speakers articulating them as /bɑ:d/ and /bɔ:d/ and GenAm participants pronouncing them as /bard/ and /bɔrd/ respectively.

‘City’ was pronounced as /sɪti:/ by RP participants, whereas the GenAm speakers produced ‘/t/-flapping’ pronouncing the alveolar plosive /t/ closer to an alveolar tap [ɾ] thus producing ‘city’ as /sɪri:/. GenAus, NZ and SAf all displayed a split between /sɪti:/ and /sɪri:/, with older participants using the

alveolar plosive /t/ and its younger participants using the tap [ɾ]. This phenomenon is in its minority in these varieties, yet could suggest that AmE pronunciation is having an influence upon the pronunciation of young people, which may be as a result of youth being more susceptible to change.

All five varieties' production of the adjective 'seedy' and the noun 'hat' corresponded, with the articulation of /si:di:/ and /hæt/ respectively. For 'dance' there was a split, with the NZ and SAf participants using the PALM vowel /da:ns/, whereas the GenAm and GenAus speakers used the TRAP vowel /dæns/. The majority of RP participants produced /da:ns/ using the PALM vowel, however RP3 produced /dæns/ using the TRAP vowel. This could be as an influence of AmE, however is more likely associated with the TRAP - BATH split that occurs within Britain. Words that belong to the standard lexical set BATH in the North of England are generally pronounced with the short, open TRAP vowel (Wells, 1982b:353). This situation was similar with 'daft' pronounced as /da:ft/ for the RP, NZ and SAf participants and /dæft/ for GenAm, with a split in GenAus between /da:ft/ and /dæft/. Svartvik and Leech (2006:163) explain that in words such as 'dance' and 'glass' GenAm has the 'front a sound', in comparison to RP /ɑ:/. This split could suggest an increasing influence from AmE upon AusE pronunciation. It could also be attributed to Australian settlement history, as residents in the North of England also used the TRAP vowel in place of the BATH vowel in words such as 'dance'; however history shows that only a small minority of settlers were from the North of England. There is little certain fact about the origins of the first settlers and convicts in Australia. Robson (1965:178-188) takes a sample of the first settlers, both free and bound, from relevant documents lodged in the Public Record Office in London, and goes into great detail on his sampling methods. From his sample of 6,131 men and 1,248 women, 56% of the men were born in England, alongside 23% in Ireland, whereas 32% of the females were born in England, with 34% coming from Ireland. Robson (1965:178;186) also details the location in which the convict settlers were tried, with 17% of

males tried in London, 7% in Lancashire, 5% in Dublin, 4% in Yorkshire, 3% in Warwick alongside 20% of females being tried in London, followed by 8% in Lancashire, 7% in Dublin, 4% in Cork, 3% in Yorkshire and so on. Robson's (1965) statistics provide a general overview of the settlers' birthplace and the location of the convicts' trials prior to transportation; however this data is not substantial enough to provide conclusive evidence of the origins of Australian English. Thus, the Australian use of the TRAP vowel /æ/ could be attributed to the Americanisation of AusE as opposed to Australia's settlement history; however it is difficult to make claims about individual participants and in this case is impossible to be certain.

Bradley (1991) in Cheshire (ed.) (1991) discusses the long and complex history between /æ/ and /a:/ in Australian English. He attributes the development of the Middle English short *a* to long /a:/ rather than /æ/ before the fricatives /f/, /θ/ and /s/ as a reaction to the deconstruction of postvocalic- /r/ and suggests that this phenomenon preceded the development of /a:/ rather than /æ/ before a cluster of nasal plus obstruent (e.g., *dance*). Bradley (1991:227) comments that Australian English tends more to /æ/ in the latter environment and is supportive of the aforementioned timeline, which may in turn assist to order and date the stages of lexical diffusion. Bradley (1991:228) cites other research (Mitchell and Delbridge (1965), Baker (1966)) which suggests "the [æ] form is more widely heard in Australia, and [is] on the increase" and continues to explain that this may reflect a reversal of the lexical diffusion process or alternatively could suggest movement away from RP as the prestige in Australia. Bradley's (1991) results demonstrate that most lexical items behave alike in RP and AusE, and he suggests there has been some continued contact and influence of RP on AusE, most evident in Adelaide by stating that "the pattern is more like that of RP" (Bradley 1991:229), however states that it is still distinctively Australian.

'Half' was pronounced as /hɑ:f/ by the RP, GenAus, NZ and SAf participants, with GenAm using the TRAP vowel /hæf/. The lexemes 'father' and 'farther'

are mainly homophonous in RP, GenAus, NZ and SAf; /fɑ:ðə/ and /fɑ:ðə/, with the exception of a few participants in GenAus and SAf producing /fɜ:ðə/. This can either be attributed to a pronunciation change, or more likely as a participant perception error when reading the list, with the participants mistaking ‘further’ for ‘farther’. GenAm pronounces the two words differently, /fɑ:ðɜr/ and /fɑrðɜr/, demonstrating rhoticity in the latter. The word ‘pull’ was produced differently in most of the five varieties. RP and GenAus articulated /pʊɫ/, employing the dark /l/ [ɫ] in the word final position, as noted in 3.2.2.3, whereas GenAm demonstrated a split with /pʊɫ/ and /pʌɫ/. The production of both the FOOT /ʊ/ and STRUT /ʌ/ vowel could be associated with the FOOT - STRUT split which saw in the 17th Century the old short /u/ splitting into two distinct qualities /ʊ/ and /ʌ/. There are cases in the North of England where FOOT is used in words that are in the STRUT lexical set; however it is unusual to see it the opposite way round, as in the case of GenAm. NZ pronounced both /pʊɫ/ and /pəɫ/ and SAf produced a split between /pʊɫ/ and /pu:ɫ/. The NZ use of the SCHWA sees the vowel being produced lower and further forward as noted by Hay et al. (2008:24) when they explain that the “NZE FOOT is becoming more central and less rounded”. They explain that this is most noticeable in words such as ‘good’ which often sounds like it is produced as ‘g’d’ /gəd/. The use of the SCHWA /ə/ could also be in anticipation of the production of the dark- /l/ [ɫ] in the word-final position of ‘pull’. For the SAf pronunciation we see the two younger participants produce /pu:ɫ/ for ‘pull’. This is not a previously documented occurrence, suggesting that changes are taking place within SAfE pronunciation amongst the younger generation.

‘Pool’ was produced as /pu:ɫ/ by RP, GenAm and SAfE participants, with GenAus articulating /pu:ɫ/ and /pəʊɫ/ and NZ speakers splitting between /pu:ɫ/ and /pəɫ/. The variation of /pəʊɫ/ was produced by only one GenAus

participant who is an older gentleman and was reading the list at a rapid pace. This suggests that this is not in fact a true representation of Australian English speech and instead could be a participant perception error, considering ‘pole’ followed ‘pool’. ‘Pole’ was produced as /pəʊt/ and ‘Paul’ was pronounced as /pɔ:t/ in all five varieties. ‘Doll’ and ‘cot’ were both produced as /kɒt/ and /dɒt/ in RP, GenAus, NZ and SAf, whereas GenAm produced a split between /dɒt/ and /dɑt/ and /kɒt/ and /kat/ respectively. The use of /ɑ/ supports the findings of Gramley and Pätzold (1992) and Carr (1999) noted in 3.2.1.4, and is supported further by Bronstein (1960:165) who explains in his publication on the pronunciation of AmE that “[p] is not a phonemic entity to most of us who use only [ɑ] or [ɔ]”. Some SAf participants also seemed to be producing the LOT vowel /ɒ/ as slightly higher and further forward in ‘cot’, suggesting it was similar to /ʌ/. This result is supported by Bowerman (2004) (cited in 3.2.1.4) who explains that SAf often ranges between [ɒ], [ɔ] and [ʌ] for the LOT vowel, with [ʌ] mainly being used by younger speakers. RP, GenAus, NZ and SAf produced ‘caught’ as /kɔ:t/ with GenAm splitting the pronunciation between /kɔ:t/ and /kat/.

‘Fir’ was pronounced as /fɜ:/ by RP, GenAus and SAf, with GenAm demonstrating rhoticity with /fɜr/ and NZ articulating it as a split between /fɜ:/ and /fɜə/. For the majority of participants, rather than producing a free, steady state vowel, NZ produces a diphthong by adding an unstressed SCHWA /ə/ to the NURSE vowel /ɜ:/ when articulating ‘fir’. ‘Fern’ was produced as /fɜ:n/ by the RP, GenAus, NZ and SAfE speakers with a display of rhoticity produced by the GenAm participants with /fɜrn/. ‘Fur’, a homophone to ‘fir’ was pronounced as /fɜ:/ by RP, GenAus and SAf participants, with GenAm speakers demonstrating rhoticity /fɜr/ and NZ

participants instead producing a split between /fɜ:/ and /fɜə/, homophonous to the previously mentioned ‘fir’. The lexeme ‘fair’ was pronounced as a split between /fɛ:/ and /fɛə/ by RP participants, as /fɛər/ by GenAm speakers, as /fɛ:/ in AusE, split in NZE between /fɛə/ and /fɪə/ and as /fɛə/ in SAfE. Some RP participants use the free, steady state SQUARE /ɛ:/, whereas others add the unstressed SCHWA /ə/ to produce /ɛə/ as documented by Wells (1982a) and NZ sees one participant produce /fɪə/, however, this is in the minority, suggesting it was a participant perception error when reading the word list.

‘Nose’ and ‘knows’ were produced as homophones /nəʊz/ and /nəʊz/ for all five varieties and ‘plate’ was pronounced as /pleɪt/. ‘Weight’ was produced as /weɪt/ by the RP, GenAm, GenAus and SAf, whereas the NZ participants produced a split between /weɪt/ and /hweɪt/. This demonstration of the /hw/-/w/ distinction (previously mentioned in 3.2.2.1,) originates in the pronunciation of immigrant New Zealander’s in the late eighteenth and nineteenth century. This usage slowly declined in the early twentieth century. Hay et al. (2008:33) commented that “older women from the higher levels of society [...] are usually the only people who use /hw/ in the traditional way” and this comment corresponds with the participant who used this distinction. The participant NZ5, is a well-educated female, with a number of academic publications to her name, fitting the ‘higher socio-economic profile’ mentioned by Hay et al. (2008). It is interesting to note in this example that /h/ is not present in the orthographic spelling of the word, yet is pronounced by the New Zealand speaker. Hay et al. (2008:33) suggests that /hw/ is often present when the orthography of a word does not reflect it and occurs when a person is emphasising that particular lexeme.

‘Poor’ was articulated differently in each variety, with RP producing a split between /pɔ:/, /pʊə/ and /pɔə/, GenAm /pɔr/, GenAus /pɔ:/ and /pʊə/,

NZ as /pɔə/ and SAf /pʊə/. The verb ‘pour’ was pronounced as /pɔ:/ and /pɔə/ in RP, /pɔ:/ in GenAus and SAf, while GenAm articulated /pɔr/ and NZ /pɔə/. The use of the THOUGHT vowel and the CURE vowel in RP is to be expected, with /pʊə/ being the more traditional and archaic of the two. The use of this is demonstrated by the two older participants from Britain. The use of /pɔə/ sees the THOUGHT vowel becoming a diphthong with SCHWA articulated at the end. This is only produced by one RP participant, but is present in NZ speech too. This suggests that similarly to the SQUARE vowel being split between /ɛ:/ and /ɛə/ the THOUGHT vowel may have split between /ɔ:/ and /ɔə/. The word ‘paw’ was pronounced as /pɔ:/ and /pɔə/ in RP, /pɔ:/ in GenAus and SAf, /pɔə/ in NZ and the rhotic /par/ in GenAm. As mentioned in 3.2.1.4, GenAm does not have the LOT vowel, instead using either /a/ or /ɔ:/, which appears to be interchangeable for the participants, who use /a/ in place of the more traditional /ɔ:/. This finding is supported by Fromkin et al. (2007:225). ‘Tide’ and ‘tied’ were produced homophonously in all five varieties, as /taɪd/ and in RP, GenAus, NZ and SAf participants all produced ‘pause’ and ‘paws’ as /pɔ:z/, with GenAm speakers producing a split between /pɔrz/ and /parz/, for the reasons discussed previously.

‘Meet’ and ‘meat’ were also pronounced as homophones /mi:t/ and /mi:t/ for all five varieties. The lexeme ‘mate’ was produced as /meɪt/ in RP, GenAm, GenAus, NZ and SAf and ‘which’ and ‘witch’ were produced the same in all five varieties, as /wɪtʃ/ and /wɪtʃ/ respectively. The RP, GenAm, Gen Aus and SAf participants all pronounced ‘whales’ as /weɪtɪz/ whereas NZ had a split between /weɪtɪz/ and /hweɪtɪz/ as mentioned previously, demonstrating the /hw/-/w/ distinction. The lexeme ‘watch’ was produced

as /wɒtʃ/ by all five varieties and ‘whine’ and noun ‘wine’ were articulated as homophones in all five varieties, as /waɪn/ and /waɪn/.

5.1.2 - Word List 1 - Discussion

The first word list focussed on eliciting the difference in vowel sounds among the five varieties. The results demonstrated that despite their overtly different appearances, the varieties still contain many similarities, with many of the vowel sounds being produced alike from variety to variety. Thirty-one of the fifty-nine words were articulated in the same way in all five varieties, with only twenty-eight yielding differences. Some of the similar pronunciations included lexemes such as ‘pet’, ‘pat’, ‘seedy’ and ‘mate’. Some of the main differences include the NZ and SAf use of the central vowel SCHWA /ə/ in words such as ‘pit’, noted by scholars such as Wells (1982a), Fromkin et al., (2007), Hay et al. (2008:23) and Bowerman (2004). NZ also uses /ə/ as a variation of ‘pull’ with some of the participants producing /pət/ instead of the traditional /pʊt/. Hay et al. (2008:24) again suggests that with regards to NZ English, that the FOOT vowel is becoming more central and less rounded. Some NZ participants also use /ə/ when producing homophones ‘fir’ and ‘fur’ producing /fɜə/. This indicates movement from the open-mid central position /ɜ/ to the slightly higher central position /ə/ producing /ɜə/ (see Figure 15).

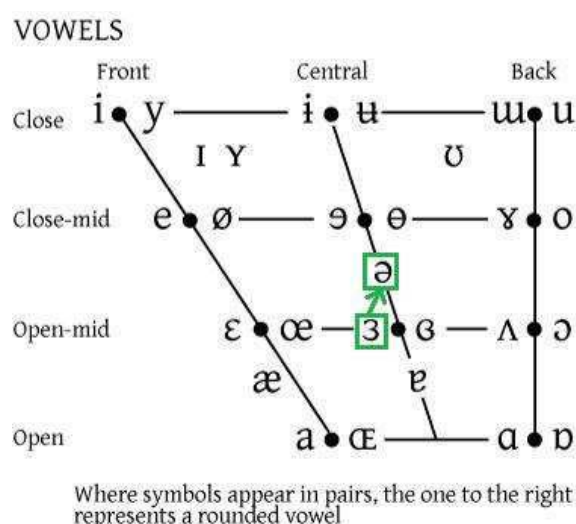


Figure 15

NZ Pronunciation of 'Fir' and 'Fur'

Adapted from 'The International Phonetic Alphabet'

These differences are not in line with either RP or GenAm pronunciation, suggesting that changes are occurring within the individual varieties, similar to what is known as the 'Latin Analogy' (see 3.1.3).

The New Zealand participants also produced pronunciation differences that are not present in any of the other varieties of English, articulating 'beer' and 'bear' as homophones for some participants, as /bɪər/. Hay et al. (2008:39) states that "the sound change that sets NZE apart from many other varieties of English is the NEAR/SQUARE merger that removes the distinction between pairs of words such as 'ear' and 'air'." Older NZ speakers also produce a distinction between 'Wales' and 'whales' producing them as /weɪɪz/ and /hweɪɪz/ respectively, providing evidence of the /w/-/hw/ distinction mentioned in 3.2.2.1. This phenomenon, as suggested by Hay et al. (2008) is not present in any other varieties of English and this is confirmed by the data obtained in this study, thus again suggesting that the varieties are beginning to diverge from one another.

The concept of '/t/-tapping' is well known in GenAm, involving a tap of the tongue against the alveolar ridge when orthographic <t> occurs between two

vowels producing [ɹ] with GenAm speakers producing ‘city’ as /sɪɹi:/. Some GenAus, NZ and SAf participants also provided evidence of ‘/t/-tapping’ alongside the pronunciation /sɪti:/ providing evidence that /t/-tapping is still not widespread. However, it is evident in the speech of younger participants and suggests that /t/-flapping may become a common speech feature in the future.

The results of word list 1 presented evidence that suggests AusE may to some extent have been influenced by AmE. The GenAus pronunciation of ‘dance’ using the TRAP vowel /æ/ producing /dæns/, as opposed to the RP /da:ns/ may be attributed to the Americanisation of AusE, however, the GenAus speakers did not provide evidence of other Americanisms such as rhoticity or the use of /a/ for the LOT vowel /ɒ/ in words such as ‘doll’ and ‘cot’ suggesting that if Americanisation is occurring, it is in its infancy. The NZ participants also demonstrated evidence of the ‘Latin Analogy’ by producing some variations that were not present in either of the reference varieties, such as the use of SCHWA in ‘pull’ /pəɫ/ and the articulation of /hw/ in ‘weight’ /hweɪt/ and ‘whales’ /hweɪɪz/, suggesting that these are individual to the variety of New Zealand. Table 5 presents the differences highlighted by results of the first word list for the five varieties, demonstrating the phenomena and the word in which it occurred:

	RP	GenAm	GenAus	NZ	SAf
/t/-tapping		CITY	CITY	CITY	CITY
Use of SCHWA /ə/				PIT, PULL, POOL	PIT
Use of TRAP /æ/	DANCE	DANCE, DAFT,	DANCE		
		HALF			
Use of STRUT /ʌ/	PUT	PULL			
Use of PALM /a/		DOLL, COT,			
		CAUGHT			
		PAW, PAUSE,			
		PAWS			
Use of GOAT /ə /			POOL		

Use of CURE /ʊə/	POOR		POOR		POOR
Use of NEAR /ɪə/				FAIR	
Use of GOOSE /u:/					PULL
Presence of /hw/				WEIGHT, WHALES	
Production of /ɔə/	POOR, POUR,			POOR, POUR,	
	PORE, PAW			PORE, PAW	
Production of /ɛə/	FAIR			FAIR	FAIR

Table 5
Word List 1 Results

5.2 - Word List 2

The second part of the study included the recording of a second list of thirty-four words by the participants (cited in Appendix 4), compiled from research conducted by Svartvik and Leech (2006:165). This word list contained examples with aspects such as word stress, /t/-flapping and the use of the reduced ‘schwa’ vowel /ə/. A detailed explication of this can be found in Appendix 10 (page 161). A condensed phonemic transcription of the second word list is provided in Appendix 11 (located on 162), which highlights the different pronunciations of each variety. Appendix 12 (cited on page 168) provides the transcription of each individual participant’s pronunciation of the second word list. We will now consider each element in turn.

5.2.1 - Word Stress

The suprasegmental features of lexical stress marks a syllable as more prominent by placing emphasis on that syllable. British and American word stress patterns are known to differ and it is an obvious move to explore this idea in the study. Word stress in this study is sub-divided into two categories explored by the second word list; polysyllabic word stress and French loan words.

5.2.1.1 Polysyllabic Word Stress

Svartvik and Leech (2006:165) state that in some polysyllabic words there is a noticeable variation in the positioning of word stress, explaining that “in GA [GenAm] there is usually one option, but in RP the ‘American’ pronunciation co-exists with the ‘British’ pronunciation” (Svartvik and Leech, 2006:165). This could indicate the beginning of infiltration into British pronunciation by American stress patterns. The changes in polysyllabic word stress had already been noted by Alexander (1986) when he commented that over one hundred years ago British and American stress patterns were very similar but this is no longer the case. To prove his point he directs the reader to Webster’s Dictionary of 1861 which lists ‘etiquette’ with stress on the third syllable and comments that currently we would stress the first syllable, highlighting the change over time. The words included to test the notion of variation in polysyllabic word stress were ‘advertisement’, ‘applicable’, ‘aristocrat’ and ‘controversy’.

The first of the polysyllabic words ‘advertisement’ provided as many as four differing pronunciations in some varieties. RP participants placed stress on the second syllable /æd'vɜ:tɪsmənt/ articulating the noun with the TRAP vowel in the word initial position and with the consonant /s/ in a medial position. GenAm speakers instead placed stress on the first syllable /'ædvɜ:taɪzmənt/ and also began with the TRAP vowel, but used the voiced counterpart /z/ in the medial position, preceded by the PRICE vowel /aɪ/. GenAus participants provided the research with three different pronunciations of ‘advertisement’ with /æd'vɜ:tɪsmənt/, similar to the RP participants, /æd'vɜ:tɪsmənt/, again placing stress on the second syllable but instead using the reduced SCHWA vowel in the initial position and /'ædvɜ:taɪzmənt/, the American counterpart. NZ speakers produced three different articulations, with /əd'vɜ:tɪsmənt/ using the SCHWA vowel in the initial position, with stress on the second syllable alongside /'ædvɜ:tɪsmənt/

which began with TRAP /æ/ and stressed the first syllable. Some NZ participants also produced the AmE /æd'vɜ:tɪzmənt/, beginning with the TRAP vowel, using the voiced /z/ preceded by the PRICE vowel /aɪ/. SAf participants produced four differing pronunciations, with /'ædvɜ:tɪsmənt/, /æd'vɜ:tɪsmənt/ and /æd'vətɪsmənt/ all using the TRAP vowel in the initial position, with alternate placing of stress alongside the third variation using the reduced SCHWA vowel /ə/ in the medial position, in comparison to using the NURSE vowel /ɜ:/ . The fourth distinction articulated the reduced SCHWA vowel in the initial position /əd'vɜ:tɪsmənt/. The use of unstressed SCHWA in the initial position is an expected variation when the stress is placed on the second syllable. The realisation of SCHWA /ə/ is used in between consonants in the middle of the word when the vowel is unstressed. The split between word stress positioning differs; RP does not display any evidence of the American stress pattern and vice versa. GenAus, NZ and SAf participants all use either word stress patterns with the other pronunciation differences mentioned previously. GenAus and NZ speakers then take the Americanisation further by using the voiced /z/ instead of the unvoiced /s/ in /'ædvɜ:tɪzmənt/. This is demonstrated by younger participants, suggesting that Americanisation is having more of an effect upon the younger rather than the older generations.

'Applicable' is another polysyllabic word that differed within the five varieties. RP, NZ and SAf speakers all produced a split between /æ'plɪkəbəl/ and /ə'plɪkəbəl/, with some participants using the TRAP and others the SCHWA in the initial position, both placing stress on the second syllable in the word. The GenAm participants produced a split in both word initial pronunciation and stress placement with /'æplɪkəbəl/ and /ə'plɪkəbəl/ and GenAus speakers produced /'æplɪkəbəl/, /æ'plɪkəbəl/ and /ə'plɪkəbəl/.

‘Aristocrat’ was pronounced as /'æɪstəʊkræt/, /'æɪstəkræt/ and /ə'ɪstəʊkræt/, in BrE with two of the three variations using the TRAP vowel at the beginning, alongside the third using the reduced SCHWA. The first two realisations also varied in the middle of the word, with some participants using the GOAT vowel /əʊ/ whereas others used the SCHWA. The use of SCHWA is often present when the vowel is present in an unstressed syllable. GenAm produced only /ə'ɪstəʊkræt/ and GenAus /'æɪstəʊkræt/, /ə'ɪstəʊkræt/, /'æɪstəkræt/ and /ə'ɪstəʊkræt/. The AusE realisations varied in the medial position, similar to that of RP speakers, as well as placing stress on both the first and second syllables. NZ participants also provided four different pronunciations, producing /'æɪstəʊkræt/, /æ'ræstəʊkræt/, /ə'ɪstəʊkræt/ and /ə'ɪstəkræt/. Two of the variations use the TRAP in the initial position, two used SCHWA and they also differed in the medial position, with the exception of /æ'ræstəʊkræt/ produced by a single participant, who used /æ/ instead of the KIT vowel following /r/. This unusual pronunciation is interesting to document, however it does not appear to reflect the pronunciation of the NZE populace. SAfE participants produced three variations, with /'æɪstəʊkræt/ and /'æɪstəkræt/ placing stress at the beginning of the word, with either the GOAT vowel /əʊ/ or SCHWA /ə/ in the medial position, as well as beginning with SCHWA and placing stress on the second syllable /ə'ɪstəʊkræt/.

The final polysyllabic word in the second word list was ‘controversy’ which was produced in BrE as /'kɒntrəvɜːsi:/, /kɒn'trɒvɜːsi:/ and /kən'trɒvɜːsi/. The participants provided stress either on the initial position or on the second syllable. For those who placed stress at the beginning, the orthographic <o> was produced as the unstressed SCHWA /ə/, in comparison to the pronounced LOT /ɒ/ vowel in the other variations. For the pronunciations placing stress

on the second syllable, some participants produced the LOT vowel /ɒ/ and others the SCHWA /ə/ in the first syllable. The GenAm participants all pronounced ‘controversy’ placing stress on the first syllable producing /kəntrəvərsi:/, /'kəntrəvərsi:/ and /'kəntrəvɜrsi:/, with some using the SCHWA /ə/ in the medial position, others combining the SCHWA /ə/ with the NURSE vowel /ɜ:/ and others using /ɑ/ rather than /ɒ/ (as mentioned in 3.2.1.4 and 5.1.1). The GenAus participants produced a combination of /'kəntrəvɜ:si:/, /kən'trɒvɜ:si:/ and /kən'trəʊvɜ:si:/. The variation /'kəntrəvɜ:si:/ has stress on the first syllable, using a reduced SCHWA in the second, /kən'trɒvɜ:si:/ places emphasis on the second syllable, and /kən'trəʊvɜ:si:/ emphasises the second syllable accompanied by the use of the GOAT vowel /əʊ/ in the medial position. NZ participants pronounced three variations placing stress on the first syllable, with some placing the SCHWA in place of the orthographic <o> and <e>, and others demonstrating the use of the LOT, SCHWA and NURSE vowels; /'kəntrəvəsi:/, /'kəntrəvəsi:/ and /'kəntrəvɜ:si:/. Some participants also placed stress on the second syllable /kən'trɒvəsi:/, they however were in the minority. Finally, the SAf participants produced /'kəntrəvəsi:/ with stress on the first syllable, resulting in the use of the schwa in the second and third syllables, alongside /kən'trəvəsi:/ and /kən'trɒvəsi:/ which places emphasis on the second syllable.

The polysyllabic word stress of these four words shows that the RP participants tend to only use the RP stress patterns, with the exception of ‘controversy’ where the participants used either. This is echoed in the GenAm results, speakers are inclined to only use the AmE stress pattern, with the exception of ‘applicable’ where the participants produce the word with stress on either the first or second syllable. The GenAus participants use

either RP or GenAm stress patterns for all four words, and take the Americanisation further in ‘advertisement’ by producing /z/ rather than /s/. The NZ and SAf participants use both stress patterns for ‘advertisement’, ‘aristocrat’ and ‘controversy’ and only use the RP pattern for ‘applicable’. The majority of NZ participants use the AmE stress pattern in ‘controversy’ with stress on the second syllable in the minority. This demonstrates that there is still a clear distinction between the two reference varieties with regards to polysyllabic word stress; however AusE speakers uses both stress patterns, with an increased usage of the American forms for some words. NZ and SAf participants use either patterns with SAfE favouring BrE in these examples and NZE using both equally.

It is important, however, to consider factors other than increased usage of British or American forms when considering polysyllabic word stress. Stress positioning is a complex matter, as Giegerich (1992:181) explains. Speakers are not at liberty to stress what ever syllable they prefer, instead “every word has exactly one correct stress pattern” (Giegerich, 1992:183). There are a variety of patterns determined by the specific nature of the word, for example there are no monosyllabic words that consist of a light syllable and nouns that have long vowels in their final syllable have stress on that syllable. Words uttered in isolation may shift their stress from the secondary-primary to primary-secondary in certain contexts, for example ‘hotel’ and ‘champagne’ said in isolation, have final stress, but for many speakers they shift stress onto the first syllable when another strongly stressed syllable immediately follows them, as in ‘hotel management’.

In the case of polysyllabic word stress Giegerich (1992:67) notes “...three-way stress differentiation in words is not easily perceived; it is also relevant to the range of vowels that may be expected to occur in any given syllable”. This suggests that the clash of pattern principles may also have some effect upon the differing production of the polysyllabic words in the second word list. In addition to this, it must also be considered that some of these words may not be present in the participants’ everyday lexicon and the less-

frequent access to these words may result in the participants' uncertainty in the placement of word stress.

5.2.1.2 French Loan Word Stress

The French loan words 'ballet', 'café', 'detail' and 'frontier' were all included in the list to explore the notion of word stress. Traditionally GenAm participants place stress on the last syllable, as in the original loan words, (Svartvik and Leech, 2006:165). RP speakers, as noted by Svartvik and Leech (2006:165) placed emphasis on the start of the word /'bæleɪ/ and GenAm participants produced /bæ'leɪ/ with stress on the second syllable, replicating the original French pronunciation. Alongside RP, GenAus and NZ participants both place stress in the word initial position whereas SAf speakers produce the Americanised /bæ'leɪ/. The difference in stress could be attributed to Americanisation; however it would be primitive to assume that AmE had influenced the SAfE pronunciation of a word which is of French origin, when they are simply producing the word with the French stress pattern. There are many people of French origin living in South Africa (see Figure 16), in areas such as Franschhoek, outside of Cape Town.

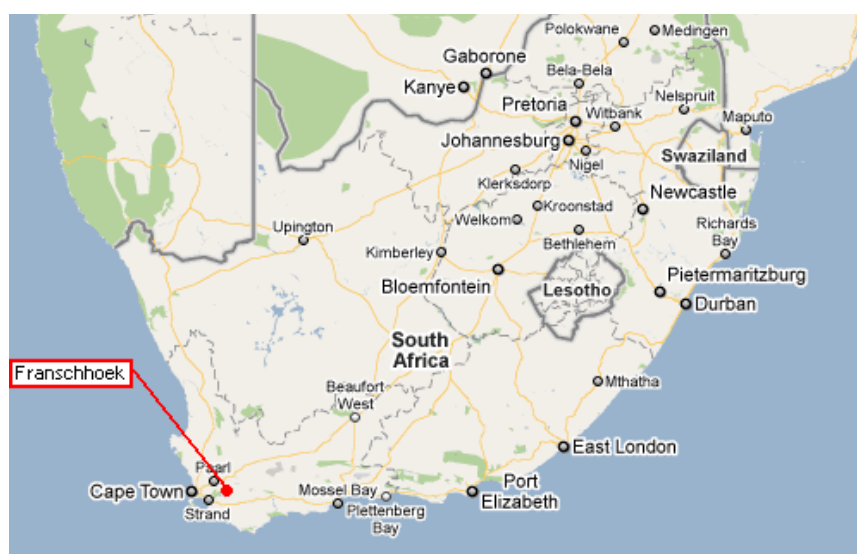


Figure 16

Franschhoek, South Africa.

Adapted from maps.google.com.au (2009)

The American usage of this stress pattern may have made it more accessible; however in this instance it is more appropriate to suggest that the South African participants may be adopting the original French pronunciation.

The noun ‘café’ was again pronounced with the stress on the first syllable in RP, GenAus and NZE /'kæfeɪ/ and on the second in AmE /kæ'feɪ/. SAf participants however, produced both variations, with stress on the second syllable in the majority. ‘Detail’ was articulated as /'di:teɪ/ by RP, GenAus, NZ and SAf speakers, with GenAm participants this time producing a split between /'dɪteɪ/ and /dɪ'teɪ/, with the stress on the second syllable in the minority. The AmE participants also used the KIT vowel /ɪ/ rather than the FLEECE vowel /i:/ produced by the other varieties. This is supported by Svartvik and Leech (2006:165) when they explain that in GenAm there can be more than one pronunciation of ‘detail’ with “/'dɪteɪ/” and “/dɪ'teɪ/” (Svartvik and Leech, 2006:165). This lexeme is the first exception to the proposed rule that AmE participants place stress on the second syllable, thus providing some evidence that the GenAm participants are assimilating their pronunciation to coincide with other English varieties.

The participants pronunciation of ‘frontier’ in RP, GenAus, NZ and SAf were all divided between /'frʌntɪə/ and /frʌn'tɪə/, whereas, in accordance with Svartvik and Leech’s (2006:165) findings, GenAm speakers demonstrated stress on the second syllable, as well as providing evidence of rhoticity with /frʌn'ti:r/.

With regard to word stress in French loan words, with the exception of ‘frontier’ RP, GenAm and NZ participants stressed the first syllable, not the second or French ‘original’. The GenAm participants provided stress on the second syllable in all except ‘detail’ which used both pronunciations, favouring the RP stress pattern /'dɪteɪ/. SAf speakers used both stress

patterns for ‘café’ and ‘frontier’, favouring the French in ‘café’ and used the French pattern in ‘ballet’ and the RP pattern in ‘detail’. This usage of the French or AmE stress pattern is more likely to be attributed to either, or a combination of, the Afrikaans influence upon SAfE and the presence of French speakers in South Africa, as well as perhaps being made more prominent by the AmE usage.

5. 2. 2 - Rhoticity

The notion of rhoticity in Section 5.1, was explored briefly in the second word list, through the participant production of the lexemes ‘car’ and ‘climber’. It was noted that American English is the only rhotic variety and this is reiterated in the results of the second word list. RP, GenAus, NZ and SAf speakers all produced ‘car’ as /kɑ:/ using the free steady-state PALM vowel, whereas GenAm participants produced the rhotic /kɑr/. RP and SAf speakers pronounced ‘climber’ as /klaɪmɜ:/, GenAus participants as /klaɪmə/, NZ speakers as a split between /klaɪmɜ:/ and /klaɪmə/, using either the lengthened NURSE vowel or the reduced SCHWA vowel in word final position, whereas GenAm participants produced the rhotic /klaɪmɜr/. The first word list demonstrated some rhoticity on the part of the New Zealand and South African participants; however this was not present for the second word list and could not be classed as a sound confirmation of this notion. In the case of the second word list only the GenAm participant’s pronounced <r> in the word final position in accordance with the literature.

5.2.3 - Reduced SCHWA vowel /ə/

Svartvik and Leech (2006:164) postulate that “adjectives ending in ‘-ile’ usually have a reduced ‘schwa’ vowel /ə/ in GA [GenAm] but not in RP”. The addition of the words ‘fertile’ and ‘hostile’ to the list aimed to explore this notion. The RP, GenAus and NZ participants all produced the words as

/fɜ:tʌɪt/ and /hɒstʌɪt/ respectively using the PRICE vowel /aɪ/, whereas GenAm speakers, as Svartvik and Leech (2006) mentioned, use the reduced SCHWA vowel in a split between /fɜrtə/ and /fɜrrə/ and /hɒstə/ and demonstrated evidence of /t/-flapping (see 5.2.5). Some GenAm participants, however also produced the BrE /fɜ:tʌɪt/ and /hɒstʌɪt/. The SAf participants all produced ‘fertile’ as /fɜ:tʌɪt/, however there was a split demonstrated between /hɒstʌɪt/ and /hɒstə/ for ‘hostile’. As a result, the RP, GenAus and NZ participants all used the PRICE vowel /aɪ/ in the words listed, whereas GenAm produced the full RP and reduced AmE version. The SAf participants demonstrated use of the reduced SCHWA /ə/ in ‘hostile’ but not in ‘fertile’ suggesting some influence of the reduced SCHWA usage in SAfE.

It was also noted by Svartvik and Leech (2006) that words ending with ‘-ery’ or ‘-ory’ in GenAm have full vowel with secondary word stress, while RP either has a reduced SCHWA vowel or omits the vowel completely. The inclusion of ‘cemetery’ and ‘inventory’ aimed to explore this.

The noun ‘cemetery’ was articulated in BrE as a combination of a three syllable /semɪtri:/, four syllable /semɪteri:/ using the DRESS vowel and /semɪtɛ:ri:/ using the SQUARE vowel. GenAm participants produced /semɪteri:/ with the shortened NURSE, GenAus speakers provided the three syllable /semɪtri:/ and /semɪteri:/ and NZ participants a combination of a three syllable /semɪtri:/, /sɪmɪteri:/ and /sɪmɪtri/ both using the KIT vowel instead of the DRESS. The SAf speakers produced a similar /sɪmɪtri:/ alongside /semɪteri:/ and /semɪtri:/. In this example the RP, GenAus, NZ and SAf participants all provided variations that reduced the four syllable word to three syllables by omitting the final vowel. ‘Inventory’ was produced as /'ɪnvəntəri:/ and /'ɪnvəntri:/ with stress on the first syllable and /ɪn'ventəri/

in BrE. GenAm speakers produced /'ɪnvəntɔːri/ and /'ɪnvəntɔːri/ with both stressing the first syllable, only differing in the use of the DRESS or SCHWA in the medial position. The AusE participants pronounced /'ɪnvəntri:/ with stress on the first syllable using the SCHWA, /ɪn'ventri:/ and /ɪn'ventɔːri:/ using the DRESS with stress on the second syllable. The NZ participants produced the AmE /'ɪnvəntɔːri/ with stress in the initial position and /'ɪnvəntri:/ using the SCHWA. They also produced /ɪn'ventɔːri:/ with stress on the second syllable. The SAf participants provided /'ɪnvəntri:/ with the initial word stress and SCHWA alongside /ɪn'ventɔːri:/ and /ɪn'ventri:/ with stress in the second position. In these examples RP, GenAus, NZ and SAf participants all demonstrate the reduction of the four syllable word to three syllables and omission of vowels, alongside RP speakers who provide evidence of the SCHWA reduction with /'ɪnvəntəːri:/.

5. 2. 4 - /t/-tapping

The process of /t/-tapping or flapping involves the intervocalic alveolar /t/ realised as a tap or flap [ɾ] in some varieties. Eddington and Elzinga (2008:247) explain that “it is generally agreed that flaps must be followed by unstressed vowels” and often follow a stressed vowel. The incorporation of ‘butter’, ‘data’ and ‘later’ aimed to elicit this phenomenon in the participants’ pronunciation. RP participant pronunciation of ‘butter’ produced /bʌtə/, GenAm speakers pronounced /bʌrər/ providing evidence of /t/-flapping, as well as rhoticity, with GenAus participants producing a split between /bʌtə/ and the /t/-tapped /bʌrə/. NZ speakers produced a split between /bʌtʌ/, /bʌtə/ and /bʌrə/ and SAf participants between /bʌtə/ and /bʌtɜː/. SAfE, like BrE did not demonstrate any /t/-tapping in this instance, with both GenAus and NZ participants producing some evidence of /r/ rather than /t/. In the case of ‘data’ RP and GenAus speakers pronounced the noun

in two variations /deɪtə/ and /dɑ:tə/ and NZ and SAf speakers as /dɑ:tə/, with none of the varieties demonstrating /t/-tapping. GenAm participants, however, produced a split between /deɪrə/ and /dæɪrə/. For the word 'later' RP speakers produced a split between the lengthened /leɪtɜ:/ and the reduced SCHWA vowel /leɪtə/ in word final position, GenAus, NZ and SAf participants all produced /leɪtə/. Again, the varieties did not demonstrate /t/-tapping, whereas GenAm speakers did with the pronunciation of /leɪrə/. The results of the study show that in some cases, for example 'butter', the AusE and NZ participants demonstrated /t/-tapping, however this was not the case in all words (e.g. 'data' and 'later'), suggesting that the AmE /r/ is entering into other varieties, although is not fully established at the present time.

5. 2. 5 - Pronunciation Differences

Other words in the second list were included on account of apparent pronunciation differences between the varieties. The first of these pronunciations was for 'clerk', which is traditionally produced as /klɑ:k/ in BrE and /klɜrk/ in AmE. The RP participants demonstrated the production of the traditional /klɑ:k/ as well as one participant articulating the AmE /klɜ:k/ without the rhoticity, instead using the lengthened steady-state NURSE /ɜ:/ . GenAus and SAf speakers both produced a split between /klɑ:k/ and /klɜ:k/, with NZ participants producing the AmE /klɜ:k/. This shows an increased usage of the AmE version of the word, with a presence in every variety, which alongside Americanisation may be attributed to the orthographic pronunciation of the word. The noun is spelt with the orthographic <e>, yet is pronounced in BrE with /ɑ:/ which is similar to the orthographic <a>. This may be one of the reasons behind the increased usage of the NURSE vowel

/ɜ:/ over the PALM vowel /ɑ:/. Another reason may be associated with the etymology of the word. The pronunciation /kla:k/ is evidenced in the South of England from the 15th Century (Simpson (ed.), (1989a:313) and alongside nouns such as ‘hearth’ and ‘sergeant’ use /ɑ:/ rather than /ɜ:/ that suits the orthography. Scottish English is believed to use /ɜ:/ as does AmE and Simpson (ed.), (1989a:313) states that “in [the] US the pronunciation is (klɜ:k) of late this has become somewhat frequent in London” suggesting it is infiltrating other varieties.

BrE and AmE produced differing pronunciations of ‘dynasty’ with RP speakers producing /dɪnəsti:/ or /dɪnɪsti:/ and GenAm participants using /daɪnəsti:/ or /daɪnɪsti:/. The GenAus participants produced a split between /dɪnəsti:/ and /daɪnəsti:/, the NZ speakers between /dɪnɪsti:/ and /daɪnɪsti:/ and the SAf participants /dɪnɪsti:/, /daɪnəsti:/ and /daɪnɪsti:/. This data, again, demonstrates the inclusion of the AmE pronunciation in varieties with BrE origin, highlighting the influence of AmE. The Americanisation of this particular word may be attributed to the media, namely the distribution of a television programme in the 1980’s known as ‘Dynasty’, pronounced using the AmE /daɪnəsti:/.

The noun ‘garage’ is produced with a split between /'gærɪdʒ/ and /gə'ra:ʒ/ in BrE, whereas GenAm speakers pronounce both /gə'ra:ʒ/ and /gə'ra:dʒ/, with most participants using the /ʒ/, placing stress on the second syllable. GenAus speakers provide a three way split between /'gæra:dʒ/ with the stress in the word initial position, /gə'ra:dʒ/, with stress placed on the second syllable alongside /gə'ra:ʒ/. NZ participants were also divided with /'gærɪdʒ/, /'gæra:dʒ/ and /'gæra:ʒ/ all placing emphasis at the start of the word, except one participant who produced /gə'ra:dʒ/ stressing the second

syllable. The SAf participants also produced different pronunciations of the lexeme ‘garage’ with /'gæɹɑ:dʒ/ and /'gæɹɑ:ʒ/ placing word stress in the initial position and /gæ'ra:dʒ/ and /gæ'ra:ʒ/ placing it on the second syllable. The production of /gæ'ra:dʒ/ with the reduced SCHWA vowel had the most common occurrence and this may be attributed to the word being of French origin with stress on the second syllable.

The RP, GenAus and SAf participants produced the noun ‘inquiry’ as /ɪŋk'waɪri:/ placing the stress on the second syllable in the word whereas GenAm speakers pronounced /'ɪŋkwəri:/ with the stress in the word initial position. NZ participants produced a split between /ɪŋk'waɪri:/ and /'ɪŋkwəri:/, however the BrE pronunciation was in the majority, with only one participant producing the AmE /'ɪŋkwəri:/. The use of the reduced SCHWA /ə/ in AmE and NZE is in accordance with the rule of the main stress on the first syllable of the word, and demonstrates some influence of AmE upon NZE pronunciation.

‘Laboratory’ was split three ways in RP with participants pronouncing /'læbætri:/, /lə'bɒrətri:/ and /lə'bɒrətəri:/, with two of the variations placing stress on the second syllable. The example positioning the stress on the first appears to be an unusual pronunciation of the word, demonstrated by only one participant and does not appear to be a true representation of the RP pronunciation of the word. GenAm participants provided the research with /'læbrætɔri/ and GenAus speakers /lə'bɒrətri:/, /'læbrətri:/ and /'læbrætɔ:ri:/. NZ participants produced several: a combination of /lə'bɒrətri:/, /'læbrætɔ:ri:/ and /'læbrətri:/ and SAf speakers /'læbrætɔ:ri:/, /lə'bɒrətri:/ and /lə'bɒrætɔ:ri:/. There are various similarities between the stress and pronunciation patterns of the five varieties. A number of RP, GenAus

and NZ speakers all produced three syllable variations of /'ləbætri:/ (RP) and /'ləbrætri:/ (GenAus and NZ), with primary stress in the initial position. Some RP, GenAus, NZ and SAf participants produced the word with stress on the second syllable, although they differed the first vowel sound /lə'bɒrætri:/ (RP) and /lə'bɒrætri:/ (AusE, NZE and SAfE), using either the SCHWA or TRAP vowels. GenAm speakers pronounced initial word stress /'ləbrætɔri/ and a few GenAus, NZ and SAf participants produced /'ləbrætɔ:ri/ a similar variation, differing in the use of /ə/ rather than /æ/ in the middle and lengthening the THOUGHT vowel /ɔ:/. RP and SAf speakers both produced a five syllable variation with /lə'bɒrætəri:/ and /lə'bɒrætɔ:ri:/ respectively. These pronunciation differences are so varied and different that it is difficult to speculate which variety has influence on which, if any. Svartvik and Leech (2006:165) postulated that RP's standard was /lə'bɒrætri/ and AmE's /'ləbræ,tɔri/, suggesting that those with stress on first syllable have correlation to AmE stress patterns.

'Leisure' was produced in BrE as /leʒɜ:/, whereas GenAm participants pronounced /li:ʒər/. GenAus speakers used the DRESS accompanied by the SCHWA /leʒə/, NZ participants, the DRESS accompanied either the SCHWA or NURSE /leʒə/ and /leʒɜ:/ and SAf speakers used both the DRESS and the FLEECE accompanied by the SCHWA /leʒə/ and /li:ʒə/. SAfE is the only variety to produce both vowel sounds in some form, suggesting again that there is some influence from AmE upon their pronunciation. For 'lever' RP and NZ participants use the FLEECE vowel ending with the NURSE in /li:vɜ:/ and GenAm speakers display rhoticity using both the FLEECE and DRESS /li:vɜr/ and /levər/. GenAus participants uses the FLEECE accompanied by the SCHWA /li:və/ and SAf speakers uses a combination /li:vɜ:/, /li:və/ and

/levə/. The use of the DRESS in the first syllable suggests that the participants literal pronunciation of the word, as with ‘clerk’ producing ‘lever’ in a similar fashion to its orthography.

For the noun ‘lieutenant’ the RP, GenAus and SA participants produced a split between /leftənənt/ and /lu:tenənt/ using the DRESS and GOOSE vowels respectively, whereas GenAm only has /lu:tenənt/. NZ speakers produced a split between /leftənənt/, /lu:tenənt/ and /lu:tɪnənt/ with the production of the KIT vowel in the middle of the word. The origin of the different pronunciations are still debated, with a suggestion that the British pronunciation may be associated with old French ‘luef’ for ‘lieu’ and the idea that the “labial glide at the end of lieu as the first element of a compound was sometimes apprehended by Englishmen as a ‘v’ or ‘f’” (Simpson (ed.), (1989b:909). ‘Nephew’ was produced as ‘nefju:’ in all five varieties and RP, GenAus, NZ and SAf participants all produced ‘progress’ as /prəʊgres/ using the GOAT vowel, with the GenAm participants splitting between /prɒgres/ using the LOT vowel and /prəʊgres/.

The RP, NZ and SAf speakers all produced ‘route’ with the GOOSE vowel /ru:t/, whereas the GenAm and GenAus participants provided a split between /ru:t/ and /raʊt/ using the MOUTH vowel. The present day orthography of ‘route’ was only introduced in its present form at the end of the 16th Century and not fully adopted until the beginning of the 18th Century. From that time until circa 1800 the usual spelling was ‘rout’, pronounced /raʊt/. This pronunciation still remains in the military and in AmE (Simpson (ed.), (1989c:170). This suggests that the AmE pronunciation is associated with the original pronunciation of the word and as a result the BrE pronunciation has since evolved, thus demonstrating a change that has occurred within the variety.

The BrE and NZE participants produced ‘schedule’ with a split between /skedju:t/ and /ʃedju:t/ using both /sk/ and /ʃ/ in the initial position. GenAm speakers used /sk/ and accompanied by a SCHWA after /u:/ making it a three syllable word /skedju:ət/. GenAus participants produced /skedju:t/, /skedju:ət/ and /ʃedju:t/ and SAfE /skedju:t/. The /sk/ is traditionally associated with AmE whereas; the traditional /ʃ/ BrE pronunciation derives from the Old French and late Latin origins of the word. (Simpson (eds.), (1989c:612)

‘Tomato’ was produced as /təma:təʊ/ by the RP participants with the PALM vowel in the medial position and GenAm speakers /təmeɪtəʊ/ with the FACE vowel and /təma:təʊ/ with the PALM in the middle of the word, both beginning with the reduced SCHWA. GenAus participants produced the RP /təma:təʊ/ and /təma:rəʊ/ with /t/-flapping and NZ and SAf speakers used SCHWA in the first syllable /təma:təʊ/. The AmE pronunciation of ‘tomato’ has not infiltrated the other varieties, despite its mention in the media made famous by Fred Astaire and Ginger Rogers in the 1937 film ‘Shall We Dance’ in the song “Let’s Call The Whole Thing Off.” It is possibly the comic associations of the word that gave the pronunciation negative connotations, discouraging other varieties from using it.

For the noun ‘vase’, RP and NZ participants used the PALM vowel in /va:z/, GenAm speakers used the FACE vowel with the unvoiced /s/ in /veɪs/ and the PALM and voiced counterpart in /va:z/. GenAus participants used the FACE with the voiced /z/ in /veɪz/ and SAf speakers provide both /va:z/ and /veɪz/. The use of the FACE vowel /eɪ/ dates back to the original pronunciation of the word (between 1731 and 1857) which is still used in AmE (Simpson (ed.), 1989d:455).

‘Vitamin’ was articulated by the RP participants using the KIT vowel /vitæmɪn/, whereas GenAm speakers used the PRICE accompanied by a flapped /t/ /vaɪrəməɪn/. GenAus participants using the PRICE vowel produce both /vaɪtəməɪn/ and /vaɪrəməɪn/, with a regular and flapped /t/ and the speakers from NZ and SAf use both the KIT and the PRICE vowels /vitæmɪn/ and /vaɪtəməɪn/. The origins of ‘vitamin’ derive from ‘vitamine’ which was created circa 1912 as a combination of ‘vita’ (life) and ‘-amine’ as they were thought to contain amino acids, (Harper, 2001; Simpson and Weiner (eds.), 1989d:703). The pronunciation reflected the AmE articulation with either /vaɪtəməɪn/ or /vaɪtəmi:n / used. The word final <e> was dropped circa 1920 upon the discovery of the true nature of the substance (Harper, 2001). This again demonstrates how BrE pronunciation has evolved within itself. AusE shows evidence of the AmE usage utilising the PRICE vowel, whereas NZE and SAfE, despite displaying correlations with AmE pronunciation, also retain the BrE pronunciation.

RP participants produced ‘yoghurt’ as /jɒgət/, with the LOT vowel in the first syllable, with GenAm speakers using the GOAT vowel as well as demonstrating rhoticity /jəʊgɜrt/. GenAus, NZ and SAf participants use the AmE GOAT vowel with the GenAus speakers using a lengthened NURSE /jəʊgɜ:t/ and NZ and SAf participants a SCHWA /jəʊgət/. Finally, ‘zebra’ was pronounced in BrE, AusE and SAfE as /zebrə/, using the DRESS vowel /e/ whereas GenAm speakers used the FLEECE vowel /i:/ in /zi:brə/ and NZ participants produced both /zebrə/ and /zi:brə/, corresponding to AmE pronunciation, that could be attributed to evidence of AmE influence. The pronunciation of this word appears to be associated with the pronunciation of the orthographic letter <z>, with BrE participants using /zed/ and AmE speakers using /zi:/.

5.2.6 - Word List 2 - Discussion

The construction of the second word list aimed to continue the exploration of phenomena such as /t/-tapping alongside identifying differences in polysyllabic word stress, French loan word stress, the use of the reduced SCHWA vowel /ə/ and other pronunciation differences. The differences between the five varieties were more apparent in this word list, beginning with the different placing of word stress in polysyllabic word stress. Svartvik and Leech (2006:165) suggest that AmE usually only had one pattern of stress whereas RP speakers used either the BrE and AmE pattern. For ‘advertisement’, the RP participants placed stress on the second syllable and GenAm speakers on the first. The GenAus, NZ and SAf participants all used either stress patterns, with some younger GenAus and NZ participants taking the Americanisation of the word further using the voiced /z/ rather than its voiceless counterpart in the third syllable. ‘Applicable’ saw RP participants placing stress on the second syllable, which was echoed by NZ and SAf speakers whereas GenAm and GenAus participants placed stress on either the first and second syllables. This example is the first instance of the American participants also using the British stress pattern. For ‘aristocrat’ RP speakers placed stress on the first syllable, GenAm participants on the second and GenAus, NZ and SAf speakers on either. RP participants placed stress on both the first and second syllable in ‘controversy’ adopting the AmE pattern with the GenAm participants emphasising the first syllable and GenAus, NZ and SAf speakers all used either, with the majority of NZ participants using the AmE pattern. The exploration of polysyllabic word stress demonstrated for the most part the RP and GenAm participants’ use of the stress patterns within their respective varieties, with a few exceptions. GenAus speakers used either stress pattern with a particular affinity to the AmE pronunciation and SAf participants to the RP stress patterns. NZ speakers, however, used either stress patterns in some, whereas in others they favoured both reference varieties. The NZE use of /z/ in ‘advertisement’ however, is the only piece of data that suggests their pronunciation is slightly more influenced by AmE rather than BrE.

The positioning of stress in French loan words was another aspect to be explored by the second word list. Traditionally AmE is believed to place stress on the second syllable of the word, in concurrence with the French original, whereas BrE tended to assign stress to the initial position. The pronunciation of 'ballet' was in agreement with the literature for BrE and AmE, with GenAus and NZ participants following the RP stress pattern and SAf speakers, using either the BrE or AmE. This was echoed with 'café' seeing the SAf participants who again produced either the RP and GenAm stress patterns, however, favouring the AmE pronunciation. The word 'detail' saw BrE stress patterns in all five varieties with GenAm participants producing a split between the BrE and AmE patterns, with the majority of GenAm participants using the BrE pronunciation. 'Frontier' saw the production of both the BrE and AmE pronunciations by RP, GenAus, NZ and SAf participants with the GenAm speakers the only variety to use only the AmE pattern. In this instance, the RP participants tended to favour emphasis on the first syllable with the exception of 'frontier' which saw stress on either syllable and GenAm speakers the second syllable, other than in 'detail' where both patterns were used with the BrE pronunciation articulated more frequently. GenAus and NZ participants preferred the use of the BrE stress pattern and SAf speakers used both with a very slight affinity to the AmE and French pattern.

The notion of rhoticity was noted in the discussion of the first word list, however it was explored again in the second word list through the inclusion of 'car' and 'climber'. In the first word list NZE and SAfE appeared to demonstrate rhoticity as well AmE, whereas in the second word list only the GenAm participants produced post-vocalic /r/ in the word final position. It is however, essential to note that the data on rhoticity is only speculative and is not substantial enough to make conclusions. The notion of the use of the 'reduced SCHWA vowel /ə/' was also investigated through the second word list. Svartvik and Leech (2006:164) postulated that adjectives ending in '-ile' usually have the SCHWA in AmE but not in BrE. The RP, GenAus and NZ speakers all used the PRICE vowel /aɪ/ in 'fertile' and 'hostile', whereas

GenAm participants used the SCHWA /ə/ as suggested by Svartvik and Leech (2006). SAf speakers produced *fertile* as /fɜ:tʌɪt/ however split the pronunciation of *'hostile'* between /hɒstʌɪt/ and /hɒstət/. The reduced SCHWA vowel /ə/ is often interchangeable with /ɪ/ in SAfE, however it is not noted to be associated with the PRICE vowel, suggesting that this may be another instance of AmE influence.

The use of the reduced SCHWA /ə/ was again explored, this time with BrE, where in words ending with *'-ery'* or *'-ory'* RP either has a reduced SCHWA vowel or omits the vowel completely in comparison with GenAm which has a full vowel with secondary word stress. For *'cemetery'* the RP, GenAus, NZ and SAf participants all demonstrated one instance of pronunciation that omitted the vowel completely producing /semɪtri:/ (RP, GenAus and NZ) and /sɪmɪtri:/ (SAf). For *'inventory'* RP, GenAus, NZ and SAf speakers produced examples that demonstrated the absence of a vowel in the final syllable /'ɪnvəntri:/, with RP participants also providing a variation including the reduced SCHWA /'ɪnvəntəri:/. GenAm speakers (for both words) provided a full vowel, with /semɪtəri:/ and /'ɪnvəntɔri:/ or /'ɪnvəntɔri:/, which was not adopted by any of the non-reference varieties.

The second word list provided evidence of the concept of /t/-flapping in some participant's speech, with GenAus and NZ participants producing it alongside GenAm speakers. The words aiming to elicit this concept included in this word list were *'butter'*, *'data'* and *'later'*. *'Butter'* produced a split between the /t/-flapped /bʌrə/ and non-flapped varieties in both AusE and NZE, and the GenAm participants produced the rhotic counterpart /bʌrər/, however the GenAm speakers were the only variety to flap the /t/ in *'data'* and *'later'*. This suggests that this phenomenon is in its infancy in varieties other than in GenAm and is not yet produced in all words where /t/ comes

between vowels. It is interesting also to note that there was no evidence of glottalisation as mentioned in Section 3.2.2.6, where RP speakers occasionally produce [ʔ] rather than /t/ between vowels.

Other words were included in word list 2 due to their noticeably different pronunciations in the two reference varieties RP and GenAm. With the exception of the GenAm participants, speakers of the other four varieties; RP, GenAus, NZ and SAf all produced both ‘progress’ and ‘tomato’ with the BrE pronunciation, /prəʊgres/ and /təmə:təʊ/ or /təmə:rəʊ/ respectively and with the exception of the RP speakers, all four varieties produced ‘yoghurt’ with the AmE articulation /jəʊgət/ or /jəʊgz:t/. RP, GenAus and NZ participants all used the DRESS vowel and GenAm speakers the FLEECE in ‘leisure’ with SAf participants producing both variations. NZ and GenAm speakers produced the AmE ‘clerk’ with RP, GenAus and SAf participants producing the BrE and the AmE varieties. Similarly GenAm and GenAus participants both used the AmE pronunciation of ‘vase’ with SAf speakers producing both alongside RP and NZ participants producing the BrE version. GenAm and GenAus participants both produced ‘vitamin’ with /aɪ/ in the first syllable, RP speakers with /ɪ/ and NZ and SAf participants with both /vaɪtæmɪn/ and /vɪtæmɪn/. RP, GenAus and SAf speakers all pronounced ‘inquiry’ and ‘zebra’ the same, as /ɪŋk'waɪri:/ and /zebrə/; with NZ producing both the RP and GenAm variations. For ‘schedule’ GenAm and SAf participants used /sk/ in the word initial position, whereas, RP, GenAus and NZ speakers used a combination of the British /ʃ/ and American /sk/ with /skedju:l/ and /ʃedju:l/. ‘Nephew’ was produced the same in all five varieties, ‘laboratory’ was produced differently in all the varieties and ‘dynasty’ was produced differently in BrE /dɪnɪsti:/ or /dɪnəsti:/ and AmE /daɪnɪsti:/ or /daɪnəsti:/ with all the non-reference varieties producing either version .

For ‘garage’, GenAm and GenAus participants produced the same pronunciation placing stress on the second syllable, whereas, RP, NZ and SAf speakers produced both the BrE (stress on the first syllable) and AmE realisations of the words. With ‘route’ RP, NZ and SAf speakers all pronounced the RP /ru:t/ whereas the GenAm and GenAus participants produced /raʊt/. As previously mentioned the differing pronunciation of these words could be associated not only with the notion of ‘Americanisation’ but with the origins of the word. ‘Garage’ is of French origin and ‘route’ in its present form was only fully introduced in the 18th Century, previously being spelt as ‘rout’ and pronounced as /raʊt/, suggesting that the influence is not necessarily from ‘America’ but is instead retained from the origins of the word. This may be the case with many of the examples in the word list. The final word ‘lieutenant’ also provided a split with GenAm speakers using the GOOSE vowel /u:/ in the first syllable alongside RP, GenAus, SAf and NZ participants producing variations using the GOOSE simultaneously with adaptations using the DRESS /e/. The usage of the AmE /u:/ alongside the BrE /e/ may not be attributable to American influences, but instead to the participant perception of the word. The orthography of ‘lieutenant’ suggests that it is produced with the GOOSE vowel /u:/ and is attributed to the inconsistent spelling and pronunciation of the English language alongside its French origins.

The second word list has presented evidence both in support of the varieties correlation with AmE pronunciation, and of them retaining BrE pronunciation and stress patterns. Appendix 13 (located on page 171) presents a concise table detailing the differences that occur in each variety. Evidence of phenomena such as /t/-tapping, and the use of /z/ rather than /s/ alongside the use of either American or British stress patterns suggests that there is a strong correlation with AmE pronunciation. However, the avoidance of SCHWA /ə/ in adjectives ending in ‘-ile’ and use of the reduced SCHWA or omission of vowels in words ending with ‘-ery’ or ‘-ory’ suggest that the AmE pronunciation has not yet completely infiltrated the varieties; demonstrating

they retain some of their original BrE pronunciation. There is some evidence of internal differences occurring with words such as ‘laboratory’ providing different pronunciations in all five varieties, but this is counterbalanced by words such as ‘nephew’ being produced in the same way by all participants (despite being in a minority).

5.3 - Conversation Transcriptions

The two word lists demonstrated minimal evidence of unusual pronunciation by the participants. With the exception of three participants, the pronunciation of all the words were produced similarly in all the varieties, suggesting that the participants have not adhered to Saville-Troike’s (1989:128) observation of providing the answers that the researcher would prefer.

The three incongruities that arose from the word lists were produced by RP3, GenAus4 and GenAus5. In word list 1, RP3 pronounced ‘dance’ as /dæns/ using the TRAP vowel /æ/, rather than the traditional RP pronunciation using the BATH vowel /ɑ:/ producing /da:ns/. This may have been attributed to the TRAP-BATH split between the North and South of England (discussed in Section 5.1.1.). GenAus4 produced /pəʊt/ for ‘pool’ using the GOAT vowel /əʊ/ rather than the GOOSE vowel /u:/. This appeared to be a participant error, as the lexeme following ‘pool’ in the list was ‘pole’ which is usually pronounced as /pəʊt/. The third discrepancy arose in word list 2 when GenAus 5 provided an unusual pronunciation of ‘controversy’ producing /kən'trəʊvɜ:si:/ with the GOAT /əʊ/ vowel in the second syllable.

The conversations of these three participants were transcribed for comparative purposes, enabling the researcher to understand if these were participant perception errors or features of the participant’s pronunciation. RP3’s transcription, (cited in Appendix 15), demonstrated continued use of

the TRAP vowel /æ/ in place of the BATH vowel /ɑ:/ when producing ‘afternoon’ which was pronounced as /æftənu:n/. This suggests that the usage of the TRAP vowel /æ/ is a feature of the participant’s speech. RP3’s questionnaire indicated that the participant was born in South Wales, and spent their formative years in England, before moving to Australia. The participant did not indicate precisely where in England they resided, suggesting that the use of the TRAP vowel /æ/ could be attributed to living in the North of England, or alternatively could be an influence of AusE. Unfortunately without further understanding of the participants background we are unable to ascertain the reasoning behind this, therefore will disregard RP3’s pronunciation of ‘dance’ in the research.

GenAus4 and GenAus 5 participated in a joint conversation which was transcribed and is cited in Appendix 16. The transcription showed no further evidence of unusual pronunciation throughout the three minute conversation. GenAus 4 did not display any unusual pronunciation of the GOOSE /u:/ or GOAT /əʊ/ vowels and GenAus5 did not provide unusual pronunciation of the LOT vowel /ɒ/ or the GOAT vowel /əʊ/. This suggests that GenAus 4 and GenAus 5’s pronunciation of ‘pool’ and ‘controversy’ respectively appear to be a result of participant perception errors.

5.4 - Questionnaire

The final aspect of the study consisted of a questionnaire which was distributed individually to each participant (cited in Appendix 5). This was administered to gain knowledge of the participants’ linguistic background, enabling the researcher to ensure that she gains a representative sample of the population. This allows the researcher to “make relatively few observations but gain an accurate picture of a much larger population” (Babbie, 2007:225). Results of the questionnaires are presented in Appendix 17 (cited on page 180). The first question explored the ages of the

participants. Table 6 demonstrates the age range of the participants from each variety.

Received Pronunciation:

18 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 +
1	3	2	0	1	1	0	0

General American:

18 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 +
2	3	2	1	0	0	0	0

General Australian:

18 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 +
0	3	1	1	1	0	1	1

New Zealand:

18 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 +
0	4	1	0	3	0	0	0

South African:

18 - 20	21 - 30	31 - 40	41 - 50	51 - 60	61 - 70	71 - 80	81 +
1	2	2	1	2	0	0	0

Table 6
Participant Age Ranges

The age range shows that 10% of the participants were between 18 and 20 years of age, with 37.5% in the 21 - 30 age range. 20% were in the 31 - 40 age bracket, 7.5% in the 41 - 50 and 17.5% between 51 and 60 years of age. 2.5% were 61 - 70, 2.5% between 71 and 80 and 2.5% were over 81 years demonstrating a varied age range of participants for the research.

The second question; alongside question one, is a scaled response question which is used to obtain the gender of the participants. It was important to ensure that the research yielded results from a representative sample of participants, from a wide age range and from both the male and female genders. Table 7 shows the gender of the participants for each variety, with a total of 19 male and 21 females taking part in the research.

	RP	Gen Am	Gen Aus	NZ	SAf
Male	2	6	4	3	4
Female	6	2	4	5	4

Table 7
Participant Genders

Questions three, four and five are all open questions that detail the place of birth, occupation and academic achievements of the participants. These questions were designed to establish the socio-economic background of the participants in an attempt to gain a fair representation of the population. For the British English speakers (see Appendix 18), their birthplaces vary, with some originating from Wales and others from the North of England, however the majority are from Southern England, with a large proportion originating from the areas near to London. The American participants originated mainly from the Eastern Coast of the United States, including Florida and New Jersey as well as from California and Chicago (see Appendix 19). Two of the participants (GenAm2 and GenAm7) were born outside the area for ‘General American’ speakers; however both explained that they did not grow up in those areas. One of the participants (GenAm4) was born outside America, in Germany, however moved to America when he was young. The third group of participants, all from Australia, were required to all reside in a city and surrounding areas to follow the guidelines for ‘General Australian’ pronunciation. The majority of participants from Australia were born in either Sydney or Newcastle (see Appendix 20), with most living in Sydney, Newcastle or other urban areas throughout their lives, for example Brisbane and

Melbourne. The participants from New Zealand were evenly spread throughout the North and South Islands (see Appendix 21), with participants originating from areas such as New Plymouth, Wellington, Dunedin and Christchurch and all adhering to the description of 'Standard' New Zealand speakers. The fifth group of participants, all from South Africa were required to originate from cities, in order to follow the notion of 'Respectable' or 'Conservative' South African English speakers. The participants were born in areas such as Johannesburg, Cape Town and Pretoria (see Appendix 22), which again conform to the parameters set by the research.

The occupations of the British participants range from a Veterinary Nurse to Environmental Scientist, with two participants not in full time employment. The majority of participants have completed some form of education, ranging from a HNC (Higher National Certificate) to a PhD, again demonstrating a range of socio-economic backgrounds in the participants. This is echoed by the American participants, whose occupations range from students to an Engineer and a Software Programmer, and all of whom have attended University. The range of Australian participants provides the study with a varied representation of the Australian population, with three of the participants being students, three in current employment, one retired, and one a housewife, the majority having attended university. The participants from New Zealand are from a middle-to-high socio-economic background, with the majority having some formal education, with their occupations ranging from a chef and a teacher to scientists. The South African participants have also all spent some time in higher education, with three listing their occupations as students, others listing Finance Manager, Academic and Analyst as their occupations.

The sixth question aimed to establish an understanding of the participant's backgrounds by asking them about their places of residence throughout their lives. The British participants were all born in Britain and have spent the majority of their lives in the United Kingdom before moving to Australia, with the exception of RP5 who spent some time working in Qatar and Libya and

RP8 who spent some time in South Africa and Kenya. This has had no impact upon their pronunciation. The participants from America, with the exception of GenAm4, were all born in the United States and all spent their childhood in America. Most of the participants lived in the United States until they moved to Australia, with the exception of GenAm2 who spent some time in the United Arab Emirates; GenAm5 who spent a semester in Italy and GenAm7 who spent time in Germany before moving to Sydney. None of the participants spent enough time in these places for it to impact upon their pronunciation. The Australian participants, with the exception of GenAus6 were all born in Australia, and all grew up in different parts of the continent. GenAus2 is the only participant who has spent any time outside of Australia, having briefly lived in both Singapore and the UK. The participants from New Zealand were all born in New Zealand and spent the majority of their childhood there. NZ5, NZ6 and NZ7 are the only participants who have lived elsewhere before moving to Australia, with NZ5 spending some time in England, NZ6 was temporarily residing in Switzerland and NZ7 living in North America. The final group of participants from South Africa were all born in South Africa, with SAf1, SAf5, SAf6 and SAf7 all having lived in locations additional to South Africa, with SAf1 having also lived in Europe, SAf5 spending time in France and SAf6 and SAf7 living in the Netherlands. Again, none of the participants spent enough time in these places for it to significantly impact upon their pronunciation.

Question seven asks all non-Australian born to detail how long they have lived in Australia. This is to ensure that Australian speech has not influenced the participant's native pronunciation of words. If any participant had been in Australia for longer than the agreed period of five to seven years then their data was discarded. All the participants from each of the varieties complied with the guidelines.

The final three questions aimed to elicit from the participants their own views on their pronunciation. Question eight asked the participants whether or not they thought their pronunciation was closer to British or American

English. All the British participants agreed that their pronunciation was closer to BrE than AmE and all the American participants agreed that their speech was closer to AmE than BrE, which was to be expected. Seven of the Australian participants believed that their pronunciation was closer to British, whereas only one person thought their pronunciation was closer to AmE. Seven of the New Zealand participants found their speech to be similar to BrE and one suggested that their pronunciation was not similar to either variety. All of the SAf participants thought their pronunciation was closer to BrE. The results are demonstrated by Figure 17:

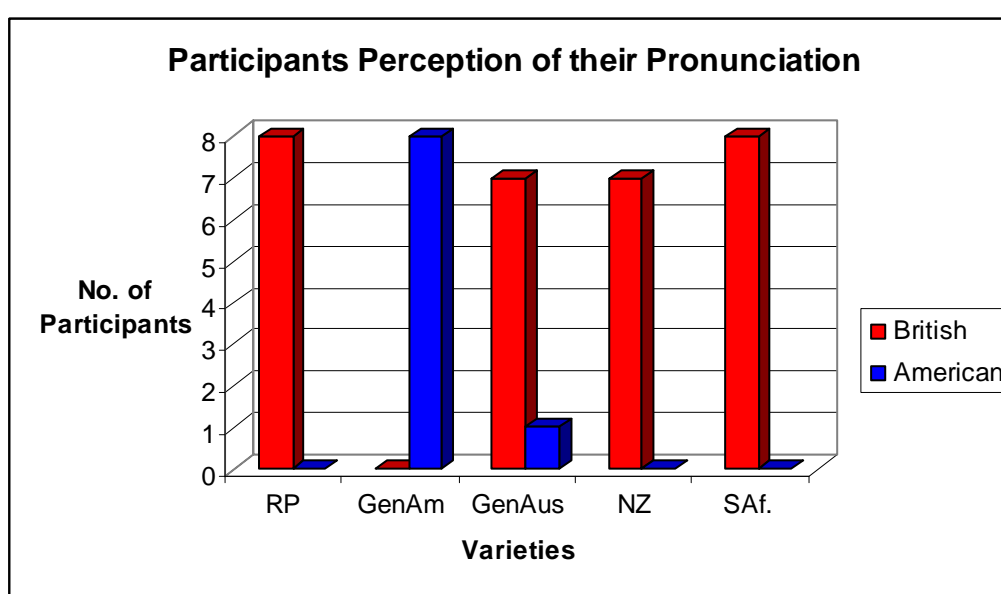


Figure 17
Participant Perception of their Pronunciation

Question nine followed on from question eight, asking the participants to identify anything typically British or American in their speech. This question was aimed at the participants from Australia, New Zealand and South Africa in response to their perception of their pronunciation. The British and American participants, as expected, identified everything in their speech to be 'typically' British and American respectively. The British participants highlighted, however that they pronounce the letter 'z' as 'zed', rather than 'zee', schedule as 'sHEDule' in comparison to 'sKEDule' as well as lexical differences such as 'trousers' vs. 'pants'. The participants from America

identified their vowel sounds to be ‘typically’ American, as well as saying that they place different stresses on words and use different pronunciation of <r> in words. The Australian participants identified aspects such as “crisp vowel sounds,” “clear diction and emphasis at the start of sentences” and “pronounced vowel sounds” in their speech to be similar to BrE. GenAus1 and GenAus8 also identified some similarities to AmE, suggesting that aspects such as “slow vowel sounds” were a feature of both AusE and AmE pronunciation. The participants from New Zealand also highlighted their similarities to BrE, explaining that they noticed an affinity between New Zealand and British vowel sounds, in words such as ‘can’t’, highlighting nasality as a possible reason as well as suggesting that the pronunciation of words such as ‘aluminium’ were congruent with BrE. Finally, the SAf participants recognised features such as vowel sounds including the ‘long a’ in words such as ‘data’ or ‘plant’ and the use of the ‘s’ sound compared to ‘z’ to be similarities between SAfE and BrE.

The final question asks the participants what they think to be influential upon their pronunciation, citing family, friends and colleagues, immigrants, media, youth and location as possible influences (see Appendix 23). All of the British participants thought that their family, friends and colleagues had an impact on their pronunciation, whereas 37.5% thought that immigrants also influence their speech. Fifty percent of the participants think that the media and young people have a significant impact upon the pronunciation, whereas the majority of participants think that the location of where you live at a given time is also influential upon your pronunciation (75%).

Of all eight American participants, 100% thought that family and friends were very influential upon their pronunciation and echoing the British participants, 37.5% of the participants listed immigrants as having an impact upon the way in which they pronounce words. There was a 50%-50% split when participants were asked if they felt the media was influential, 75% of the participants noted that they thought that young people had a significant impact upon

their speech and 87.5% thought that their location had significance in regards to their pronunciation.

The participants from Australia, like the British and American, all (100%) thought that family and friends had a significant impact upon their pronunciation, whereas none (0%) of the participants listed immigrants as having any influence upon their pronunciation. With regards to the both the media and young people 50% of the participants listed both as influential upon their pronunciation and 62.5% of the participants noted location as an influence upon their speech.

The results from New Zealand saw 100% of the participants indicating that family and friends had influence on their pronunciation, with 37.5% of participants feeling that immigrants also influenced their speech. 62.5% of the participants thought that the media influenced their pronunciation and there was a 50%-50% split on the impact of young people. Location was also believed to have an impact with 87.5% of the participants citing it as an influence upon their speech.

The South African participants all (100%) thought that family, friends and colleagues influenced their pronunciation, with only 37.5% of participants noting immigrants as having some impact upon their speech. 87.5% listed the media as an influence on their pronunciation and 75% agreed that contact with young people impacted upon their speech. Finally, 87.5% of the participants thought that their location at a given time significantly impacted upon their pronunciation.

Although the main purpose of the questionnaire was to elicit information regarding the participants linguistic background alongside obtaining information regarding gender, age ranges and occupation, some questions also asked for the participants perception of their pronunciation. 75.5% of participants (20% of which were British) believed that their pronunciation was closer to British English, whereas 22.5% thought it was closer to American English (20% of which were American). This demonstrates that the populace is

not necessarily aware of Americanisation in their pronunciation and can also be attributed to a lack of a definitive interpretation of what constitutes AmE to the participants. The other question that yielded some interesting results was the final question which aimed to obtain an understanding of what the participants thought influenced their pronunciation. 100% of participants cited 'family, friends and colleagues' as something that influenced their pronunciation. However, only 30% found immigrants from other countries had any effect. 60% of participants felt that the media, for example, British and American television shows had an influence upon their pronunciation and 57.5% believed that people of a younger generation impacted upon their speech. Finally, 80% of the forty participants said that their location at a given time had an effect on their pronunciation.

5.5 - Application of Results to the Literature

The literature postulated three main hypotheses regarding the future of world varieties of English. The first predicted the Americanisation of the English language, in lexis, pronunciation and grammar. It was implied that this would begin as a gradual process, later developing into the language being inundated by the influence of AmE. The second hypothesis was that English demonstrates retention of its origin in BrE, through similarities in pronunciation and word stress in the varieties, these having remained relatively unchanged. The third hypothesis states that varieties of English may demonstrate little correspondence with one another and eventually diversify to such an extent that the situation corresponds to languages such as Chinese and becomes a written language system of mutually unintelligible dialects, or suffers the fate of Latin, and splits into different languages altogether.

The results of the study provides some evidence that could be attributed to influence of AmE, with the first word list providing evidence of /t/-tapping in GenAus, NZ and SAf alongside GenAm speakers in 'city' produced as /sɪri:/ in each of the four varieties. GenAus and NZ also articulated /bʌrə/, similar to

the GenAm rhotic /bʌrər/, again demonstrating /t/-flapping. All eight GenAus participants also pronounced ‘dance’ using the TRAP vowel, in correspondence with GenAm producing /dæns/. Some NZ and SAf participants appeared to have demonstrated evidence of rhoticity in their pronunciation of ‘beer’ or ‘bear’ with the production of /bɪər/ and /bɛər/ in correspondence with the GenAm pronunciation. NZ and GenAus speakers provided increased evidence of AmE influence with their pronunciation of ‘advertisement’ through the placement of stress on the first syllable and the use of the voiced /z/ in the third syllable /'ædvɜːtaɪzmənt/. SAf, like GenAm demonstrated the use of both the PRICE vowel /aɪ/ and the reduced SCHWA /ə/ in the adjective ‘hostile’ producing both /hɒstəl/ and /hɒstaɪəl/. GenAus also demonstrated correlations with GenAm in their pronunciation of ‘route’ as /raʊt/ and GenAus, NZ and SAf all produced the GenAm ‘yoghurt’ articulating /jəʊgɜːt/ or /jəʊgət/.

NZ and SAf participants produced ‘applicable’ in parallel with the RP pronunciation, placing stress on the second syllable producing either /æ'plɪkəbəl/ or /ə'plɪkəbəl/. The final of the two articulations were also produced by some GenAm speakers, demonstrating that the varieties retain some of their British heritage in their speech. NZ speakers produced similar stress patterns to RP for ‘ballet’, ‘café’ and ‘detail’, placing stress on the first syllable, and GenAus and NZ, alongside RP produced the full PRICE vowel /aɪ/ in words such as ‘fertile’ and ‘hostile’ pronouncing /fɜːtaɪəl/ and /hɒstaɪəl/ respectively. Evidence from the second word list demonstrated no evidence of rhoticity in GenAus, NZ and SAf in correspondence with RP, which again demonstrates correlations between the non-reference varieties and their origin in British English. Similarly NZ and SAf all pronounced ‘route’ with the RP realisation /ruːt/ and GenAus, NZ and SAf all provided evidence of the RP articulation of ‘zebrə’.

NZ English provided evidence of divergence from other varieties of English through their increased usage of the SCHWA /ə/ in words such as ‘pit’ /pət/ and ‘pull’ /pəʔ/ and some participants also added the SCHWA /ə/ to the NURSE vowel, when producing homophones ‘fir’ and ‘fur’ producing /fɜə/. A handful of NZ participants did not differentiate between ‘beer’ and ‘bear’, seeing them produced as /bɪər/ and /bɪər/ respectively. Some NZ participants also produced /hw/ instead of /w/ in ‘whales’ /hweɪtɪz/ and pronounced /hw/ in words that do not contain the orthographic <h> such as ‘weight’, pronouncing it as /hweɪt/. All five varieties produced ‘laboratory’ in slightly different ways with articulations including /lə'bɒrətɪ:/, /'ləbrətɪ:/ and /'ləbrətɔ:ri:/. As to be expected of different varieties, there is a lack of agreement between BrE, AmE, AusE, NZE and SAfE in some areas, seeing the varieties display subtle differences in areas of their pronunciation.

Although the questionnaire results are based upon participants’ personal opinion, it is interesting to consider their perception of their pronunciation and its influences. The results showed 75.5% of the participant’s believed that their pronunciation is closer to BrE than AmE and 20% of those who think their speech is closer to AmE are GenAm speakers. 60% said that they felt the media had an impact upon their pronunciation. Scholars such as Bell (1998) have suggested the influence of the media aids the Americanisation of English, due to the vast amount of American television programmes and films screened around the world. 80% of the participants also thought that their current location had a significant impact upon their pronunciation, demonstrating the importance of the restriction that the research be undertaken by individuals who had not lived in Australia for a significant period of time. This was to ensure a truer representation of the participants’ variety, preventing the collection of data that had been contaminated by AusE.

Chapter 5 has presented the findings of the study, outlining the differences in pronunciation obtained by using the two words lists and demonstrated the pronunciation of a wide range of participants alongside examining the perception of their pronunciation. The results have also been considered in relation to previous research in the field enabling the researcher to identify any new phenomena occurring within the varieties, alongside seeing if the study contributes evidence to support or alternatively to not confirm any of the previous hypotheses. Chapter 6 presents the conclusions of the study and provides closing comments in relation to the original research question.

Chapter 6 - Conclusion

The aim of this study was to establish the differences in pronunciation between five varieties of English; BrE, AmE, AusE, NZE and SAfE. Through comparison with the 'reference varieties' BrE (Received Pronunciation or RP) and AmE (General American or GenAm), the study aimed to discover the likely future pronunciation of AusE, NZE and SAfE. These aims were achieved through analysis of previous research and the results of this investigation which examined participant pronunciation from each of the five varieties, then compared these results with one another in addition to the reference varieties.

The study aimed to address two questions:

- 1) What differences are there among British, American, Australian, New Zealand and South African English pronunciation? Are these differences consistent?
- 2) If the differences are consistent, do they provide evidence as to the likely future changes in pronunciation for these varieties?

These questions were addressed in relation to three hypotheses regarding the future of the five varieties:

- 1) Americanisation: Research suggests that with the economic influence of the United States of America, Americanisation is occurring within all varieties of English, both in lexis and pronunciation. The USA's influence is believed to be in its infancy at present but will build momentum, eventually engulfing the varieties of English.
- 2) The Retention of British English Roots: American, Australian, New Zealand and South African English all derive from British English as a result of colonisation and some researchers suggest that the varieties

have retained their roots in British English. This hypothesis suggests that either the varieties have only progressed with changes similar to those that have occurred in British English, with little evidence of differences between the varieties and British English, or that there has been a push to return to the British pronunciation in an attempt to prevent infiltration of other external influences.

- 3) Diversification. Research has suggested that the varieties of English may eventually diversify so much that they will follow in the path of Chinese, and become a written language system of mutually unintelligible dialects, or the fate of Latin, and split into different languages altogether.

The study provided an analysis of the pronunciation of all five varieties and produced results that lend support of all three hypotheses; however none of the evidence was overwhelming enough to constitute complete support of the hypotheses. Each of the varieties in their current state do not provide enough evidence to determine the future changes that may occur within the varieties, and unfortunately provide inconclusive evidence that encourage further research in this area.

In response to the first question, the research yielded evidence of both similarities and differences between the varieties, discussed in Chapter 5. Twenty-nine of the fifty-nine words in the first word list were pronounced the same way in all five varieties, whereas only one word ‘nephew’ was pronounced the same in the second word list. The main contrasts in the first word list included the potential rhotic pronunciation of ‘beer’ and ‘bear’ by GenAm, NZ and SAf, alongside additional rhotic pronunciation of words by GenAm speakers in accordance with AmE, as well as the /t/-tapped pronunciation of words such as ‘city’ by GenAm, GenAus, NZ and SAf participants. Evidence of the pronunciation of /hw/ was present in some NZ participants speech when producing ‘weight’ and ‘whales’, and ‘dance’ was produced using the TRAP vowel /æ/ by participants from GenAm, GenAus, NZ

and SAf, alongside GenAm using TRAP in ‘daft’ and ‘half’. Other differences included the GenAm use of /ɒ/ and /ɑ/ in place of the LOT vowel /ɔ/ in ‘doll’ and ‘cot’ and the use of SCHWA /ə/ in place of FOOT /ʊ/ in ‘pull’.

The differences demonstrated by the results of the second word list included evidence of /t/-tapping in ‘butter’, ‘data’, ‘fertile’ and ‘later’. Other contrasts included the use of the reduced SCHWA in a number of varieties when pronouncing ‘cemetery’, ‘fertile’, ‘hostile’ and ‘inventory’, different stress placement in polysyllabic words such as ‘advertisement’, ‘controversy’ and ‘laboratory’ and alternate word stress in French loan words such as ‘café’ and ‘garage’. Remaining words highlighted pronunciation contrasts such as /leftənənt/ and /lu:tenənt/ for ‘lieutenant’, /vɪtəˈmɪn/ and /vaɪtəˈmɪn/ for ‘vitamin’ and /jɒgət/ and /jəʊgɜrt/ for ‘yoghurt’ amongst others. Although there is evidence of diversification among the five varieties, none of the differences are significant enough to be unintelligible to another participant.

In answering the second question the results were tested against three hypotheses; the first that Americanisation has occurred within all the varieties of English, the second that the varieties will have retained their roots in BrE, not having changed significantly and the third that the varieties are beginning to show evidence of diversification which sees English on course to become a written language system of mutually unintelligible dialects, or split into different languages altogether.

With regards to the third hypothesis known as the ‘Latin Analogy’, Rajagopalan (2009:52) states:

“The Latin analogy is deceptive and misleading. A closer examination of the historical circumstances of the spread of Latin will show that they are markedly different from the ones that attend on the present day expansion and consolidation of English worldwide.”

Rajagopalan (2009:52)

Rajagopalan (2009:53) argues that with the expansion of the Roman Empire it was a natural phenomenon for Latin to be carried to the four corners of the Empire. He also says that the Latin that spread worldwide was not ‘Classical Latin’, but ‘Vulgar Latin’, spoken and transported primarily by merchants and soldiers who were isolated for long periods of time with little contact with Rome. This Latin was adapted into the situation of its speakers, who needed to learn new words to communicate with other people. Bobda (1998:13) highlights the view that “British English and American English constitute today the two main poles in the vast English using community”. However, as previously mentioned, twenty-nine of the fifty-nine words in the first word list were produced the same in all five varieties, including British and American English. This does not support the notion that British and American English are polar opposites and consequently contradicts evidence for the ‘Latin Analogy’. Bobda (1998:15) claims that it is inappropriate to suggest that the two reference varieties are too far removed from one another, or as some scholars have suggested overwhelmingly similar, and instead asks how many differences constitute the notion of ‘too different’. It is unnatural to not anticipate some difference between the five varieties of English, seeing as there was a significant period in which the varieties had minimal contact. It is also to be expected to find influences of one variety upon another, considering the present day availability of media such as television alongside the ease of communication and travel. The main differences highlighted by the primary research were found in the speech of NZ participants, including the increased usage of the SCHWA /ə/ in words such as ‘pit’ /pət/ and ‘pull’ /pəʔ/ and the addition of the SCHWA /ə/ to the NURSE vowel, when producing the homophones ‘fir’ and ‘fur’ in /fɜə/. A few NZ participants also did not differentiate between ‘beer’ and ‘bear’, producing them as /bɪər/ and /bɪər/ respectively. Some also produced /hw/ instead of /w/ in ‘whales’ /hweɪʔz/ and pronounced /hw/ in words that do not contain the orthographic <h> such as ‘weight’, articulating the word /hweɪt/. All five varieties also

produced ‘laboratory’ with slightly different articulations including /lə'bɒrətri:/, /'læbrətri:/ and /'læbrətɔ:ri:/. These differences, though noticeable are not enough to constitute firm support for the ‘Latin Analogy’. Participants from Britain can still understand the speakers from New Zealand and vice versa. As Rajagopalan (2009) states, the situation is very different from that of the spread of the Roman Empire and although it is possible to postulate that the varieties are changing slightly, it is not enough however to indicate complete diversification of the English Language.

The second hypothesis explored the similarities between BrE and the other four varieties. NZ and SAf participants produced ‘applicable’ in parallel with the RP pronunciation, placing stress on the second syllable, as did some GenAm speakers. NZ speakers demonstrated similar stress patterns to RP for words such as ‘ballet’, ‘café’ and ‘detail’, placing stress on the first syllable and GenAus and NZ participants, alongside RP speakers producing the full PRICE vowel /aɪ/ in words such as ‘fertile’ and ‘hostile’. The second word list demonstrated that GenAus, NZ and SAf are all non-rhotic in accordance with RP and NZ and SAf speakers all pronounced ‘route’ in accordance with RP pronunciation. GenAus, NZ and SAf participants produced the RP articulation of ‘zebrə’. These examples demonstrate similarities between the varieties and current RP, however it is important to consider that the BrE present at the time of colonisation would have been significantly different from the present day pronunciation, suggesting that some of the differences between RP and the four varieties may be as a result of RP diverging itself from its earlier incarnations.

The hypothesis that cites ‘Americanisation’ as the future of the English language seems the most probable with the economic and technological influence of the United States. Phenomena that could be attributed to Americanisation in the five varieties included the indication of /t/-tapping in GenAus, NZ and SAf participants pronunciation of ‘city’ produced as /sɪri:/ and GenAus and NZ participants articulation of ‘butter’ as /bʌrə/. GenAus

participants used the TRAP vowel /æ/ when pronouncing ‘dance’ in correspondence with GenAm /dæns/ and NZ and GenAus speakers provided increased evidence of Americanisation in their placement of stress on the first syllable in ‘advertisement’ alongside the use of the voiced /z/ in the third syllable /'ædvɜ:təɪzmənt/. SAf, like GenAm demonstrated the use of both the PRICE vowel /aɪ/ and the reduced SCHWA /ə/ in ‘hostile’ producing both /hɒstəl/ and /hɒstaɪl/ and GenAus demonstrated Americanisation through the pronunciation of ‘route’ as /raʊt/ alongside GenAus, NZ and SAf all producing the GenAm ‘yoghurt’ as /jəʊgɜ:t/ or /jəʊgət/.

It is important to note that the evidence in support of the ‘Latin Analogy’, ‘Retention of British Roots’ or ‘Americanisation’ could also be attributed to any number of other factors. The pronunciation of /hw/ in words such as ‘weight’ and ‘whales’ in NZE is evidence of a phenomenon that was brought to New Zealand by its early settlers, that has since been lost in BrE and the placement of stress on the second syllable of French loan words may be attributed to the participants honouring the original French pronunciation as opposed to being associated with Americanisation. It is very difficult to determine the exact cause of the contrasts and correlations that have occurred in the varieties and one can only propose probable reasons at this stage.

It is important to also consider what degree of similarity constitutes a variety being ‘Americanised’, or what comprises a variety that demonstrates retention of its British origins. To this question there is no definitive answer. The evidence provided has not indicated overwhelming support for any of the hypotheses, with each variety indicating similarities with AmE and BrE, at the same time as displaying individual characteristics that could support the ‘Latin Analogy’. This study has provided an insight into the current state of English in the early 21st Century, however, independently cannot provide a definitive answer to the questions raised. The application of similar

consecutive studies in the future, over a period of time, collectively could provide researchers with evidence of the changes occurring and give some indication of the future directions of English. Currently, as it stands the research is too small-scale to draw any definitive conclusions. In hindsight, it would have been beneficial to draw a larger sample of participants from each variety enabling an analysis based on a bigger cross section of the speakers of the varieties. A more extensive study could explore the differences between the age groups both within and across the varieties, as well as examine the contact that the participants have had with media such as television, travel, immigrants and so on, alongside a comparison with earlier pronunciation usage of all the five varieties.

This study has demonstrated evidence of contrasts between the five varieties of English that could possibly be attributed to Americanisation and the retention of original British pronunciation or could provide evidence of diversification and future unintelligibility. However, at this stage it is difficult to determine the exact direction of these varieties and at best, provides inconclusive evidence that might encourage further research.

Smith (1992) cited in Kachru (ed.) (1992:75) states that it is unnecessary for every user of English to be intelligible to every other user of the English language and instead argues that it is only necessary to be intelligible in speech and writing to those with whom we wish to communicate. It is inevitable that English as we know it will continue to develop and grow with changes occurring in the future as they have throughout history. Without these changes English would not be as enriched as it is in its present form. The history of early English vocabulary is one of repeated invasions with newcomers to Britain bringing their own language with them, and leaving a fair amount of it behind when they left, or were assimilated, (Crystal, 2003:24). This is a notion that we need to embrace, and take a pragmatic approach to the diversity of varieties, by understanding what they are, and trying to understand how they occurred.

List of Appendices

- pg -

Appendix 1	Vowel Distribution Charts (Wells, 1982a, 1982c)	136
Appendix 2	Vowel Charts (Wells, 1982, 1982c)	137
Appendix 3	Word List 1	138
Appendix 4	Word List 2	139
Appendix 5	Questionnaire	140
Appendix 6	Consent Form	144
Appendix 7	Research Itinerary	147
Appendix 8	Condensed Phonemic Transcription of Word List 1	149
Appendix 9	Full Phonemic Transcription of Word List 1	151
Appendix 10	Phenomena Explored in Word List 2	161
Appendix 11	Condensed Phonemic Transcription of Word List 2	162
Appendix 12	Full Phonemic Transcription of Word List 2	168
Appendix 13	Word List 2 - Results	179
Appendix 14	Transcription Key	181
Appendix 15	RP3's Conversation Transcription	182

Appendix 16	GenAus 3, GenAus 4 and GenAus 5's Conversation Transcription	185
Appendix 17	Questionnaire Results	188
Appendix 18	Map of British Participants Birth Places	211
Appendix 19	Map of American Participants Birth Places	212
Appendix 20	Map of Australian Participants Birth Places	213
Appendix 21	Map of New Zealand Participants Birth Places	214
Appendix 22	Map of South African Participants Birth Places	215
Appendix 23	Question 10 Results	216

Appendix 1 - Vowel Distribution Charts (Wells, 1982a, 1982c)

Received Pronunciation

ɪ	ʊ	i:		u:	ɪə	ʊə
e		eɪ	ɔɪ	əʊ	ɛə	ɜ:
ʌ						
æ	ɒ	aɪ	aʊ		ɑ:	

General American

ɪ	ʊ	i		u			
ɛ	ʌ	eɪ	ɔɪ	o	ɜ	ɔ	
æ	ɒ	aɪ	aʊ		ɑ		

Australian English

ɪ	ʊ	i:		ɪə	(ʊə)	u:	
e		ʌɪ	ɔɪ	eə	ɜ:	ɔ:	ʌʊ
æ	ʌ	ɒ	ɑɪ	a:		æʊ	

New Zealand English

e	ə	ʊ	i:	(ɪə)	(ʊə)	u:	
æ	ʌ	ɒ	ʌɪ	ɔɪ	eə	ɜ:	ɔ:
				ɑɪ	a:	æʊ	ʌʊ

South African English

ɪ	ʊ	i:		u:	ɪə	ʊə	
e	ə	ʌ	əɪ	ɔɪ	əʊ	ɛə	ɜ:
æ	ʌ	ɒ	aɪ	aʊ			ɑ:

Appendix 2 - Vowel Charts (Wells, 1982a, 1982c)

SOUND	RP	GenAm	GenAus	NZ	SA
KIT	ɪ	ɪ	ɪ	ə	ɪ / ə
DRESS	e	ɛ	e	e	e
TRAP	æ	æ	æ	æ	æ
LOT	ɒ	ɒ	ɒ	ɒ	ɒ
STRUT	ʌ	ʌ	ʌ	ʌ	ʌ
FOOT	ʊ	ʊ	ʊ	ʊ	ʊ
BATH	ɑ:	æ	ɑ:	ɑ:	ɑ:
CLOTH	ɒ	ɔ	ɒ	ɒ	~
NURSE	ɜ:	ɜr	ɜ:	ɜ:	ɜ:
FLEECE	i:	i	i:	i:	i:
FACE	eɪ	eɪ	ʌɪ	ʌɪ	əɪ
PALM	ɑ:	ɑ	ɑ:	ɑ:	ɑ:
THOUGHT	ɔ:	ɔ	ɔ:	ɔ:	ɔ:
GOAT	əʊ	o	ʌʊ	ʌʊ	əʊ
GOOSE	u:	u	u:	u:	u:
PRICE	aɪ	aɪ	ɑɪ	ɑɪ	aɪ
CHOICE	ɔɪ	ɔɪ	ɔɪ	ɔɪ	ɔɪ
MOUTH	aʊ	aʊ	æʊ	æʊ	aʊ
NEAR	ɪə	ɪr	ɪə	ɪə	ɪə
SQUARE	ɛə	ɛə	eə	eə	eə
START	ɑ:	ɑr	ɑ:	ɑ:	ɑ:
NORTH	ɔ:	ɔr	ɔ:	ɔ:	ɔ:
FORCE	ɔ:	or	ɔ:	ɔ:	ɔ:
CURE	ʊə	ʊr	ʊə	ʊə	ʊə
<i>happY</i>	ɪ	ɪ	i:	i:	ɪ
<i>lettER</i>	ə	ə	ə	ə	ə
<i>commA</i>	ə	ə	ə	ə	ə

Appendix 3 - Word List 1

PIT	COT
PET	CAUGHT
PAT	FIR
PUT	FERN
PUTT	FUR
POT	FAIR
BEE	NOSE
BAY	KNOWS
BUY	PLATE
BOY	WEIGHT
BOOT	POOR
BOAT	POUR
BOUT	PORE
BEER	PAW
BEAR	TIDE
BIRD	TIED
BARD	PAUSE
BOARD	PAWS
CITY	MEET
SEEDY	MEAT
HAT	MATE
DANCE	WHICH
DAFT	WITCH
HALF	WHALES
FATHER	WALES
FARTHER	WATCH
PULL	WHINE
POOL	WINE
POLE	
PAUL	
DOLL	

Appendix 4 - Word List 2

ADVERTISEMENT

APPLICABLE

ARISTOCRAT

BALLET

BUTTER

CAFÉ

CAR

CEMETERY

CLIMBER

CLERK

CONTROVERSY

DATA

DETAIL

DYNASTY

FERTILE

FRONTIER

GARAGE

HOSTILE

INQUIRY

INVENTORY

LABORATORY

LATER

LEISURE

LEVER

LIEUTENANT

NEPHEW

PROGRESS

ROUTE

SCHEDULE

TOMATO

VASE

VITAMIN

YOGHURT

ZEBRA

Appendix 5 - Questionnaire

The University of New South Wales

Researcher: Rebecca Travers.

Joint Supervisors: Dr. D. Aarons, Dr. M. Amberber,
and A/Professor. P. Collins.

Research Area: Linguistics.



**A study into the differences between British, American, Australian,
New Zealand and South African English pronunciation**

*Thank you very much for agreeing to complete this research. The study aims
to identify the differences between the pronunciation of British, American,
South African, Australian and New Zealand English. If there are any questions
which you do not feel comfortable to answer, please leave them blank.
Thank you for your co-operation.*

Questionnaire

1. Please can you tick the age box that refers to you:

18 - 20 []	21 - 30 []	31 - 40 []	41 - 50 []
51 - 60 []	61 - 70 []	71 - 80 []	81 + []

2. Gender:

Male [] Female []

3. Place of Birth:

4. Occupation:

5. Highest Academic Achievement:

6. Please can you list the different places you have lived during your lifetime, in order of residence:

7. For all Non-Australian Born: How long have you lived in Australia?

8. Do you believe your pronunciation is closer to British or American English?

British [☐] American [☐]

9. Can you identify anything you believe to be typically British or American in your pronunciation?

Yes [☐] No [☐]

If Yes:

What are these features?

British:

American: _____

10. Do you think that your pronunciation is influenced by any of the following?

Family/Friends/Colleagues: Yes [] No []
(i.e. People you spend a lot of time with)

Immigrants: Yes [] No []
(i.e. Friends/Colleagues from other countries)

Media: Yes [] No []
(i.e. British/American Television Shows)

Youth: Yes [] No []
(i.e. Things said by younger people)

Location: Yes [] No []
(i.e. Where you live at a given time)

If Yes:

What features of your pronunciation do you believe to be as a result of these influences?

If none of the above:

What is, if anything, your pronunciation influenced by?

Thank you for your participation in this research, if you would like a summarised copy of the research findings upon the completion of the research please tick the box [☐] and provide us with your personal details, as to where you would like the information sent.

Name:

Address:

Postcode:

Country:

All information will remain confidential

Appendix 6 - Consent Form

The University of New South Wales

Researcher: Rebecca Travers

Joint Supervisors: Dr. D. Aarons, Dr. M. Amberber,
and A/Professor. P. Collins.

Research Area: Linguistics



THE UNIVERSITY OF NEW SOUTH WALES

PARTICIPANT INFORMATION STATEMENT AND CONSENT FORM

A study into the differences between British, American, Australian, New Zealand and South African English pronunciation.

You the research participant are invited to participate in a study of the differences between British, American, South African, Australian and New Zealand English pronunciation. We, Rebecca Travers, Dr. M. Amberber, Dr. D. Aarons and A/Professor. P. Collins hope to learn about the differences between these varieties of English language. You were selected as a possible participant in this study because you fit the criteria required of the research, noted above.

If you decide to participate, we will begin with asking you to fill out a questionnaire, which will address questions about your linguistic background. We will then ask you to read out a list of fifty two words, the results of which will be recorded by a dictaphone. Following this we will ask you to participate in a conversation, in either a group or individual environment depending upon the individual participation circumstances. You will have the option to discuss a topic of your own choice or a choice of topics can be provided for you. The conversation will last approximately two to three minutes. The whole research experiment will take an estimated time of between ten and fifteen minutes to complete. The word-list and conversational element of the study will be audio-taped and by signing this participant information statement and consent form, you will be consenting to the collection of the data through this method.

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission, except as required by law. If you give us your permission by signing this document, we plan to discuss the results in the thesis written by the researcher, with the supervisors and necessary markers within the University of New South Wales. In any publication, information will be provided in such a way that you cannot be identified.

Complaints may be directed to the Ethics Secretariat, The University of New South Wales, SYDNEY 2052 AUSTRALIA (phone 9385 4234, fax 9385 6648, email ethics.sec@unsw.edu.au). Any complaint you make will be investigated promptly and you will be informed of the outcome.

A summarised copy of the research findings will be available upon completion of the research study. If you would like a summarised copy of the research findings please notify the researcher by ticking the box at the end of the questionnaire and filling out a form with your details, as to where you would require the results to be sent. All this information will also be confidential.

Your decision whether or not to participate will not prejudice your future relations with the University of New South Wales. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without prejudice.

If you have any questions, please feel free to ask us. If you have any additional questions later, the researcher, Rebecca Travers, 0420525756 will be happy to answer them.

You will be given a copy of this form to keep.

THE UNIVERSITY OF NEW SOUTH WALES

PARTICIPANT INFORMATION STATEMENT AND CONSENT FORM (continued)

A study into the differences between British, American,
Australian, New Zealand and South African English pronunciation.

You are making a decision whether or not to participate. Your signature indicates that, having read the information provided above, you have decided to participate.

.....
Signature of Research Participant

.....
Signature of Witness

.....
(Please PRINT name)

.....
(Please PRINT name)

.....
Date

.....
Nature of Witness

REVOCATION OF CONSENT

A study into the differences between British, American,
Australian, New Zealand and South African English pronunciation.

I hereby wish to **WITHDRAW** my consent to participate in the research proposal described above and understand that such withdrawal **WILL NOT** jeopardise any treatment or my relationship with The University of New South Wales.

.....
Signature

.....
Date

.....
Please PRINT Name

The section for Revocation of Consent should be forwarded to Rebecca Travers, 1/32 Meeks Street, Kingsford, NSW, 2032.

Appendix 7

The University of New South Wales

Researcher: Rebecca Travers.

Joint Supervisors: Dr. D. Aarons, Dr. M. Amberber,
and A/Professor. P. Collins.

Research Area: Linguistics.



**A study into the differences between British, American, Australian,
New Zealand and South African English pronunciation.**

Research Itinerary

- **Consent Form**

Participants are asked to read through and complete a consent form which explains the procedure to them, details that all information will be kept confidential and explains that they are free to withdraw from the study at any time.

- **Briefing**

The researcher will explain to the participant the planned research itinerary, detailing the order of the research, what they will be asked to do, and again remind the participant that the information will be kept confidential and that they are free to withdraw at any time.

- **Questionnaire**

Participants are asked to complete a questionnaire consisting of ten questions. The questionnaire aims to give the researcher a basic knowledge of the participants' linguistic background, which in turn provides the researcher with a basis for the research.

- **Word Lists**

Participants are asked to read out two lists of words, whilst being recorded by a Dictaphone.

- **Conversation**

The participants are asked to participate in a two to three minute conversation, either with other participants or the researcher, depending upon individual circumstances. The conversation will again be recorded by Dictaphone and transcribed afterwards.

- **Debrief**

The researcher will thank the participant for their participation in the research and ask them if they would like to receive any feedback upon the completion of the research, and again remind the participant that all information will be kept confidential.

Appendix 8
Condensed Transcription of Word List 1

Word	RP	GenAm	GenAus	NZ	SAf
pit	pɪt	pɪt	pɪt	pɪt/pæt	pɪt/pæt
pet	pet	pet	pet	pet	pet
pat	pæt	pæt	pæt	pæt	pæt
put	put/pʌt	put	put	put	put
putt	pʌt	pʌt	pʌt	pʌt	pʌt
pot	pɒt	pɒt	pɒt	pɒt	pɒt
bee	bi:	bi:	bi:	bi:	bi:
bay	beɪ	beɪ	beɪ	beɪ	beɪ
buy	baɪ	baɪ	baɪ	baɪ	baɪ
boy	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ
boot	bu:t	bu:t	bu:t	bu:t	bu:t
boat	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt
bout	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt
beer	bɪə	bɪər	bɪə	bɪə/bɪər	bɪə/bɪər
bear	bɛ:/bɛə	bɛər	bɛ:/bɛə	bɛə/bɪər	bɛ:/bɛə
bird	bɜ:d	bɜrd	bɜ:d	bɜ:d	bɜ:d
bard	bɑ:d	bard	bɑ:d	bɑ:d	bɑ:d
board	bɔ:d	bɔrd	bɔ:d	bɔ:d	bɔ:d
city	sɪti:	sɪri:	sɪti:/sɪri:	sɪti:/sɪri:	sɪti:/sɪri:
seedy	si:di:	si:di:	si:di:	si:di:	si:di:
hat	hæt	hæt	hæt	hæt	hæt
dance	dɑ:ns/dæns	dæns	dæns	dɑ:ns	dɑ:ns
daft	dɑ:ft	dæft	dɑ:ft/dæft	dɑ:ft	dɑ:ft
half	hɑ:f	hæf	hɑ:f	hɑ:f	hɑ:f
father	fɑ:ðə	fɑ:ðɜr	fɑ:ðə	fɑ:ðə	fɑ:ðə
farther	fɑ:ðə	fɑrðɜr	fɑ:ðə/fɜ:ðə	fɑ:ðə	fɑ:ðə/fɜ:ðə
pull	pʊt	pʊt/pʌt	pʊt	pʊt/pæt	pʊt/pu:t
pool	pu:t	pu:t	pu:t/pəʊt	pu:t/pæt	pu:t
pole	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt
Paul	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t
doll	dɒt	dɒt/dɑt	dɒt	dɒt	dɒt
cot	kɒt	kɒt/kat	kɒt	kɒt	kɒt

caught	kɔ:t	kɔ:t/kat	kɔ:t	kɔ:t	kɔ:t
fir	fɜ:	fɜr	fɜ:	fɜə	fɜ:
fern	fɜ:n	fɜrn	fɜ:n	fɜrn	fɜ:n
fur	fɜ:	fɜr	fɜ:	fɜə	fɜ:
fair	fɛ:/fɛə	fɛər	fɛ:	fɛə/fɪə	fɛə
nose	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
knows	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
plate	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt
weight	weɪt	weɪt	weɪt	weɪt/hweɪt	weɪt
poor	pɔ:/pʊə/pɔə	pɔr	pɔ:/pʊə	pɔə	pʊə
pour	pɔ:/pɔə	pɔr	pɔ:	pɔə	pɔ:
pore	pɔ:/pɔə	pɔr	pɔ:	pɔə	pɔ:
paw	pɔ:/pɔə	par	pɔ:	pɔə	pɔ:
tide	taɪd	taɪd	taɪd	taɪd	taɪd
tied	taɪd	taɪd	taɪd	taɪd	taɪd
pause	pɔ:z	pɔrz/parz/	pɔ:z	pɔ:z	pɔ:z
paws	pɔ:z	pɔrz/parz/	pɔ:z	pɔ:z	pɔ:z
meet	mi:t	mi:t	mi:t	mi:t	mi:t
meat	mi:t	mi:t	mi:t	mi:t	mi:t
mate	meɪt	meɪt	meɪt	meɪt	meɪt
which	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
witch	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
whales	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz/hweɪtɪz	weɪtɪs
wales	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪs
watch	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ
whine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn
wine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn

Appendix 9

Full Phonemic Transcription of Word List 1

British Participants

Word	RP 1	RP 2	RP 3	RP 4	RP 5	RP 6	RP 7	RP 8
pit	pɪt	pɪt	pɪt	pɪt	pɪt	pɪt	pɪt	pɪt
pet	pet	pet	pet	Pet	pet	pet	pet	pet
pat	pæt	pæt	pæt	Pæt	pæt	pæt	pæt	pæt
put	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʌt	pʊt
putt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt
pot	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt
bee	bi:	bi:	bi:	bi:	bi:	bi:	bi:	bi:
bay	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ
buy	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ
boy	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ
boot	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t
boat	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt
bout	baut	baut	baut	baut	baut	baut	baut	baut
beer	bɪə	bɪə	bɪə	bɪə	bɪə	bɪə	bɪə	bɪə
bear	bɛə	bɛ:	bɛ:	bɛə	bɛ:	bɛə	bɛ:	bɛ:
bird	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d
bard	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d
board	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d
city	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:
seedy	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:
hat	hæt	hæt	hæt	Hæt	hæt	hæt	hæt	hæt
dance	dɑ:ns	dɑ:ns	dæns	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns
daft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft
half	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f
father	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə
farther	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə
pull	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt
pool	pu:t	pu:t	pu:t	pu:t	pu:t	pu:t	pu:t	pu:t
pole	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt
Paul	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t

doll	dɒl	dɒl	dɒl	dɒl	dɒl	dɒl	dɒl	dɒl
cot	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt
caught	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t
fir	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:
fern	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n
fur	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:
fair	fɛə	fɛ:	fɛ:	fɛ:	fɛ:	fɛ:	fɛə	fɛə
nose	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
knows	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
plate	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt
weight	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt
poor	pʊə	pɔ:	pɔ:	pɔ:	pɔ:	pʊə	pʊə	pɔ:
pour	pʊə	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:
pore	pʊə	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:
paw	pʊə	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:
tide	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd
tied	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd
pause	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z
paws	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z
meet	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
meat	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
mate	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt
which	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
witch	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
whales	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz
wales	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz
watch	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ
whine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn
wine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn

American Participants

Word	GenAm 1	GenAm 2	GenAm 3	GenAm 4	GenAm 5	GenAm 6	GenAm 7	GenAm 8
pit	pɪt	pɪt	pɪt	Pɪt	pɪt	pɪt	pɪt	pɪt
pet	pet	pet	pet	pet	pet	pet	pet	pet
pat	pæt	pæt	pæt	pæt	pæt	pæt	pæt	pæt
put	pʊt	pʊt	pʊt	Pʊt	pʊt	pʊt	pʊt	pʊt
putt	pʌt	pʌt	pʌt	Pʌt	pʌt	pʌt	pʌt	pʌt
pot	pɒt	pɒt	pɒt	Pɒt	pɒt	pɒt	pɒt	pɒt
bee	bi:	bi:	bi:	bi:	bi:	bi:	bi:	bi:
bay	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ
buy	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ
boy	bɔɪ	bɔɪ	bɔɪ	Bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ
boot	bu:t	bu:t	bu:t	Bu:t	bu:t	bu:t	bu:t	bu:t
boat	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt
bout	baut	baut	baut	Baut	baut	baut	baut	baut
beer	bɪər	bɪər	bɪər	bɪər	bɪər	bɪər	bɪər	bɪər
bear	bɛər	bɛər	bɛər	bɛər	bɛər	bɛər	bɛər	bɛər
bird	bɜrd	bɜrd	bɜrd	bɜrd	bɜrd	bɜrd	bɜrd	bɜrd
bard	bɑrd	bɑrd	bɑrd	bɑrd	bɑrd	bɑrd	bɑrd	bɑrd
board	bɔrd	bɔrd	bɔrd	bɔrd	bɔrd	bɔrd	bɔrd	bɔrd
city	sɪri:	sɪri:	sɪri:	sɪri:	sɪri:	sɪri:	sɪri:	sɪri:
seedy	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:
hat	hæt	hæt	hæt	hæt	hæt	hæt	hæt	hæt
dance	dæns	dæns	dæns	dæns	dæns	dæns	dæns	dæns
daft	n/a	dæft	dæft	daft	dæft	dæft	dæft	dæft
half	hæf	hæf	hæf	hæf	hæf	hæf	hæf	hæf
father	fa:ðɜr	fa:ðɜr	fa:ðɜr	fa:ðɜr	fa:ðɜr	fa:ðɜr	fa:ðɜr	fa:ðɜr
farther	farðɜr	farðɜr	farðɜr	farðɜr	farðɜr	farðɜr	farðɜr	farðɜr
pull	pʊt	pʊt	pʊt	Pʊt	pʊt	pʊt	pʊt	pʊt
pool	pu:t	pu:t	pu:t	Pu:t	pu:t	pu:t	pu:t	pu:t
pole	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt
Paul	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t
doll	daʔ	daʔ	daʔ	daʔ	daʔ	dɒʔ	dɒʔ	daʔ
cot	kat	kat	kat	Kat	kat	kɒt	kat	kat
caught	kɔ:t	kat	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kat

fir	f3r	f3r	f3r	f3r	f3r	f3r	f3r	f3r
fern	f3rn	f3rn	f3rn	f3rn	f3rn	f3rn	f3rn	f3rn
fur	f3r	f3r	f3r	f3r	f3r	f3r	f3r	f3r
fair	fɛər	fɛər	fɛər	fɛər	fɛər	fɛər	fɛər	fɛər
nose	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
knows	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
plate	pleɪt	pleɪt	pleɪt	Pleɪt	pleɪt	pleɪt	pleɪt	pleɪt
weight	weɪt	weɪt	weɪt	Weɪt	weɪt	weɪt	weɪt	weɪt
poor	pɔr	pɔr	pɔr	Pɔr	pɔr	pɔr	pɔr	pɔr
pour	pɔr	pɔr	pɔr	Pɔr	pɔr	pɔr	pɔr	pɔr
pore	n/a	pɔr	pɔr	Pɔr	pɔr	pɔr	pɔr	pɔr
paw	par	par	par	Par	par	par	par	par
tide	taɪd	taɪd	taɪd	Taɪd	taɪd	taɪd	taɪd	taɪd
tied	taɪd	taɪd	taɪd	Taɪd	taɪd	taɪd	taɪd	taɪd
pause	parz	parz	parz	pɔrz	parz	parz	parz	parz
paws	parz	parz	parz	pɔrz	parz	parz	parz	parz
meet	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
meat	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
mate	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt
which	wɪtʃ	wɪtʃ	wɪtʃ	Wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
witch	wɪtʃ	wɪtʃ	wɪtʃ	Wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
whales	weɪtɪz	weɪtɪz	weɪtɪz	Weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz
wales	weɪtɪz	weɪtɪz	weɪtɪz	Weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz
watch	wɒtʃ	wɒtʃ	wɒtʃ	Wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ
whine	wain	wain	wain	Wain	wain	wain	wain	wain
wine	wain	wain	wain	Wain	wain	wain	wain	wain

Australian Participants

Word	GenAus 1	GenAus 2	GenAus 3	GenAus 4	GenAus 5	GenAus 6	GenAus 7	GenAus 8
pit	pɪt	pɪt	pɪt	pɪt	pɪt	pɪt	pɪt	pɪt
pet	pet	pet	pet	Pet	pet	pet	pet	pet
pat	pæt	pæt	pæt	pæt	pæt	pæt	pæt	pæt
put	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt
putt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt
pot	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt
bee	bi:	bi:	bi:	bi:	bi:	bi:	bi:	bi:
bay	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ
buy	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ
boy	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ
boot	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t
boat	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt
bout	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt
beer	bɪə	bɪə	bɪə	bɪə	bɪə	bɪə	bɪə	bɪə
bear	bɛ:	bɛə	bɛ:	bɛə	bɛə	bɛə	bɛə	bɛə
bird	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d
bard	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d
board	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d
city	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪri:
seedy	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:
hat	hæt	hæt	hæt	hæt	hæt	hæt	hæt	hæt
dance	dæns	dæns	dæns	dæns	dæns	dæns	dæns	dæns
daft	da:ft	da:ft	da:ft	da:ft	da:ft	da:ft	dæft	da:ft
half	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f
father	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə
farther	fɜ:ðə	fɑ:ðə	fɑ:ðə	fɜ:ðə	fɑ:ðə	fɑ:ðə	fɜ:ðə	fɑ:ðə
pull	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt
pool	pu:t	pu:t	pu:t	pəʊt	pu:t	pu:t	pu:t	pu:t
pole	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt
Paul	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t
doll	dɒt	dɒt	dɒt	dɒt	dɒt	dɒt	n/a	dɒt
cot	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt
caught	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t

fir	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:
fern	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n
fur	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:
fair	fɛ:	fɛ:	fɛ:	fɛə	fɛə	fɛə	fɛə	fɛ:
nose	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
knows	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
plate	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt
weight	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt
poor	pɔ:	n/a	pɔ:	pɔ:	pɔə	pɔ:	pɔ:	pɔ:
pour	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:
pore	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:
paw	pɔ:	pɔ:	n/a	pɔ:	pɔ:	pɔ:	pɔ:	pɔ:
tide	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd
tied	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd
pause	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z
paws	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z
meet	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
meat	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
mate	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt
which	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
witch	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
whales	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪ	weɪtɪz	weɪtɪz	weɪtɪz
wales	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz	weɪtɪz
watch	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ
whine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn
wine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn

New Zealand Participants

Word	NZ 1	NZ 2	NZ 3	NZ 4	NZ 5	NZ 6	NZ 7	NZ 8
pit	pɪt	pɪt	pət	pɪt	pɪt	pət	pɪt	pɪt
pet	pet	pet	pet	Pet	pet	pet	pet	pet
pat	pæt	pæt	pæt	pæt	pæt	pæt	pæt	n/a
put	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt
putt	pʌt	pʌt	pʌt	pʌt	pʌt	pʊt	pʌt	pʌt
pot	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt
bee	bi:	bi:	bi:	bi:	bi:	bi:	bi:	bi:
bay	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ
buy	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ
boy	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ
boot	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t
boat	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt
bout	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt
beer	bɪə	bɪə	bɪər	bɪə	bɪə	bɪə	bɪər	bɪər
bear	bɪər	bɪər	bɪər	bɛə	bɛə	bɪər	bɪər	bɛər
bird	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d
bard	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d
board	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d
city	n/a	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪri:	sɪti:
seedy	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:
hat	hæt	hæt	hæt	hæt	hæt	hæt	hæt	hæt
dance	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns
daft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft
half	hɑ:f	hɑ:f	hɑ:f	hɑ:f	hɑ:f	hɑ:f	hɑ:f	hɑ:f
father	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə
farther	fɑ:ðɜ:	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðɜ:	fɑ:ðɜ:	fɑ:ðɜ:
pull	pəʊt	pəʊt	pəʊt	pʊt	pʊt	pʊt	pəʊt	pʊt
pool	pəʊt	pəʊt	pəʊt	pəʊt	pu:t	pəʊt	pəʊt	pu:t
pole	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt	pəʊt
Paul	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t	pɔ:t
doll	dɒt	dɒt	dɒt	dɒt	dɒt	dɒt	dɒt	dɒt
cot	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt
caught	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t

fir	fɜ:ə	fɜ:ə	fɜ:ə	fɜ:	fɜ:ə	fɜ:ə	fɜ:ə	fɜ:
fern	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n
fur	fɜ:ə	fɜ:ə	fɜ:ə	fɜ:	fɜ:ə	fɜ:ə	fɜ:ə	fɜ:
fair	fɛə	fɛə	fɪə	fɛə	fɛə	fɛə	fɛə	fɛə
nose	nəʊz	n/a	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
knows	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
plate	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt
weight	weɪt	weɪt	weɪt	weɪt	hweɪt	weɪt	weɪt	weɪt
poor	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə
pour	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə
pore	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə
paw	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔə	pɔ:
tide	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd
tied	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd	taɪd
pause	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z
paws	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z	pɔ:z
meet	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
meat	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
mate	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt
which	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
witch	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
whales	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	hweɪlɪz	hweɪlɪz	weɪlɪz	weɪlɪz
wales	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz	weɪlɪz
watch	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ
whine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn
wine	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn	wəɪn

South African Participants

Word	SAf 1	SAf 2	SAf 3	SAf 4	SAf 5	SAf 6	SAf 7	SAf 8
pit	pət	pət	pət	pɪt	pɪt	pət	pɪt	pɪt
pet	pet	pet	pet	Pet	pet	pet	pet	pet
pat	pæt	pæt	pæt	pæt	pæt	pæt	pæt	pæt
put	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt	pʊt
putt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt	pʌt
pot	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt	pɒt
bee	bi:	bi:	bi:	bi:	bi:	bi:	bi:	bi:
bay	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ	beɪ
buy	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ	baɪ
boy	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ	bɔɪ
boot	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t	bu:t
boat	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt	bəʊt
bout	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt	baʊt
beer	biər	biər	biər	biər	biər	biər	biər	biər
bear	bɛ:	bɛ:	bɛ:	bɛ:	bɛ:	bɛə	bɛ:	bɛ:
bird	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d	bɜ:d
bard	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d	bɑ:d
board	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d	bɔ:d
city	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪti:	sɪri:
seedy	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:	si:di:
hat	hæt	hæt	hæt	hæt	hæt	hæt	hæt	hæt
dance	dɑ:ns	dɑ:ns	dɑ:ns	dɑ:ns	dans	dɑ:ns	dɑ:ns	dɑ:ns
daft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft	dɑ:ft
half	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f	ha:f
father	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə
farther	fɜ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə	fɑ:ðə
pull	pu:ɫ	pʊɫ	pʊɫ	pʊɫ	pʊɫ	pʊɫ	pu:ɫ	pu:ɫ
pool	pu:ɫ	pu:ɫ	pu:ɫ	pu:ɫ	pu:ɫ	pu:ɫ	pu:ɫ	pu:ɫ
pole	pəʊɫ	pəʊɫ	pəʊɫ	pəʊɫ	pəʊɫ	pəʊɫ	pəʊɫ	pəʊɫ
Paul	pɔ:ɫ	pɔ:ɫ	pɔ:ɫ	pɔ:ɫ	pɔ:ɫ	pɔ:ɫ	pɔ:ɫ	pɔ:ɫ
doll	dɒl	dɒl	dɒl	dɒl	dɒl	dɒɫ	dɒl	dɒl
cot	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt	kɒt
caught	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t	kɔ:t

fir	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:
fern	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n	fɜ:n
fur	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:	fɜ:
fair	fɛə	fɛə	fɛə	fɛə	fɛə	fɛə	fɛə	fɛə
nose	nəʊz	n/a	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
knows	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz	nəʊz
plate	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt	pleɪt
weight	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt	weɪt
poor	pʊə	pʊə	pʊə	pʊə	n/a	pʊə	pʊə	pʊə
pour	pɔ:	pɔ:	pɔ:	pɔ:	n/a	pɔ:	pɔ:	pɔ:
pore	pɔ:	pɔ:	pɔ:	pɔ:	n/a	pɔ:	pɔ:	pɔ:
paw	pɔ:	pɔ:	pɔ:	pɔ:	n/a	pɔ:	pɔ:	pɔ:
tide	taɪd	taɪd	taɪd	taɪd	n/a	taɪd	taɪd	taɪd
tied	taɪd	taɪd	taɪd	taɪd	n/a	taɪd	taɪd	taɪd
pause	pɔ:z	pɔ:z	pɔ:z	pɔ:z	n/a	pɔ:z	pɔ:z	pɔ:z
paws	pɔ:z	pɔ:z	pɔ:z	pɔ:z	n/a	pɔ:z	pɔ:z	pɔ:z
meet	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
meat	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t	mi:t
mate	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt	meɪt
which	wɪtʃ	n/a	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
witch	wɪtʃ	n/a	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ	wɪtʃ
whales	weɪt̬s	n/a	weɪt̬s	weɪt̬s	weɪt̬s	weɪt̬s	weɪt̬s	weɪt̬s
wales	weɪt̬s	n/a	weɪt̬s	weɪt̬s	weɪt̬s	weɪt̬s	weɪt̬s	weɪt̬s
watch	wɒtʃ	n/a	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ	wɒtʃ
whine	wain	n/a	wain	wain	wain	wain	wain	wain
wine	wain	n/a	wain	wain	wain	wain	wain	wain

Appendix 10

Phenomena Explored in Word List 2

Word	Exploration
advertisement	Polysyllabic Word Stress
applicable	Polysyllabic Word Stress
aristocrat	Polysyllabic Word Stress
ballet	French Loan Word Stress
butter	/t/-flapping
café	French Loan Word Stress
car	Rhoticity
cemetery	Reduced SCHWA /ə/
climber	Rhoticity
clerk	Pronunciation Differences
controversy	Polysyllabic Word Stress
data	/t/-tapping
detail	French Loan Word Stress
dynasty	Pronunciation Differences
fertile	Reduced SCHWA /ə/
frontier	French Loan Word Stress
garage	Pronunciation Differences
hostile	Reduced SCHWA /ə/
inquiry	Pronunciation Differences
inventory	Reduced SCHWA /ə/
laboratory	Polysyllabic Word Stress
later	/t/-tapping
leisure	Pronunciation Differences
lever	Pronunciation Differences
lieutenant	Pronunciation Differences
nephew	Pronunciation Differences
progress	Pronunciation Differences
route	Pronunciation Differences
schedule	Pronunciation Differences
tomato	Pronunciation Differences
vase	Pronunciation Differences
vitamin	Pronunciation Differences
yoghurt	Pronunciation Differences
zebra	Pronunciation Differences

Appendix 11
Condensed Phonemic Transcription of Word List 2

British Participants

Word	RP
advertisement	æd'vɜ:tɪsmənt
applicable	æ'plɪkəbəl/ə'plɪkəbəl
aristocrat	'æɪrɪstəʊkræt/'æɪrɪstəkræt/ə'rɪstəʊkræt
ballet	'bæleɪ
butter	bʌtə
café	kæfeɪ/kæ'feɪ
car	kɑ:
cemetery	semɪtri:/semɪteri:/semɪtɛ:ri:
climber	klaɪmɜ:
clerk	klɜ:k/klɑ:k
controversy	'kɒntrəvɜ:si:/kɒn'trɒvɜ:si:/kən'trɒvɜ:si
data	deɪtə/dɑ:tə
detail	'di:teɪl
dynasty	dɪnɪsti:/dɪnəsti:
fertile	fɜ:taɪl
frontier	'frʌntɪə/frʌn'tɪə
garage	'gærɪdʒ/gæ'ra:ʒ
hostile	hɒstaɪl
inquiry	ɪnk'waɪri:
inventory	ɪn'ventəri:/'ɪnvəntəri:/'ɪnvəntri:
laboratory	'læbətəri:/lə'bɒrətəri:/lə'bɒrətəri:
later	leɪtɜ:/leɪtə
leisure	leɜ:ʒ:
lever	li:vɜ:
lieutenant	leftənənt/lu:tenənt
nephew	nefju:
progress	prəʊgres
route	ru:t
schedule	skedju:l/ʃedju:l
tomato	təmə:təʊ

vase	va:z
vitamin	vɪtæmɪn
yoghurt	jɒgət
zebra	zebrə

American Participants

Word	GenAm
advertisement	'ædvɜ:təɪzmənt
applicable	'æplɪkəbəl/əplɪkəbəl
aristocrat	æ'rɪstəʊkræt
ballet	bæ'leɪ
butter	bʌrər
café	kæ'feɪ
car	kɑr
cemetery	semɪ'teri:
climber	klaɪmɜr
clerk	klɜrk
controversy	'kɒntrəvɜrsi:/'kəntrəvəsi:/'kɒntrəvɜrsi:
data	deɪrə/dæɪrə
detail	'dɪteɪl/dɪ'teɪl
dynasty	daɪnɪsti:/daɪnəsti:
fertile	fɜrɪl/fɜrtəɪl/fɜrtəl
frontier	frʌn'tɪər
garage	gə'ra:dʒ/gə'ra:ʒ
hostile	hɒstəl/hɒstəɪl
inquiry	'ɪnkwəri:
inventory	'ɪnvəntɔri:/'ɪnvəntɔri:
laboratory	'læbrətɔri
later	leɪrə
leisure	li:ʒər
lever	li:vɜr/levər
lieutenant	lu:tenənt
nephew	nefju:
progress	prɒgres/prəʊgres
route	ru:t/raʊt

schedule	skedju:əʔ
tomato	təmeɪtəʊ/təma:təʊ
vase	veɪs/vɑ:z
vitamin	vaiɾəmin
yoghurt	jəʊgɜrt
zebra	zi:brə

Australian Participants

Word	GenAus
advertisement	æd'vɜ:tɪsmənt/əd'vɜ:tɪsmənt/'ædvɜ:taɪzmənt
applicable	'æplɪkəbəl/'æplɪkəbəl/ə'plɪkəbəl
aristocrat	'æɪrɪstəʊkræt/æ'rɪstəʊkræt/æ'rɪstəkræt/ə'rɪstəʊkræt
ballet	bæleɪ
butter	bʌtə/bʌrə
café	'kæfeɪ
car	kɑ:
cemetery	semɪtri:/semɪteri:
climber	klaɪmə
clerk	klɜ:k/klɑ:k
controversy	kən'trɒvɜ:si:/kəntrəvɜ:si:/kən'trəʊvɜ:si:
data	dɑ:tə/deɪtə
detail	'di:teɪl
dynasty	dɪnəsti:/daɪnəsti:
fertile	fɜ:taɪl
frontier	'frʌntɪə/frʌn'tɪə
garage	'gæra:dʒ/gæ'ra:dʒ/gə'ra:dʒ
hostile	həstaɪl
inquiry	ɪn'kwɪəri:
inventory	ɪn'ventɔ:ri:/ɪnvəntri:/ɪn'ventri:
laboratory	lə'bɒrətɪ:/ləbrətɪ:/ləbrətɔ:ri:
later	leɪtə
leisure	leʒə
lever	li:və
lieutenant	leftənənt/lu:tenənt
nephew	nefju:

progress	prəʊɡres
route	ru:t/raʊt
schedule	skedju:t/skedju:ət/ʃedju:t
tomato	təma:təʊ/təma:rəʊ
Vase	veɪz
vitamin	vaiɾəmi:n/vaɪtəmi:n
yoghurt	jəʊɡz:t
zebra	zebrə

New Zealand Participants

Word	NZ
advertisement	'ædvɜ:taɪzmənt/æd'vɜ:tɪsmənt/əd'vɜ:tɪsmənt
applicable	æ'plɪkəbəl/ə'plɪkəbəl
aristocrat	'æɪrɪstəʊkræt/æ'ræstəʊkræt/ə'rɪstəʊkræt/ə'rɪstəkræt
ballet	'bæleɪ
butter	bʌtəl/bʌtə/bʌrə
café	'kæfeɪ
car	kɑ:
cemetery	semitri:/sɪmɪteri:/sɪmɪtri:
climber	klaɪmɜ:/klaɪmə
clerk	klɜ:k
controversy	kən'trɒvəsi:/'kɒntrəvəsi:/'kɒntrəvəsi:/'kɒntrəvɜ:si:
data	dɑ:tə
detail	'di:teɪl
dynasty	dəɪnɪsti:/dɪnɪsti:
fertile	fɜ:taɪl
frontier	'frʌntɪə/frʌn'tɪə
garage	'ɡærɪdʒ/'ɡæra:dʒ/'ɡæra:ʒ/ɡə'ra:dʒ
hostile	həsteɪl
inquiry	ɪnk'waɪri:/'ɪnkwəri:
inventory	ɪn'ventɔ:ri:/'ɪnventɔ:ri:/'ɪnvəntri:
laboratory	lə'bɒrətri:/læbrətɔ:ri:/læbrətri:
later	leɪtə
leisure	leɪʒə/leɪʒ:
lever	li:vɜ:

lieutenant	leftənənt/lu:tenənt/lu:tinənt
nephew	nefju:
progress	prəʊgres
route	ru:t
schedule	skedju:l/ʃedju:l
tomato	təma:təʊ/təma:rəʊ
vase	vɑ:z
vitamin	vaitæmin/vitæmin
yoghurt	jəʊgət
zebra	zebrə/zi:brə

South African Participants

Word	SAf
advertisement	'ædvɜ:tɪsmənt/əd'vɜ:tɪsmənt/æd'vɜ:tɪsmənt/æd'vətɪsmənt
applicable	æ'plɪkəbəl/ə'plɪkəbəl
aristocrat	'æɪrɪstəʊkræt/'æɪrɪstəkræt/ə'rɪstəʊkræt
ballet	bæ'leɪ /bæ'leɪ
butter	bʌtə/bʌtɜ:
café	'kæfeɪ/kæ'feɪ
car	kɑ:
cemetery	sɪmɪtri:/semɪteri:/semɪtri:
climber	klaɪmɜ:
clerk	klɜ:k/klɑ:k
controversy	'kɒntrəvɜ:si:/kən'trəvɜ:si:/kən'trəvəsi:
data	dɑ:tə
detail	'di:teɪl
dynasty	dɪnɪsti:/daɪnəsti:/daɪnɪsti:
fertile	fɜ:taɪl
frontier	'frʌntɪə/frʌn'tɪə
garage	'gæra:dʒ/gæ'ra:dʒ/'gæra:ʒ/gə'ra:dʒ
hostile	hɒstəl/hɒstaɪl
inquiry	ɪnk'waɪri:
inventory	'ɪnvəntri:/ɪn'ventɔ:ri:/ɪn'ventri:
laboratory	'ləbrətɔ:ri:/lə'bɒrətɪri:/lə'bɒrətɔ:ri:
later	leɪtə

leisure	leʒə/li:ʒə
lever	li:vɜ:/li:və/levə
lieutenant	leftənənt/lu:tenənt
nephew	nefju:
progress	prəʊgres
route	ru:t
schedule	skedju:ʔ
tomato	təma:təʊ
vase	vɑ:z/veiz
vitamin	vitæmɪn/vaitæmɪn
yoghurt	jəʊgət
zebra	zebrə

Appendix 12

Full Phonemic Transcription of Word List 2

British Participants

Word	RP 1	RP 2	RP 3	RP 4
advertisement	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt
applicable	æ'plɪkəbəl	ə'plɪkəbəl	æ'plɪkəbəl	æ'plɪkəbəl
aristocrat	'æɪrɪstəʊkræt	'æɪrɪstəkræt	ə'rɪstəʊkræt	'æɪrɪstəʊkræt
ballet	'bæleɪ	'bæleɪ	'bæleɪ	'bæleɪ
butter	bʌtə	bʌtə	bʌtə	bʌtə
café	'kæfeɪ	'kæfeɪ	'kæfeɪ	'kæfeɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	semɪtri:	semɪtri:	semɪtri:	semɪteri:
climber	klaɪmɜ:	klaɪmɜ:	klaɪmɜ:	klaɪmɜ:
clerk	klɜ:k	klɑ:k	klɑ:k	klɑ:k
controversy	'kɒntrəvɜ:si	kən'trɒvɜ:si	kən'trɒvɜ:si	kən'trɒvɜ:si
data	deɪtə	deɪtə	deɪtə	deɪtə
detail	'di:teɪl	'di:teɪl	'di:teɪl	'di:teɪl
dynasty	dɪnɪsti:	dɪnəsti:	dɪnəsti:	dɪnəsti:
fertile	fɜ:taɪl	fɜ:taɪl	fɜ:taɪl	fɜ:taɪl
frontier	'frʌntɪə	'frʌntɪə	'frʌntɪə	'frʌntɪə
garage	'gæərɪdʒ	'gæərɪdʒ	'gæərɪdʒ	gæ'ra:ʒ
hostile	hɒstaɪl	hɒstaɪl	hɒstaɪl	hɒstaɪl
inquiry	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:
inventory	ɪn'ventəri:	ɪn'ventəri:	'ɪnvəntri:	ɪn'ventəri:
laboratory	lə'bɒrətɪ:	'ləbætri:	lə'bɒrətɪ:	lə'bɒrətɪ:
later	leɪtɜ:	leɪtɜ:	leɪtɜ:	leɪtɜ:
leisure	leɜ:ʒ:	leɜ:ʒ:	leɜ:ʒ:	leɜ:ʒ:
lever	li:vɜ:	li:vɜ:	li:vɜ:	li:vɜ:
lieutenant	lu:tenənt	leftenənt	lu:tenənt	leftenənt
nephew	nefju:	nefju:	nefju:	nefju:
progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
route	ru:t	ru:t	ru:t	ru:t
schedule	skedju:l	ʃedju:l	ʃedju:l	skedju:l
tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:təʊ

vase	vɑ:z	vɑ:z	vɑ:z	vɑ:z
vitamin	vitæmɪn	vitæmɪn	vitæmɪn	vitæmɪn
yoghurt	jɒgət	jɒgət	jɒgət	jɒgət
zebra	Zebra	zebra	zebra	zebra

Word	RP 5	RP 6	RP 7	RP 8
advertisement	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt
applicable	ə'plɪkəbəl	ə'plɪkəbəl	ə'plɪkəbəl	ə'plɪkəbəl
aristocrat	'æɪstəʊkræt	'æɪstəʊkræt	'æɪstəʊkræt	ə'ɪstəʊkræt
ballet	'bæleɪ	'bæleɪ	'bæleɪ	'bæleɪ
butter	bʌtə	bʌtə	bʌtə	bʌtə
café	'kæfeɪ	kæ'feɪ	'kæfeɪ	'kæfeɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	semɪtri:	semɪtɛ:ri:	semɪtri:	semɪtri:
climber	klaɪmɜ:	klaɪmɜ:	klaɪmɜ:	klaɪmɜ:
clerk	klɜ:k	kla:k	kla:k	kla:k
controversy	'kɒntrəvɜ:si	kɒn'trɒvɜ:si	kɒn'trɒvɜ:si	'kɒntrəvɜ:si
data	dertə	dɑ:tə	dertə	dertə
detail	'di:teɪl	'di:teɪl	'di:teɪl	'di:teɪl
dynasty	dɪnəsti:	dɪnəsti:	dɪnəsti:	dɪnəsti:
fertile	fɜ:taɪl	fɜ:taɪl	fɜ:taɪl	fɜ:taɪl
frontier	'frʌntɪə	frʌn'tɪə	frʌn'tɪə	'frʌntɪə
garage	'gæɪdʒ	gæ'ra:ʒ	gæ'ra:ʒ	'gæɪdʒ
hostile	hɒstaɪl	hɒstaɪl	hɒstaɪl	hɒstaɪl
inquiry	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:
inventory	'ɪnvəntri:	'ɪnvəntəri:	ɪn'ventəri:	'ɪnvəntri:
laboratory	lə'bɒrətɪ:	lə'bɒrətəri:	lə'bɒrətɪ:	lə'bɒrətɪ:
later	leɪtɜ:	leɪtɜ:	leɪtɜ:	leɪtə
leisure	leʒɜ:	leʒɜ:	leʒɜ:	leʒɜ:
lever	li:vɜ:	li:vɜ:	li:vɜ:	li:vɜ:
lieutenant	lu:tenənt	leftenənt	leftenənt	lu:tenənt
nephew	nefju:	nefju:	nefju:	nefju:
progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
route	ru:t	ru:t	ru:t	ru:t
schedule	ʃedju:l	ʃedju:l	ʃedju:l	skedju:l
tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:təʊ

vase	va:z	va:z	va:z	va:z
vitamin	vitæmin	vitæmin	vitæmin	vitæmin
yoghurt	jɒgət	jɒgət	jɒgət	jɒgət
zebra	Zebrə	zebrə	zebrə	zebrə

American Participants

Word	GenAm 1	GenAm 2	GenAm 3	GenAm 4
advertisement	'ædvɜ:taɪzmənt	'ædvɜ:taɪzmənt	'ædvɜ:taɪzmənt	'ædvɜ:taɪzmənt
applicable	æplɪkəbəl	ə'plɪkəbəl	'æplɪkəbəl	ə'plɪkəbəl
aristocrat	æ'rɪstəʊkræt	æ'rɪstəʊkræt	æ'rɪstəʊkræt	æ'rɪstəʊkræt
ballet	bæ'leɪ	bæ'leɪ	bæ'leɪ	bæ'leɪ
butter	bʌrər	bʌrər	bʌrər	bʌrər
café	kæ'feɪ	kæ'feɪ	kæ'feɪ	kæ'feɪ
car	kar	kar	kar	kar
cemetery	semitəri:	semitəri:	semitəri:	semitəri:
climber	klaɪmɜr	klaɪmɜr	klaɪmɜr	klaɪmɜr
clerk	klɜrk	klɜrk	klɜrk	klɜrk
controversy	kantrəvəsi:	'kɒntrəvɜrsi:	'kɒntrəvɜrsi:	'kɒntrəvɜrsi:
data	deɪrə	dæɪrə	deɪrə	deɪrə
detail	dɪ'teɪl	'dɪteɪl	'dɪteɪl	'dɪteɪl
dynasty	dəɪnɪsti:	dəɪnəsti:	dəɪnəsti:	dəɪnəsti:
fertile	fɜrɪl	fɜrtəɪl	fɜrtəl	fɜrtəɪl
frontier	frʌn'ti:r	frʌn'ti:r	frʌn'ti:r	frʌn'ti:r
garage	gə'rɑ:dʒ	gə'rɑ:ʒ	gə'rɑ:ʒ	gə'rɑ:dʒ
hostile	hɒstəl	hɒstəɪl	hɒstəɪl	hɒstəɪl
inquiry	'ɪŋkwɪri:	'ɪŋkwəri:	'ɪŋkwəri:	'ɪŋkwəri:
inventory	ɪnvəntɔri:	'ɪnvəntɔri:	'ɪnvəntɔri:	'ɪnvəntɔri:
laboratory	ləbrætɔri	'ləbrætɔri	'ləbrætɔri	'ləbrætɔri
later	leɪrə	leɪrə	leɪrə	leɪrə
leisure	li:ʒər	li:ʒər	li:ʒər	li:ʒər
lever	li:vɜr	levər	li:vɜr	li:vɜr
lieutenant	lu:tenənt	lu:tenənt	lu:tenənt	lu:tenənt
nephew	nefju:	nefju:	nefju:	nefju:
progress	prɒgres	prɒgres	prɒgres	prɒgres
route	raʊ	ru:t	ru:t	raʊ

schedule	Skedju:əʔ	skedju:əʔ	skedju:əʔ	skedju:əʔ
tomato	təmeɪtəʊ	təmeɪtəʊ	təmeɪrəʊ	təmeɪtəʊ
vase	veɪs	veɪs	veɪs	vɑ:z
vitamin	vaiɾəmin	vaiɾəmin	vaiɾəmin	vaiɾəmin
yoghurt	jəʊgɜrt	jəʊgɜrt	jəʊgɜrt	jəʊgɜrt
zebra	zi:brə	zi:brə	zi:brə	zi:brə

Word	GenAm 5	GenAm 6	GenAm 7	GenAm 8
advertisement	'ædvɜ:taɪzmənt	'ædvɜ:taɪzmənt	'ædvɜ:taɪzmənt'	'ædvɜ:taɪzmənt
applicable	ə'plɪkəbʔ	'æplɪkəbʔ	ə'plɪkəbʔ	ə'plɪkəbʔ
aristocrat	æ'rɪstəʊkræt	æ'rɪstəʊkræt	æ'rɪstəʊkræt	æ'rɪstəʊkræt
ballet	bæ'leɪ	bæ'leɪ	bæ'leɪ	bæ'leɪ
butter	bʌrər	bʌrər	bʌrər	bʌrər
café	kæ'feɪ	kæ'feɪ	kæ'feɪ	kæ'feɪ
car	kɑr	kɑr	kɑr	kɑr
cemetery	semitəri:	semitəri:	semitəri:	semitəri:
climber	klaɪmɜr	klaɪmɜr	klaɪmɜr	klaɪmɜr
clerk	klɜrk	klɜrk	klɜrk	klɜrk
controversy	'kɒntrəvɜrsi:	'kɒntrəvɜrsi:	'kɒntrəvɜrsi:	'kɒntrəvɜrsi:
data	dæɾə	deɪɾə	deɪɾə	deɪɾə
detail	'dɪteɪʔ	'dɪteɪʔ	'dɪteɪʔ	'dɪteɪʔ
dynasty	dainəsti:	dainəsti:	dainəsti:	dainəsti:
fertile	fɜrtaiʔ	fɜrtaiʔ	fɜrtaiʔ	fɜrtəʔ
frontier	frʌn'ti:r	frʌn'ti:r	frʌn'ti:r	frʌn'ti:r
garage	gə'ɾɑ:ʒ	gə'ɾɑ:ʒ	gə'ɾɑ:ʒ	gə'ɾɑ:ʒ
hostile	hɒstaiʔ	hɒstaiʔ	hɒstaiʔ	hɒstaiʔ
inquiry	'ɪŋkwəri:	'ɪŋkwəri:	'ɪŋkwəri:	'ɪŋkwəri:
inventory	'ɪnventɔri:	'ɪnventɔri:	'ɪnventɔri:	'ɪnventɔri:
laboratory	'ləbrætɔri	'ləbrætɔri	'ləbrætɔri	'ləbrætɔri
later	leɪɾə	leɪɾə	leɪɾə	leɪɾə
leisure	li:ʒər	li:ʒər	li:ʒər	li:ʒər
lever	li:vɜr	levɜr	li:vɜr	levɜr
lieutenant	lu:tenənt	lu:tenənt	lu:tenənt	lu:tenənt
nephew	Nefju:	nefju:	nefju:	nefju:
progress	prɒgres	prəʊgres	prɒgres	prɒgres
route	ru:t	raʊt	raʊt	raʊt

schedule	Skedju:əʔ	skedju:əʔ	skedju:əʔ	skedju:əʔ
tomato	təma:təʊ	təmeɪtəʊ	təma:təʊ	təma:təʊ
vase	veɪs	veɪs	veɪs	veɪs
vitamin	vaiɾəmin	vaiɾəmin	vaiɾəmin	vaiɾəmin
yoghurt	jəʊgɜrt	jəʊgɜrt	jəʊgɜrt	jəʊgɜrt
zebra	zi:brə	zi:brə	zi:brə	zi:brə

Australian Participants

Word	GenAus 1	GenAus 2	GenAus 3	GenAus 4
advertisement	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt
applicable	'æplɪkəbʔ	æ'plɪkəbʔ	æ'plɪkəbʔ	æ'plɪkəbʔ
aristocrat	'æɾɪstəʊkræt	æ'rɪstəʊkræt	æ'rɪstəʊkræt	'æɾɪstəkræt
ballet	'bæleɪ	'bæleɪ	'bæleɪ	'bæleɪ
butter	bʌrə	bʌtə	bʌtə	bʌrə
café	'kæfeɪ	'kæfeɪ	'kæfeɪ	'kæfeɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	semitɾi:	semitɛri:	semitɛri:	semitɾi:
climber	klaɪmə	klaɪmə	klaɪmə	klaɪmə
clerk	klɜ:k	klɑ:k	klɜ:k	klɜ:k
controversy	kən'trɒvɜ:si:	'kɒntrəvɜ:si:	'kɒntrəvɜ:si:	'kɒntrəvɜ:si:
data	dɑ:tə	deɪtə	dɑ:tə	dɑ:tə
detail	'di:teɪʔ	'di:teɪʔ	'di:teɪʔ	'di:teɪʔ
dynasty	dɪnəsti:	dɪnəsti:	dɪnəsti:	dɪnəsti:
fertile	fɜ:taɪʔ	fɜ:taɪʔ	fɜ:taɪʔ	fɜ:taɪʔ
frontier	frʌn'tɪə	frʌn'tɪə	frʌn'tɪə	'frʌntɪə
garage	'gæɾɑ:dʒ	gə'ɾɑ:dʒ	'gæɾɑ:dʒ	gæ'ɾɑ:dʒ
hostile	hɒstaɪʔ	hɒstaɪʔ	hɒstaɪʔ	hɒstaɪʔ
inquiry	ɪŋ'kwɛɾi:	ɪŋ'kwɛɾi:	ɪŋ'kwɛɾi:	ɪŋ'kwɛɾi:
inventory	ɪn'ventɔ:ri:	'ɪnvəntri:	'ɪnvəntri:	'ɪnvəntri:
laboratory	lə'bɒrətɾi:	lə'bɒrətɾi:	'ləbrətɾi:	lə'bɒrətɾi:
later	leɪrə	leɪtə	leɪtə	n/a
leisure	lezə	lezə	lezə	lezə
lever	li:və	li:və	li:və	li:və
lieutenant	lu:tenənt	lu:tenənt	leftenənt	leftenənt
nephew	Nefju:	nefju:	nefju:	nefju:

progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
route	ru:t	ru:t	ru:t	raʊt
schedule	Skedju:əʔ	ʃedju:ʔ	skedju:ʔ	ʃedju:l
tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:təʊ
vase	veɪz	va:z	va:z	va:z
vitamin	vaiɾəmin	vaitəmin	vaiɾəmin	vaitəmin
yoghurt	jəʊgɜ:t	jəʊgɜ:t	jəʊgɜ:t	jəʊgɜ:t
zebra	Zebrə	zebrə	zebrə	zebrə

Word	GenAus 5	GenAus 6	GenAus 7	GenAus 8
advertisement	əd'vɜ:tɪsmənt	əd'vɜ:tɪsmənt	'ædvɜ:taɪzmənt	əd'vɜ:tɪsmənt
applicable	n/a	ə'plɪkəbʔ	ə'plɪkəbʔ	ə'plɪkəbʔ
aristocrat	æ'rɪstəkræt	'æɪstəʊkræt	'æɪstəkræt	ə'rɪstəʊkræt
ballet	'bæleɪ	'bæleɪ	n/a	'bæleɪ
butter	bʌtə	bʌtə	bʌtə	bʌtə
café	'kæfeɪ	'kæfeɪ	'kæfeɪ	'kæfeɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	semɪteri:	semɪtri:	semɪtri:	semɪtri:
climber	klaɪmə	klaɪmə	klaɪmə	klaɪmə
clerk	klɜ:k	kla:k	klɜ:k	klɜ:k
controversy	kən'trəʊvɜ:si:	'kɒntrəvɜ:si:	'kɒntrəvɜ:si:	'kɒntrəvɜ:si:
data	dɑ:tə	dɑ:tə	deɪtə	dɑ:tə
detail	'di:teɪʔ	'di:teɪʔ	'di:teɪʔ	'di:teɪʔ
dynasty	dɪnəsti:	dɑɪnəsti:	n/a	dɪnəsti:
fertile	fɜ:taɪʔ	fɜ:taɪʔ	fɜ:taɪʔ	fɜ:taɪʔ
frontier	frʌn'tɪə	'frʌntɪə	'frʌntɪə	'frʌntɪə
garage	'gæɾɑ:dʒ	'gæɾɑ:dʒ	'gæɾɑ:dʒ	'gæɾɑ:dʒ
hostile	hɒstaɪʔ	hɒstaɪʔ	hɒstəʔ	hɒstaɪʔ
inquiry	ɪŋ'kwæɪri:	ɪŋ'kwæɪri:	ɪŋ'kwæɪri:	ɪŋ'kwæɪri:
inventory	ɪn'ventri:	ɪn'ventɔ:ri:	'ɪnventɔ:ri:	'ɪnvəntri:
laboratory	lə'bɒrətɪri:	lə'bɒrətɪri:	'ləbrətɔ:ri:	lə'bɒrətɪri:
later	leɪtə	leɪtə	leɪtə	leɪtə
leisure	leʒə	leʒə	leʒə	leʒə
lever	li:və	li:və	li:və	li:və
lieutenant	lu:tenənt	leftenənt	lu:tenənt	lu:tenənt
nephew	Nefju:	nefju:	nefju:	nefju:

progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
route	raʊt	raʊt	raʊt	ru:t
schedule	skedu:əʔ	ʃedju:t	ʃedju:t	skedju:əʔ
tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:rəʊ
vase	va:z	va:z	va:z	va:z
vitamin	vaɪtəmin	vaɪtəmin	vaɪtəmin	vaɪtəmin
yoghurt	jəʊgɜ:t	jəʊgɜ:t	jəʊgɜ:t	jəʊgɜ:t
zebra	Zebrə	zebrə	zebrə	zebrə

New Zealand Participants

Word	NZ 1	NZ 2	NZ 3	NZ 4
advertisement	əd'vɜ:tɪsmənt	əd'vɜ:tɪsmənt	'ædvɜ:taɪzmənt	əd'vɜ:tɪsmənt
applicable	æ'plɪkəbəl	ə'plɪkəbəl	æ'plɪkəbəl	æ'plɪkəbəl
aristocrat	'æɪrɪstəʊkræt	ə'rɪstəʊkræt	æ'ræstəʊkræt	ə'rɪstəkræt
ballet	'bæleɪ	'bæleɪ	'bæleɪ	'bæleɪ
butter	bʌtəl	bʌtəl	bʌtəl	bʌtəl
café	'kæfeɪ	'kæfeɪ	'kæfeɪ	'kæfeɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	semitri:	semitri:	sɪmiteri:	semiteri:
climber	klaɪmɜ:	klaɪmɜ:	klaɪmə	klaɪmə
clerk	klɜ:k	klɜ:k	klɜ:k	klɜ:k
controversy	kən'trɒvəsi:	'kəntɒvəsi:	'kəntɒvəsi:	'kəntɒvəsi:
data	dɑ:tə	dɑ:tə	dɑ:tə	dɑ:tə
detail	'di:teɪəl	'di:teɪəl	'di:teɪəl	'di:teɪəl
dynasty	dɑɪnɪsti:	dɑɪnɪsti:	dɪnɪsti:	dɪnɪsti:
fertile	fɜ:taɪəl	fɜ:taɪəl	fɜ:taɪəl	fɜ:taɪəl
frontier	frʌn'tɪə	frʌn'tɪə	frʌn'tɪə	frʌn'tɪə
garage	'gæɪdʒ	'gæɪrɑ:dʒ	gə'rɑ:dʒ	'gæɪrɑ:ʒ
hostile	həstɑɪəl	həstəəl	həstɑɪəl	həstɑɪəl
inquiry	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:
inventory	ɪn'ventɔ:ri:	ɪn'ventɔ:ri:	'ɪnventɔ:ri:	'ɪnventɔ:ri:
laboratory	lə'bɒrətɪ:	lə'bɒrətɪ:	'ləbrətɔ:ri:	'ləbrətɔ:ri:
later	leɪtə	leɪtə	leɪtə	leɪtə
leisure	leʒə	leʒə	leʒə	leʒə
lever	li:vɜ:	li:vɜ:	li:vɜ:	li:vɜ:

lieutenant	lu:tenənt	lu:tenənt	lu:tinənt	leftenənt
nephew	Nefju:	nefju:	nefju:	nefju:
progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
route	ru:t	ru:t	ru:t	ru:t
schedule	skedju:ʔ	skedju:ʔ	skedju:ʔ	ʃedju:ʔ
tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:təʊ
vase	vɑ:z	vɑ:z	vɑ:z	vɑ:z
vitamin	vaitæmin	vaitæmin	vaitæmin	vaitæmin
yoghurt	jəʊgət	jəʊgət	jəʊgət	jəʊgət
zebra	Zebrə	zebrə	zi:brə	zebrə

Word	NZ 5	NZ 6	NZ 7	NZ 8
advertisement	əd'vɜ:tɪsmənt	'ædvɜ:taɪzmənt	'ædvɜ:taɪzmənt	'ædvɜ:taɪzmənt
applicable	æ'plɪkəbəl	æ'plɪkəbəl	ə'plɪkəbəl	ə'plɪkəbəl
aristocrat	'ærɪstəʊkræt	'ærɪstəʊkræt	ə'rɪstəʊkræt	ə'rɪstəkræt
ballet	'bæleɪ	'bæleɪ	'bæleɪ	'bæleɪ
butter	bʌtəl	bʌtə	bʌrə	bʌtə
café	'kæfeɪ	'kæfeɪ	'kæfeɪ	'kæfeɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	semitri:	sɪmitri:	sɪmitri:	sɪmiteri:
climber	klaɪmə	klaɪmɜ:	klaɪmə	klaɪmə
clerk	klɜ:k	klɜ:k	klɜ:k	klɜ:k
controversy	kən'trɒvəsi:	'kɒntrəvɜ:si:	'kɒntrəvɜ:si:	kən'trɒvəsi:
data	dɑ:tə	dɑ:tə	dɑ:tə	dɑ:tə
detail	'di:teɪəl	'di:teɪəl	'di:teɪəl	'di:teɪəl
dynasty	dɪnɪsti:	dɪnɪsti:	dɪnɪsti:	dɑɪnɪsti:
fertile	fɜ:taɪəl	fɜ:taɪəl	fɜ:taɪəl	fɜ:taɪəl
frontier	'frʌntɪə	'frʌntɪə	'frʌntɪə	'frʌntɪə
garage	'gæərə:dʒ	'gæərə:ʒ	'gæərɪdʒ	'gæərə:dʒ
hostile	hɒstaɪəl	hɒstaɪəl	hɒstətəl	hɒstaɪəl
inquiry	ɪŋk'waɪri:	ɪŋk'waɪri:	'ɪŋkwəri:	ɪŋk'waɪri:
inventory	'ɪnvəntri:	'ɪnvəntɔ:ri:	'ɪnvəntɔ:ri:	'ɪnvəntɔ:ri:
laboratory	'ləbrətɪ:	lə'bɒrətɪ:	'ləbrətɔ:ri:	'ləbrətɔ:ri:
later	leɪtə	leɪtə	leɪrə	leɪtə
leisure	leɜə	leɜɜ:	li:ɜə	leɜɜ:
lever	li:vɜ:	li:və	levə	levə

lieutenant	lu:tenənt	lu:tenənt	lu:tinənt	lu:tenənt
nephew	Nefju:	nefju:	nefju:	nefju:
progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
route	ru:t	ru:t	ru:t	ru:t
schedule	ʃedju:t	ʃedju:t	skedju:t	skedju:t
tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:rəʊ
vase	va:z	va:z	veiz	va:z
vitamin	vaɪtæmɪn	vaɪtæmɪn	vɪtæmɪn	vaɪtæmɪn
yoghurt	jəʊgət	jəʊgət	jəʊgət	jəʊgət
zebra	Zebrə	zebrə	zi:brə	zebrə

South African Participants

Word	SAf 1	SAf 2	SAf 3	SAf 4
advertisement	əd'vɜ:tɪsmənt	'ædvɜ:tɪsmənt	əd'vɜ:tɪsmənt	əd'vɜ:tɪsmənt
applicable	ə'plɪkəbəl	ə'plɪkəbəl	ə'plɪkəbəl	ə'plɪkəbəl
aristocrat	'æɪstəkræt	'æɪstəʊkræt	'æɪstəʊkræt	'æɪstəkræt
ballet	bæ'leɪ	n/a	bæ'leɪ	bæ'leɪ
butter	bʌtə	bʌtɜ:	bʌtə	bʌtə
café	kæ'feɪ	'kæfeɪ	kæ'feɪ	kæ'feɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	sɪmɪtri:	semɪteri:	semɪtri:	semɪtri:
climber	klaɪmɜ:	klaɪmɜ:	klaɪmɜ:	klaɪmɜ:
clerk	klɜ:k	klɜ:k	klɑ:k	klɑ:k
controversy	kən'trɒvəsi:	kən'trɒvəsi:	kən'trɒvəsi:	kən'trɒvəsi:
data	dɑ:tə	dɑ:tə	dɑ:tə	dɑ:tə
detail	'di:teɪl	'di:teɪl	'di:teɪl	'di:teɪl
dynasty	dɪnɪsti:	dɑɪnəsti:	dɪnɪsti:	dɪnɪsti:
fertile	fɜ:təɪl	fɜ:təɪl	fɜ:təɪl	fɜ:təɪl
frontier	frʌn'tɪə	'frʌntɪə	'frʌntɪə	frʌn'tɪə
garage	gə'ra:dʒ	gə'ra:dʒ	gə'ra:dʒ	'gæra:ʒ
hostile	hɒstəl	hɒstəl	hɒstəɪl	hɒstəɪl
inquiry	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:
inventory	'ɪnvəntri:	ɪn'ventɔ:ri:	ɪn'ventri:	'ɪnvəntri:
laboratory	lə'bɒrətɔ:ri:	'læbrətɔ:ri:	lə'bɒrətri:	lə'bɒrətri:
later	leɪtə	leɪtə	leɪtə	leɪtə

leisure	lezə	li:zə	lezə	lezə
lever	li:vɜ:	levə	li:vɜ:	li:vɜ:
lieutenant	lu:tenənt	lu:tenənt	leftenənt	lu:tenənt
nephew	nefju:	nefju:	nefju:	nefju:
progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
route	ru:t	raʊt	ru:t	ru:t
schedule	skedju:ʃ	skedju:ʃ	skedju:ʃ	ʃedju:ʃ
tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:təʊ
vase	vɑ:z	veɪz	vɑ:z	vɑ:z
vitamin	vɪtæmɪn	vɪtæmɪn	vɪtæmɪn	vɪtæmɪn
yoghurt	jəʊgət	jəʊgət	jəʊgət	jəʊgət
zebra	zebrə	zebrə	zebrə	zebrə

Word	SAf 5	SAf 6	SAf 7	SAf 8
advertisement	æd'vɜ:tɪsmənt	'ædvətɪsmənt	æd'vɜ:tɪsmənt	æd'vɜ:tɪsmənt
applicable	æ'plɪkəbəl	æ'plɪkəbəl	ə'plɪkəbəl	ə'plɪkəbəl
aristocrat	'æɪstəkræt	'æɪstəʊkræt	ə'ɪstəʊkræt	ə'ɪstəʊkræt
ballet	bæ'leɪ	bæ'leɪ	'bæleɪ	bæ'leɪ
butter	bʌtə	bʌtə	bʌtə	bʌtə
café	kæ'feɪ	kæ'feɪ	'kæfeɪ	'kæfeɪ
car	kɑ:	kɑ:	kɑ:	kɑ:
cemetery	semɪtri:	semɪteri:	semɪtri:	semɪteri:
climber	klaɪmə	klaɪmə	klaɪmɜ:	klaɪmɜ:
clerk	klɑ:k	klɜ:k	klɜ:k	klɜ:k
controversy	'kɒntrəvəsi:	kɒn'trɒvəsi:	'kɒntrəvəsi:	kɒn'trɒvəsi:
data	dɑ:tə	dɑ:tə	dɑ:tə	dɑ:tə
detail	'di:teɪl	'di:teɪl	'di:teɪl	'di:teɪl
Dynasty	dɪnɪsti:	dɪnɪsti:	dɪnɪsti:	dɑnɪsti:
Fertile	fɜ:təɪl	fɜ:təɪl	fɜ:təɪl	fɜ:təɪl
Frontier	frʌn'tɪə	frʌn'tɪə	frʌn'tɪə	frʌn'tɪə
Garage	'gæɪrɑ:dʒ	gə'ra:dʒ	'gæɪrɑ:dʒ	gə'ra:dʒ
Hostile	hɒstəɪl	hɒstəɪl	hɒstəɪl	hɒstəɪl
Inquiry	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:	ɪŋk'waɪri:
Inventory	ɪn'ventri:	ɪn'ventri:	ɪn'ventri:	ɪn'ventri:
Laboratory	lə'bɒrətɪri:	lə'bɒrətɪri:	lə'bɒrətɪri:	lə'bɒrətɪri:
Later	leɪtə	leɪtə	leɪtə	leɪtə

Leisure	lezə	lezə	lezə	lezə
Lever	li:və	li:və	li:v3:	li:v3:
Lieutenant	leftenənt	lu:tenənt	lu:tenənt	lu:tenənt
Nephew	Nefju:	nefju:	nefju:	nefju:
Progress	prəʊgres	prəʊgres	prəʊgres	prəʊgres
Route	ru:t	ru:t	ru:t	ru:t
Schedule	ʃedju:ʔ	skedju:ʔ	ʃedju:ʔ	ʃedju:ʔ
Tomato	təma:təʊ	təma:təʊ	təma:təʊ	təma:təʊ
Vase	vɑ:z	veɪz	veɪz	vɑ:z
Vitamin	vɪtæmɪn	vaitæmɪn	vɪtæmɪn	vɪræmɪn
Yoghurt	jəʊgət	jəʊgət	jəʊgət	jəʊgət
Zebra	Zebra	zebrə	zebrə	zebrə

Appendix 13

Word List 2 - Results

WORD	RP		GenAm		GenAus		NZ		SAf		Notes
	RP +	GenAm +	RP +	GenAm +	RP +	GenAm +	RP +	GenAm +	RP +	GenAm +	
Advertisement	2nd Syll	N/A	N/A	1st Syll	2nd Syll	1st Syll	2nd Syll	1st Syll	2nd Syll	1st Syll	GenAus uses 'z'
Applicable	2nd Syll	N/A	2nd Syll	1st Syll	2nd Syll	1st Syll	2nd Syll	N/A	2nd Syll	N/A	
Aristocrat	1st Syll	N/A	N/A	2nd Syll	1st Syll	2nd Syll	1st Syll	2nd Syll	1st Syll	2nd Syll	
Controversy	2nd Syll	1st Syll	N/A	1st Syll	2nd Syll	1st Syll	2nd Syll	1st Syll	2nd Syll	1st Syll	NZ maj. GenAm pron.
Ballet	1st Syll	N/A	N/A	2nd Syll	1st Syll	N/A	1st Syll	N/A	1st Syll	2nd Syll	SAf maj. GenAm pron.
Café	1st Syll	N/A	N/A	2nd Syll	1st Syll	N/A	1st Syll	N/A	1st Syll	2nd Syll	SAf maj. GenAm pron.
Detail	1st Syll	N/A	1st Syll	2nd Syll	1st Syll	N/A	1st Syll	N/A	1st Syll	N/A	GenAm maj. RP pron.
Frontier	1st Syll	2nd Syll	N/A	2nd Syll	1st Syll	2nd Syll	1st Syll	2nd Syll	1st Syll	2nd Syll	
Car	R -	N/A	N/A	R +	R -	N/A	R -	N/A	R -	N/A	
Climber	R -	N/A	N/A	R +	R -	N/A	R -	N/A	R -	N/A	
Fertile	/aɪ/	N/A	/aɪ/	/ə/	/aɪ/	N/A	/aɪ/	N/A	/aɪ/	N/A	GenAm and SAf use both
Hostile	/aɪ/	N/A	/aɪ/	/ə/	/aɪ/	N/A	/aɪ/	N/A	/aɪ/	/ə/	
Cemetery	1 x no V	N/A	N/A	N/A	1 x no V	N/A	2 x no V	N/A	2 x no V	N/A	
Inventory	1 x no V	N/A	N/A	N/A	1 x no V	N/A	1 x no V	N/A	1 x no V	N/A	
	1 x 2 /ə/	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Butter	N/A	N/A	N/A	TAP	N/A	TAP	N/A	TAP	N/A	N/A	
Data	N/A	N/A	N/A	TAP	N/A	N/A	N/A	N/A	N/A	N/A	
Later	N/A	N/A	N/A	TAP	N/A	N/A	N/A	N/A	N/A	N/A	

Clerk	/ɑ:/	/ɜ:/	N/A	/ɜ:/	/ɑ:/	/ɜ:/	N/A	/ɜ:/	/ɑ:/	/ɜ:/
Dynasty	/ɪ/	/aɪ/	N/A	/aɪ/	/ɪ/	/aɪ/	/ɪ/	/aɪ/	/ɪ/	/aɪ/
Inquiry	/aɪ/	N/A	N/A	/ə/	/aɪ/	N/A	/aɪ/	/ə/	/aɪ/	N/A
Leisure	/e/	N/A	N/A	/i:/	/e/	N/A	/e/	N/A	/e/	/i:/
Lever	/i:/	N/A	/i:/	/e/	/i:/	N/A	/i:/	N/A	/i:/	/e/
Lieutenant	/e/	/u:/	N/A	/u:/	/e/	/u:/	/e/	/u:/	/e/	/u:/
Progress	/əʊ/	N/A	/əʊ/	/ɒ/	/əʊ/	N/A	/əʊ/	N/A	/əʊ/	N/A
Route	/u:/	N/A	/u:/	/əʊ/	/u:/	/əʊ/	/u:/	N/A	/u:/	N/A
Schedule	/f/	/sk/	N/A	/sk/	/f/	/sk/	/f/	/sk/	N/A	/sk/
Tomato	/ɑ:/	N/A	/ɑ:/	/eɪ/	/ɑ:/	N/A	/ɑ:/	N/A	/ɑ:/	/eɪ/
Vase	/ɑ:/	N/A	/ɑ:/	/eɪ/	N/A	/eɪ/	/ɑ:/	N/A	N/A	N/A
Vitamin	/ɪ/	N/A	N/A	/aɪ/	N/A	/aɪ/	/ɪ/	/aɪ/	/ɪ/	/aɪ/
Yoghurt	/ɒ/	N/A	N/A	/əʊ/	N/A	/əʊ/	N/A	/əʊ/	N/A	/əʊ/
Zebra	/e/	N/A	N/A	/i:/	/e/	N/A	/e/	/i:/	/e/	N/A

NB: Nephew was pronounced the same in all five varieties /nefju:/

Laboratory was produced differently in all five varieties (See Discussion Section 5.2.5)

The production of 'Garage' was not associated with RP or GenAm specifically and was produced as follows in each variety:

WORD	RP	GenAm	GenAus	NZ	SAf
Garage	/ɪdʒ/	/ɑ:ʒ/	/ɑ:ʒ/	/ɪdʒ/	/ɑ:ʒ/
	/ɑ:ʒ/	/ɑ:dʒ/	/ɑ:dʒ/	/ɑ:ʒ/	/ɑ:dʒ/
				/ɑ:dʒ/	

Appendix 14
Transcription Key

(.)	Pause
(1.0)	One Second Pause
(2.0)	Two Second Pause
[a]	Overlap
=	Latch On =
/ a /	Phonemic Transcription of a Word
(unclear)	Unclear Conversation

Appendix 15

RP 3 - Conversation Transcription

(Start: 00m00sec)

RP3: ive actually got um an american colleague here whod be interested
[in participating] in

R: [oh really]

R: where abouts are they from

RP3: um (.) New Jersey

R: right

RP3: shes been here about four years

R: that fits in (.) I think (.) cos they have to be from certain areas but yeah
that would be good if you could pass on my email address or I'll take hers or
something (.) yeah thatd be fantastic'

R3: she might be around this afternoon =

/æftənu:n/

R: = oh really =

RP3: = yeah I might be able to

pop up [and] see if shes around [sometime]

R: [yeah]

[oh that would be] wonderful thank you =

R3: =

yeah

R: yeah no (.) its er very hard to find people (.) its (.) although im very lucky i
did a interview (1.0) yeah last week with (.) oh gosh what was her name (.)
em (1.0) oh my goodness ive completely forgotten her name (2.0) the lady
who contacted you (.) was it

RP3: was it name1 [(.)] or name2 =

R: [no]

= name2 that was it (.) yeah i did it with

her and shes given me three people this week already =

RP3: = yeah =

R: = thats fantastic

because its been very difficult to try and find people (.) so people aren't
always willing to do it (.) and also finding british people and you know (.) the

(.) I need the mixed ages (.) the young people are fine because you can get students on campus (.) but the kind of you know I'm looking also to get sort of older people as well [(.)] and trying to find old people

RP3: [hmm]

that have been here for a short period of time =

RP3: = short period (.) its difficult
cos I liase with like a lot of lecturers [(.)] in the faculty of medicine but

R: [hmm]

a lot of those will have been here for quite a few years =

R: = ive had that (.) i've
had some that have been here for twenty five years and theyve argued that (.)
you know (.) weve still got british accents but im like but it doesn't fit in with
what ive been doing (.) its just im trying to get within five years =

RP3: = yeah =

R: = and

if that doesn't work then I think I'll have to get (.) perhaps ten years (.) but
you know

RP3: yeah (.) I'm trying to think if there is any lecturers I know of that have
been here a short time (.) but most of them have been here a long time (.)
whove still got pretty strong british accents

R: its very interesting (.) em (.) interesting sort of (.) and also how few
people there are from places like south africa as well [(.)] within (.) like

RP3: [mmm]

(.) the area where im sort of advertising (.) so im starting to have to look at
ex pat websites and stuff and try and contact through there (.) but people
aren't very willing

RP3: oh ive got a south african friend whos just left for [adelaide] it's a

R: [oh really]

real shame cos (.) shed only been here a [short period] of time (.) she still

R: [oh really]

had quite a strong south african accent

R: well one of my supervisors is south african but shes been here over the time limit so thats (.) if the worst comes to the worst I can always you know extend the de (.) the time =

RP3: = yeah (.) if you do extend it for south africans there is quite a few south african lecturers in medicine as well (.) [(.)]

R: [oh really]

not a few but (.) three or four that I know of that I could give you the contact details of

R: it might be worth actually just going through the list of all the lecturers and finding out (.) sort of (.) who there is available and approaching them

RP3: mmm

R: its just very difficult to get people that want to volunteer which is why if I ever see an advert anywhere I always (.) you know instantly (.) if I can help (.) try and participate (.) cos I figure if I help someone else (.) someone else might help me out

(End: 03m05sec)

Appendix 16

GenAus 3, GenAus 4 and GenAus 5 - Conversation Transcription

(Start: 01m55sec)

GenAus4: weve bought them a (.) new computer and printer (.) and set

/kəmpu:tə/

them all up [and] so they are able to er (.) carry out the job and whilst im

R: [oh]

here (.) while I am here any assistance they can (.) they need we can (.) help them with (.) before (.) er I go (.) =

GenAus3 = handing it over =

GenAus4: = no (.) before the annual

meeting (.) which is in er (.) march next year (.) and hope that they will continue on with the work (.) and I feel sure they will

GenAus3: mum tell us about your cruise

GenAus5: ah well just going with name1 and name2 (.) name3 and

/gəʊɪŋ/

[name4] =

GenAus3: = yeah =

GenAus5: = sail from Sydney up around the islands

GenAus3: how many days

GenAus5: I dunno

/dʌnəʊ/

GenAus4: fourteen

GenAus5: fourteen

GenAus3: [fourteen days]

R: [fourteen]

GenAus5: [fourteen days]

R: and I saw the photographs of the em di (.) is it (.) diamond [princess]

GenAus5: [princess]

(.) I have a friend who em worked (.) whos a third officer (.) who was working on the sapphire princess but hes just (.) I think hes either gone to the diamond or the ruby im not quite sure =

GenAus5: = weve been on the sapphire to =

R: = oh

really (.) wonderful cos when it [docked in]

GenAus4: [we been on] the diamond princess

GenAus3: and the sapphire =

GenAus5: = and we went on the sapphire as well

R: cos when it docked in Sydney (.) in april (.) I sort of bumped into him and we went on there for lunch and its absolutely wonderful =

GenAus5: = oh its lovely yes =

R: =

absolutely fantastic =

GenAus5: = yeah (.) yeah

GenAus4: (unclear speech)

GenAus5: and we were on the q e two (.) we went on the q e two (1.0) oh rhapsody of the seas (.) thats the one we are going on

R: ah whens this

GenAus5: umm (1.0) whens it going

GenAus3: october

GenAus5: october

/oktəʊbə/

R: and wheres (.) wheres it go

GenAus5: it goes to nikolofa on the nineteenth of October cruise (.) it goes

/gəʊs/

/oktəʊbə/

/gəʊs/

from sydney (1.0) and then your cruising for two days (.) and then on Wednesday your in newmea and new caledonia (.) thursday mystery islands and then vanuatu (.) friday the eleventh in vanuatu (.) saturday champagne ba (.) champagne bay vanuatu (.) and Sunday luganville vanuatu (.) and monday your cruising (.) tuesday youre at the isle of pines in new caledonia (.) wednesday thursday friday cruising and saturday your back in Sydney

R: wow

GenAus4: today you got a letter (.) today you got a letter too darl

/tədeɪ/

/tədeɪ/

GenAus5: oh yeah I got a letter from name5 (unclear)

GenAus3: wheres she live (.) in (.) england

GenAus5: in england yeah

GenAus4: whereabouts in england love

GenAus5: she lives at (.) oh wheres she live

GenAus4: fivefleet

GenAus5: fivefleet (.) thats right near Windsor castle

R: oh wonderful

GenAus5: mmm

R: and how did you meet her again

GenAus5: well we met her in townsville (.) and (.) they were (.) we just met them [(.)] we were going on the train (.) going up to the [em]

GenAus4: [on the train] [from cairns up to]

GenAus5: from cairns up to the plateau up the top there

/plætəʊ/

(End: 05m04sec)

Appendix 17
Questionnaire Results

The University of New South Wales

Researcher: Rebecca Travers.

Joint Supervisors: Dr. D. Aarons, Dr. M. Amberber,
and A/Professor. P. Collins.

Research Area: Linguistics.



**A study into the differences between British, American, South African,
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*Thank you very much for agreeing to complete this research. The study aims
to identify the differences between the pronunciation of British, American,
South African, Australian and New Zealand English. If there are any questions
which you do not feel comfortable to answer, please leave them blank.*

Thank you for your co-operation.

Questionnaire

1. Please can you tick the age box that refers to you:

18 - 20 [1]	21 - 30 [3]	31 - 40 [2]	41 - 50 []
51 - 60 [1]	61 - 70 [1]	71 - 80 []	81 + []

2. Gender:

Male [2]	Female [6]
------------	--------------

3. Place of Birth:

RP 1: Kent, England

RP 3: Abergavenny, South Wales.

RP 5: Redworthy, Cornwall

RP 7: Bishop Auckland, Co. Durham

RP 2: North London, UK.

RP 4: Edgware, London.

RP 6: United Kingdom

RP 8: Sussex, UK

4. Occupation:

RP 1: Environmental Scientist

RP 3: Librarian

RP 5: Civil Engineer

RP 7: Retired Administrator

RP 2: Student.

RP 4: Library Co-ordinator.

RP 6: Priest

RP 8: Vet Nurse

5. Highest Academic Achievement:

RP 1: BSc (Hons)

RP 3: Masters

RP 5: Degree

RP 7: RSA in Pitman's Shorthand and Typing

RP 2: Law LLB

RP 4: BA

RP 6: Master of Arts

RP 8: HNC

6. Please can you list the different places you have lived during your lifetime, in order of residence:

RP 1: UK, Sydney, Australia.

RP 2: Stevenage, Hertfordshire, UK. Nottingham, UK. Sydney, Australia.

RP 3: Wales. England. Australia

RP 4: London. Kent. Essex. Auckland. Sydney.

RP 5: 78 - 82 UK, 82 - 84 Libya, 84 - 86 Qatar, 86 - 95 UK, 95 - 97 Qatar, 97 - 07 UK, 07- 09 Aus.

RP 6: County Durham, Yorkshire, Lincolnshire, Cambridgeshire, Hampshire, England, Sydney, Australia.

RP 7: Bishop Auckland, Co. Durham, Leeds, West Yorkshire, Louth, Lincolnshire, Guilden Morden, Hertfordshire, Hamble, Hampshire, Sydney, Australia.

RP 8: Sussex, Guernsey, Durham, Sydney.

7. For all Non-Australian Born: How long have you lived in Australia?

RP 1: 2 years, 3 Months

RP 2: 2 Months

RP 3: 22 Months

RP 4: 3 years, 10 months.

RP 5: 2 years

RP 6: 1 year

RP 7: 6 weeks

RP 8: 1 year

8. Do you believe your pronunciation is closer to British or American English?

British [8]

American []

9. Can you identify anything you believe to be typically British or American in your pronunciation?

Yes [5]

No [3]

If Yes:

What are these features?

British:

RP 1: N/A

RP 2: The way I pronounce 'a' when it is in the middle of a word.

RP 3: The way I pronounce 'yoghurt' etc. Words such as 'trousers' instead of 'pants'. Dates: e.g. 'twelfth of November' rather than 'twelve November.'

RP 4: My sentences do not go up at the end and my vowel sounds are different.

RP 5: N/A

RP 6: 'Zed'/'Zee', 'SHEDule'/'SKEDule', 'plough'/'plow', 'I'/'AI',
'CentRE'/'CentER'

RP 7: Schedule - Skedule

RP 8: N/A

American:

N/A for all participants.

10. Do you think that your pronunciation is influenced by any of the following?

Family/Friends/Colleagues: (i.e. People you spend a lot of time with)	Yes [8]	No []
Immigrants: (i.e. Friends/Colleagues from other countries)	Yes [3]	No [5]
Media: (i.e. British/American Television Shows)	Yes [4]	No [4]
Youth: (i.e. Things said by younger people)	Yes [4]	No [4]
Location (i.e. Where you live at a given time)	Yes [6]	No [2]

If Yes:

What features of your pronunciation do you believe to be as a result of these influences?

RP 1: N/A

RP 2: Certain words and phrases, exclamations when I am with my girlfriends, my voice goes a lot higher pitched and my accent gets more pronounced.

RP 3: Raised intonation at the end of sentences in Australia (like everything is a sentence!)

RP 4: Words

RP 5: N/A

RP 6: One tries to standardise pronunciation to RP.

RP 7: When visiting family northern influences take over. Accent has changed during moves in my lifetime, with pronunciation of words, i.e. 'bath' now 'barth'.

RP 8:

RP 9: Phrases used, abbreviations...

RP 10: Cultural references, ways of saying words like 'cinema' from different places.

If none of the above:

What is, if anything, your pronunciation influenced by?

RP 1: N/A

RP 2: N/A

RP 3: By the people I spend most time with, e.g. Australian colleagues in work and British friends and my husband in social circles.

RP 4: N/A

RP 5: N/A

RP 6: N/A

RP 7: N/A

RP 8: N/A

RP 9: N/A

RP 10: N/A

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which you do not feel comfortable to answer, please leave them blank.*

Thank you for your co-operation.

Questionnaire

1. Please can you tick the age box that refers to you:

18 - 20 [2]

21 - 30 [3]

31 - 40 [2]

41 - 50 [1]

51 - 60 []

61 - 70 []

71 - 80 []

81 + []

2. Gender:

Male [6]

Female [2]

3. Place of Birth:

GenAm 1: Chicago, IL, USA

GenAm 3: New Jersey, USA

GenAm 5: Illinois, USA

GenAm 2: Columbia, SC, USA.

GenAm 4: Frankfurt, Germany

GenAm 6: USA

GenAm 7: Florida

GenAm 8: Eureka, California.

4. Occupation:

GenAm 1: Student

GenAm 2: Student

GenAm 3: Librarian

GenAm 4: Engineer

GenAm 5: Student

GenAm 6: Computer Software

GenAm 7: Manager, Software Dev.
Programmer

GenAm 8: Software

5. Highest Academic Achievement:

GenAm 1: Current University Student

GenAm 2: Bachelor's

GenAm 3: Masters

GenAm 4: BSc Engineering

GenAm 5: Working on Nuclear Engineering Degree at the University of IL.

GenAm 6: BS Computer Science

GenAm 7: Masters

GenAm 8: BS

6. Please can you list the different places you have lived during your lifetime, in order of residence:

GenAm 1: Chicago, USA. Philadelphia, USA.

GenAm 2: USA (East Coast, Mid Atlantic), Haiti, UAE, Australia, Thailand.

GenAm 3: New Jersey, USA. Florida, USA. Sydney, Australia.

GenAm 4: USA: NS and MD, Gold Coast, Australia, Sydney, Australia.

GenAm 5: Illinois, Italy, Australia

GenAm 6: Chicago, IL, Carromdale, IL, Sydney.

GenAm 7: FL, IL, CA, TX, MD, GERMANY, SYDNEY

GenAm 8: California, Washington, Oregon, Pennsylvania, New Hampshire,
Massachusetts, Colorado, Australia.

7. For all Non-Australian Born: How long have you lived in Australia?

GenAm 1: 6 weeks

GenAm 2: 1 ½ years

GenAm 3: Since Feb 05 (3yrs 9 months)

GenAm 4: Almost 5 years (April)

GenAm 5: 6 weeks

GenAm 6: 5 years

GenAm 7: 2 years

GenAm 8: 12 months

8. Do you believe your pronunciation is closer to British or American English?

British []

American [8]

9. Can you identify anything you believe to be typically British or American in your pronunciation?

Yes [8]

No []

If Yes:

What are these features?

British:

GenAm 1: 'Lift,' 'Rubbish,' 'Dictaphone.'

N/A for all other participants

American:

GenAm 1: 'Elevator'

GenAm 2: Longer 'r' sounds, different emphasis/stressed syllables.

GenAm 3: Harsher, more direct. No intonation at the end [rising].

GenAm 4: 'Aluminium'

GenAm 5: I pronounce my "r's"

GenAm 6: Strong 'r's

GenAm 7: Vowels, everything else

GenAm 8: "Like"

10. Do you think that your pronunciation is influenced by any of the following?

Family/Friends/Colleagues: (i.e. People you spend a lot of time with)	Yes [8]	No []
Immigrants: (i.e. Friends/Colleagues from other countries)	Yes [3]	No [5]
Media: (i.e. British/American Television Shows)	Yes [4]	No [4]
Youth: (i.e. Things said by younger people)	Yes [6]	No [2]
Location (i.e. Where you live at a given time)	Yes [7]	No [1]

If Yes:

What features of your pronunciation do you believe to be as a result of these influences?

GenAm 1: 'Chicago Accent' - The long 'a' that we use, etc.

GenAm 2: N/A

GenAm 3: I think I have a slight intonation [rising] at the end of my sentences now.

GenAm 4: Vocabulary

GenAm 5: Slang

GenAm 6: N/A

GenAm 7: Vowels, Cadence, Hard vs. Soft <c> 'k'

GenAm 8: Vocabulary and Phrasings

If none of the above:

What is, if anything, your pronunciation influenced by?

N/A for all participants.

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Thank you for your co-operation.

Questionnaire

1. Please can you tick the age box that refers to you:

18 - 20 []	21 - 30 [3]	31 - 40 [1]	41 - 50 [1]
51 - 60 [1]	61 - 70 []	71 - 80 [1]	81 + [1]

2. Gender:

Male [4]	Female [4]
------------	--------------

3. Place of Birth:

GenAus 1: Sydney, Australia.
GenAus 3: Sydney, Australia.
GenAus 5: Sydney, Australia.

GenAus 2: Sydney, Australia.
GenAus 4: Sydney, Australia.

GenAus 6: UK (Moved to Australia when a baby)

GenAus 7: Sydney, Australia

GenAus 8: Newcastle, Australia

4. Occupation:

GenAus 1: Student

GenAus 2: Student

GenAus 3: Teacher

GenAus 4: Retired

GenAus 5: Housewife

GenAus 6: Library Technician

GenAus 7: Library Technician

GenAus 8: Student

5. Highest Academic Achievement:

GenAus 1: BA/B Ed.
(BSc)

GenAus 2: University Medal

GenAus 3: Masters of Education

GenAus 4: Dip. Public Admin

GenAus 5: Second Yr, High School

GenAus 6: BA

GenAus 7: BA Degree

GenAus 8: BA Arts/Fine Arts

6. Please can you list the different places you have lived during your lifetime, in order of residence:

GenAus 1: Sydney, (Sutherland), Coffs Harbour, Sydney (Sutherland).

GenAus 2: Sydney, Singapore, UK, Sydney.

GenAus 3: Sydney, Tweeds Head, NSW.

GenAus 4: Eastwood, Earlwood, Cronulla (Sydney).

GenAus 5: Kensington, Beverly Hills, Cronulla (Sydney)

GenAus 6: Sydney

GenAus 7: Blacktown, Maroubra, Coogee, Penrith.

GenAus 8: Newcastle, Sydney, Newcastle, Sydney

7. For all Non-Australian Born: How long have you lived in Australia?

GenAus 1: N/A

GenAus 2: N/A

GenAus 3: N/A

GenAus 4: N/A

GenAus 5: N/A

GenAus 6: N/A (37 YEARS)

GenAus 7: N/A

GenAus 8: N/A

8. Do you believe your pronunciation is closer to British or American English?

British [7]

American [1]

9. Can you identify anything you believe to be typically British or American in your pronunciation?

Yes [6]

No [2]

If Yes:

What are these features?

British:

GenAus 1: Crisp Vowel Sounds

GenAus 2: N/A

GenAus 3: Clear diction and emphasis on the start of sentences.

GenAus 4: N/A

GenAus 5: Pronounced vowels.

GenAus 6: N/A

GenAus 7: N/A

GenAus 8: N/A

American:

GenAus 1: Slow Vowel Sounds

GenAus 2: N/A

GenAus 3: N/A

GenAus 4: N/A

GenAus 5: N/A

GenAus 6: N/A

GenAus 7: N/A

GenAus 8: Saying 'like' all the time.

10. Do you think that your pronunciation is influenced by any of the following?

Family/Friends/Colleagues: <i>(i.e. People you spend a lot of time with)</i>	Yes [8]	No []
Immigrants: <i>(i.e. Friends/Colleagues from other countries)</i>	Yes []	No [8]
Media: <i>(i.e. British/American Television Shows)</i>	Yes [4]	No [4]
Youth: <i>(i.e. Things said by younger people)</i>	Yes [4]	No [4]
Location <i>(i.e. Where you live at a given time)</i>	Yes [5]	No [3]

If Yes:

What features of your pronunciation do you believe to be as a result of these influences?

GenAus 1: Speech Therapy as a Child.

GenAus 2: N/A

GenAus 3: Both my father and I are teachers and speak very clearly.

GenAus 4: N/A

GenAus 5: Family and Location. Good diction.

GenAus 6: Local words, patterns of speech.

GenAus 7: The ways things are said and established (lack of grammar)

GenAus 8: I think that my pronunciation is mostly influenced by where I grew up, maybe because this was during my developing years.

If none of the above:

What is, if anything, your pronunciation influenced by?

GenAus 1: Slow Vowel Sounds

GenAus 2: N/A

GenAus 3: N/A

GenAus 4: Australian home and work life.

GenAus 5: N/A

GenAus 6: N/A

GenAus 7: N/A

GenAus 8: N/A

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**A study into the differences between British, American, South African,
Australian and New Zealand English pronunciation.**

*Thank you very much for agreeing to complete this research. The study aims
to identify the differences between the pronunciation of British, American,
South African, Australian and New Zealand English. If there are any questions
which you do not feel comfortable to answer, please leave them blank.*

Thank you for your co-operation.

Questionnaire

1. Please can you tick the age box that refers to you:

18 - 20 []	21 - 30 [4]	31 - 40 [1]	41 - 50 []
51 - 60 [3]	61 - 70 []	71 - 80 []	81 + []

2. Gender:

Male [3]	Female [5]
------------	--------------

3. Place of Birth:

NZ 1: Burwood, NZ
NZ 3: Dunedin, NZ
NZ 5: Hastings, NZ

NZ 2: New Plymouth, NZ
NZ 4: Wellington, NZ
NZ 6: New Zealand

NZ 7: Tauranga, NZ

NZ 8: Rotorua, NZ

4. Occupation:

NZ 1: Scientific Glassblower

NZ 2: Teacher

NZ 3: Scientist

NZ 4: Software Developer

NZ 5: Professor

NZ 6: Lawyer

NZ 7: Student (Grad)

NZ 8: Chef

5. Highest Academic Achievement:

NZ 1: Double Major BA History and Politics

NZ 2: Social Science & Teaching Degree

NZ 3: BSc (Hons)

NZ 4: Technical College

NZ 5: PhD

NZ 6: University Degree

NZ 7: Masters (Theatre and Film)

NZ 8: HSC

6. Please can you list the different places you have lived during your lifetime, in order of residence:

NZ 1: Christchurch NZ, Palmerston North, NZ, Canberra and Sydney Australia.

NZ 2: NA, Queensland, Sydney

NZ 3: Dunedin (Age 0 - 22), Sydney (22+)

NZ 4: New Zealand, Australia.

NZ 5: New Zealand, England, Australia

NZ 6: New Zealand, Switzerland, New Zealand, Australia.

NZ 7: NZ, North America, Australia

NZ 8: New Zealand, Sydney, Australia.

7. For all Non-Australian Born: How long have you lived in Australia?

NZ 1: Since October 2007 (11 months) NZ 2: 6 years

NZ 3: 1 year, 8 months

NZ 4: 4 years

NZ 5: 6 years

NZ 6: 4 years

NZ 7: 3 years

NZ 8: 4 years

8. Do you believe your pronunciation is closer to British or American English?

British [7]

American []

Neither [1]

9. Can you identify anything you believe to be typically British or American in your pronunciation?

Yes [5]

No [3]

If Yes:

What are these features?

British:

NZ 1: Boot (Back of your car) (Trunk in US etc).

NZ 2: Lower tone of speech, similar use of words.

NZ 3: Mall

NZ 4: Difference in vowel sounds, e.g. 'can't' and pronunciation of 'aluminium'.

NZ 5: Vocab more formal, accent different and more nasal, vowels especially.

NZ 6: N/A

NZ 7: N/A

NZ 8: N/A

American:

NZ 1: Bum bag - Americanism (Rude in English British)

NZ 2: N/A

NZ 3: N/A

NZ 4: N/A

NZ 5: Vocabulary and Accent Different

NZ 6: N/A

NZ 7: N/A

NZ 8: N/A

10. Do you think that your pronunciation is influenced by any of the following?

Family/Friends/Colleagues: <i>(i.e. People you spend a lot of time with)</i>	Yes [8]	No []
Immigrants: <i>(i.e. Friends/Colleagues from other countries)</i>	Yes [3]	No [5]
Media: <i>(i.e. British/American Television Shows)</i>	Yes [5]	No [3]
Youth: <i>(i.e. Things said by younger people)</i>	Yes [4]	No [4]
Location <i>(i.e. Where you live at a given time)</i>	Yes [7]	No [1]

If Yes:

What features of your pronunciation do you believe to be as a result of these influences?

NZ 1: Move from general pronunciation to adapted language.

NZ 2: Words used, speed of speech - using sentences that are not fully constructed, using popular slang e.g. "like" or "so."

NZ 3: Everything

NZ 4: N/A

NZ 5: My accent and intonation has some S. African features. Husband was SA.

NZ 6: Accent changes slightly when with NZ friends.

NZ 7: New Zealand sounds like Australia as a result of contact.

NZ 8: Family speech influenced me greatly.

If none of the above:

What is, if anything, your pronunciation influenced by?

NZ 1: N/A

NZ 2: N/A

NZ 3: N/A

NZ 4: N/A

NZ 5: Upbringing/Childhood

NZ 6: N/A

NZ 7: N/A

NZ 8: N/A

The University of New South Wales

Researcher: Rebecca Travers.

Joint Supervisors: Dr. D. Aarons, Dr. M. Amberber,
and A/Professor. P. Collins.

Research Area: Linguistics.



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Thank you for your co-operation.

Questionnaire

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18 - 20 [1]	21 - 30 [2]	31 - 40 [2]	41 - 50 [1]
51 - 60 [2]	61 - 70 []	71 - 80 []	81 + []

2. Gender:

Male [4]	Female [4]
------------	--------------

3. Place of Birth:

SAf 1: Cape Town, South Africa

SAf 2: Pretoria, South Africa

SAf 3: South Africa

SAf 4: Johannesburg, South Africa

SAf 5: Johannesburg, SA

SAf 6: South Africa

SAf 7: Johannesburg, SA

SAf 8: Johannesburg, South Africa

4. Occupation:

SAf 1: Postgraduate Student

SAf 2: Student

SAf 3: Academic

SAf 4: Research Fellow

SAf 5: Teacher

SAf 6: Analyst

SAf 7: Finance Manager

SAf 8: Student

5. Highest Academic Achievement:

SAf 1: Masters in Medicine

SAf 2: Batchelor Degree

SAf 3: PhD

SAf 4: LLN=M

SAf 5: PhD

SAf 6: Masters Degree

SAf 7: Post Grad

SAf 8: HSC

6. Please can you list the different places you have lived during your lifetime, in order of residence:

SAf 1: South Africa, Europe, Australia

SAf 2: South Africa, Australia

SAf 3: South Africa, Australia

SAf 4: Johannesburg, Sydney.

SAf 5: South Africa, France, Australia

SAf 6: South Africa, Netherlands, Australia

SAf 7: South Africa, Netherlands, Australia

SAf 8: Johannesburg, SA, Durban, SA, Gosford, Australia

7. For all Non-Australian Born: How long have you lived in Australia?

SAf 1: 3 weeks

SAf 2: 5 years

SAf 3: 10 years

SAf 4: 1 year and 2 months

SAf 5: 6 years

SAf 6: 7 years

SAf 7: 7 years

SAf 8: 6 years

8. Do you believe your pronunciation is closer to British or American English?

British [8]

American []

9 . Can you identify anything you believe to be typically British or American in your pronunciation?

Yes [4]

No [4]

If Yes:

What are these features?

British:

SAf 1: 'Traffic Lights'

SAf 2: N/A

SAf 3: Long 'a' e.g. 'data,' 'plant', 'dance' etc.

SAf 4: N/A

SAf 5: N/A

SAf 6: N/A

SAf 7: More use of the 's' sound compared to 'z'.

SAf 8: 'dance' and 'plant' - the 'a' sound

American:

N/A for all participants.

10. Do you think that your pronunciation is influenced by any of the following?

Family/Friends/Colleagues:

Yes [8]

No []

(i.e. People you spend a lot of time with

Immigrants:

Yes [3]

No [5]

(i.e. Friends/Colleagues from other countries)

Media:	Yes [7]	No [1]
<i>(i.e. British/American Television Shows)</i>		
Youth:	Yes [6]	No [2]
<i>(i.e. Things said by younger people)</i>		
Location	Yes [7]	No [1]
<i>(i.e. Where you live at a given time)</i>		

If Yes:

What features of your pronunciation do you believe to be as a result of these influences?

SAf 1: Slang

SAf 2: Using words from languages other than English, unconsciously.

SAf 3: Not sure, have probably insidiously been influenced by Australian accents.

SAf 4: I say 'yeah' instead of 'yah' and make slight adjustments to be understood.

SAf 5: N/A

SAf 6: N/A

SAf 7: Selective words such as project, debut, finance are pronounced totally different.

SAf 8: Assimilation towards the country in which you live

If none of the above:

What is, if anything, your pronunciation influenced by?

SAf 1: N/A

SAf 2: N/A

SAf 3: N/A

SAf 4: N/A

SAf 5: Place of birth, schooling, family, friends, desires.

SAf 6: N/A

SAf 7: N/A

SAf 8: N/A

Appendix 18

Map of British Participants Birth Places



Appendix 19

Map of American Participants Birth Places



Appendix 20

Map of Australian Participants Birth Places

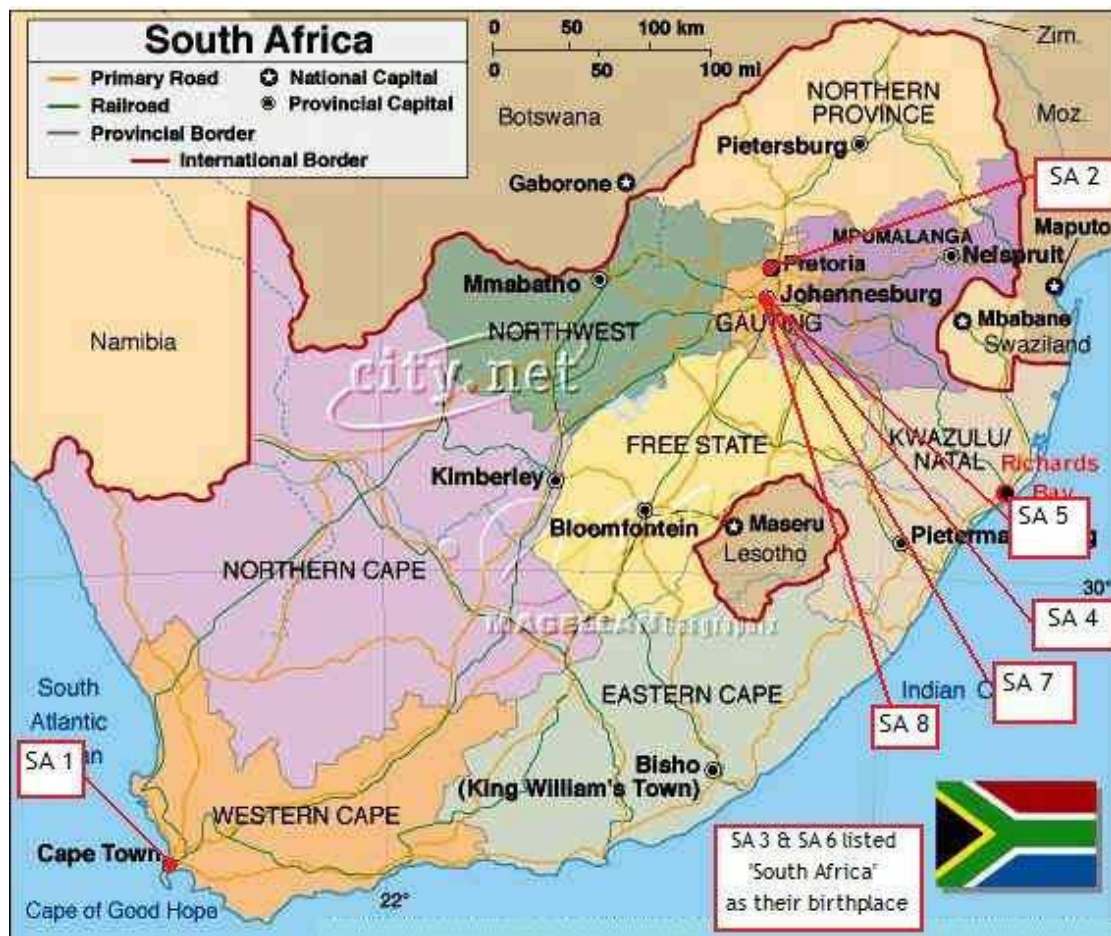


Map of New Zealand Participants Birth Places



Appendix 22

Map of South African Participants Birth Places



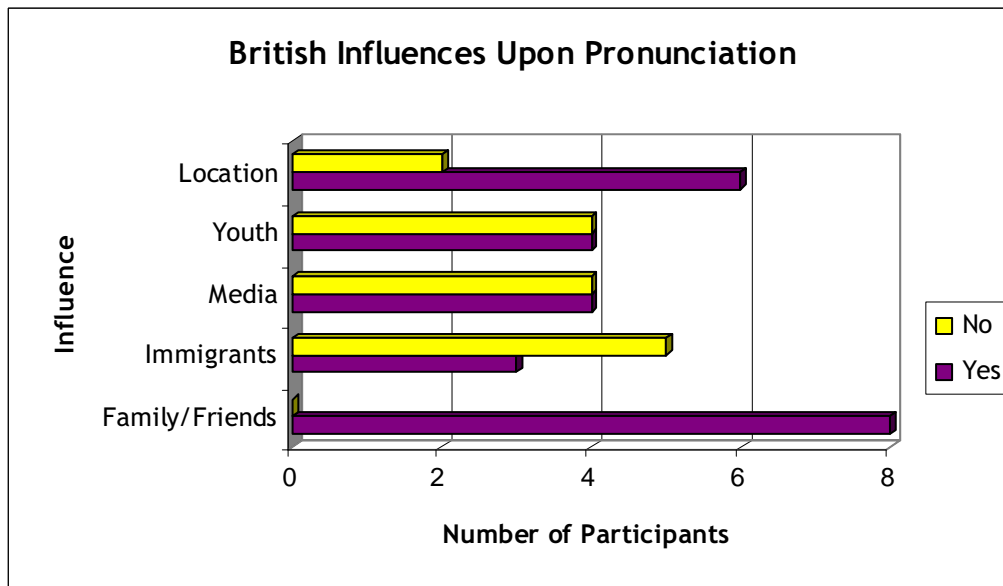
Appendix 23

Question 10 Results

Do you think your accent is influenced by any of the following?

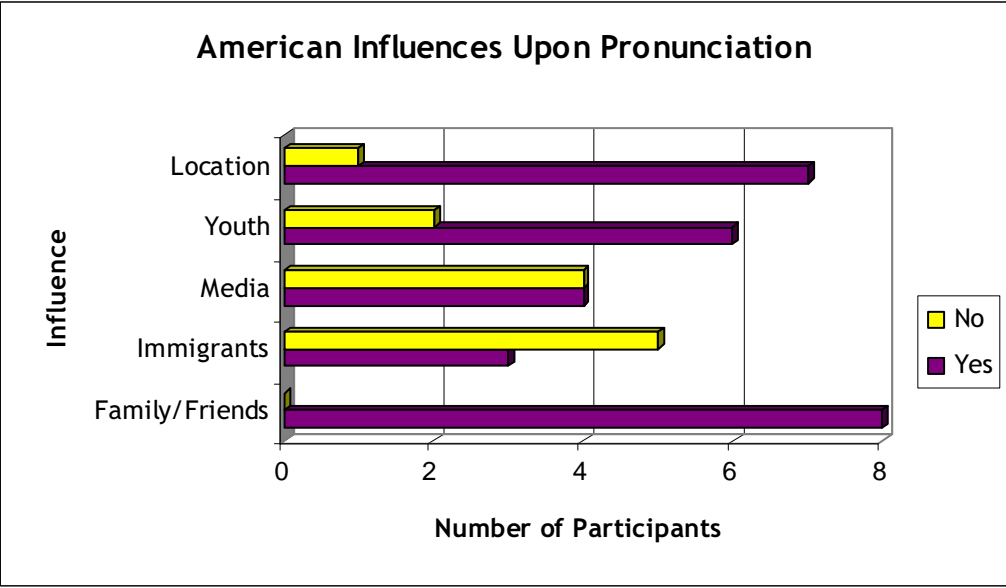
British Participants

	Yes	No
Family/Friends	8	0
Immigrants	3	5
Media	3	5
Youth	4	4
Location	6	2



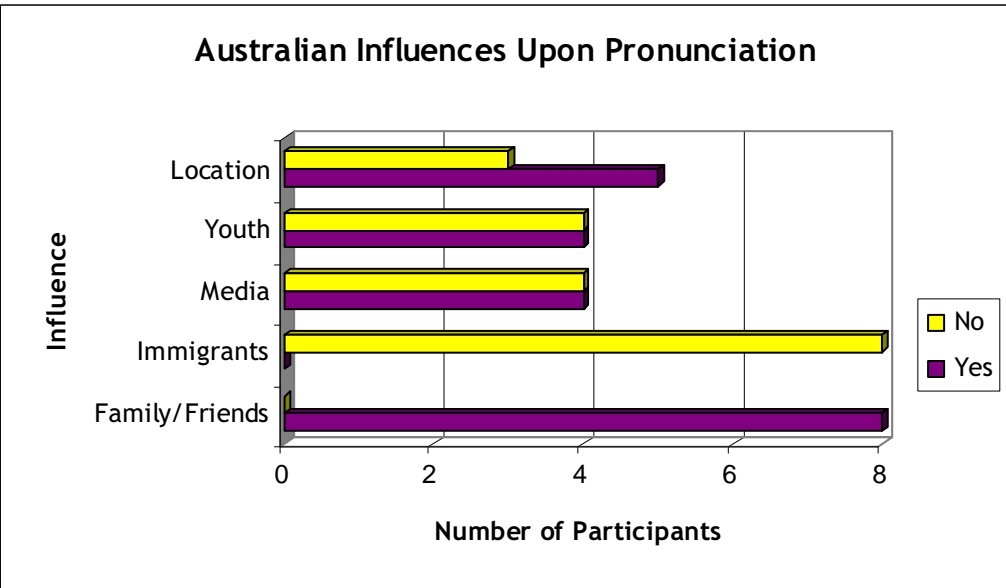
American Participants

	Yes	No
Family/Friends	8	0
Immigrants	3	5
Media	4	4
Youth	6	2
Location	7	1



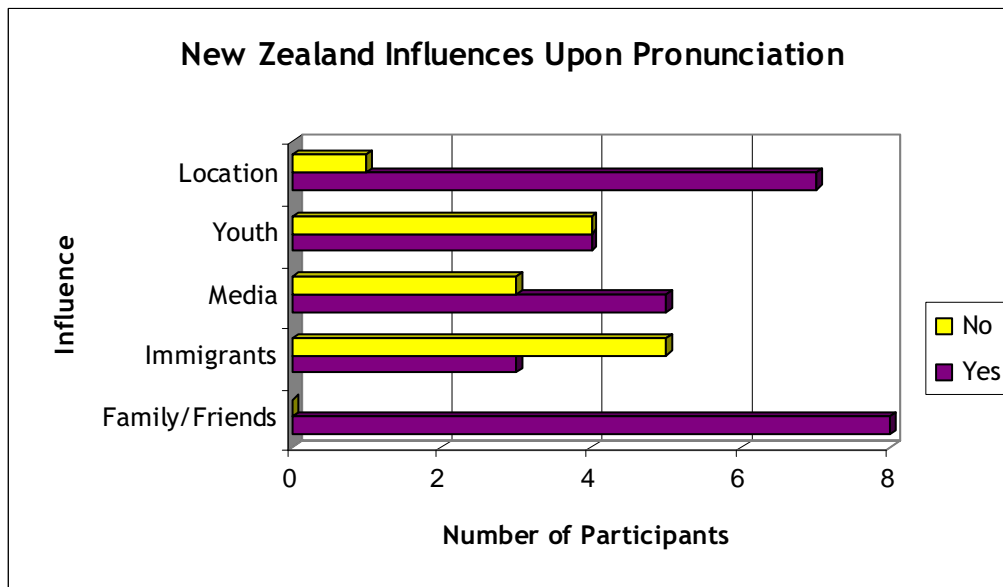
Australian Participants

	Yes	No
Family/Friends	8	0
Immigrants	0	8
Media	4	4
Youth	4	4
Location	5	3



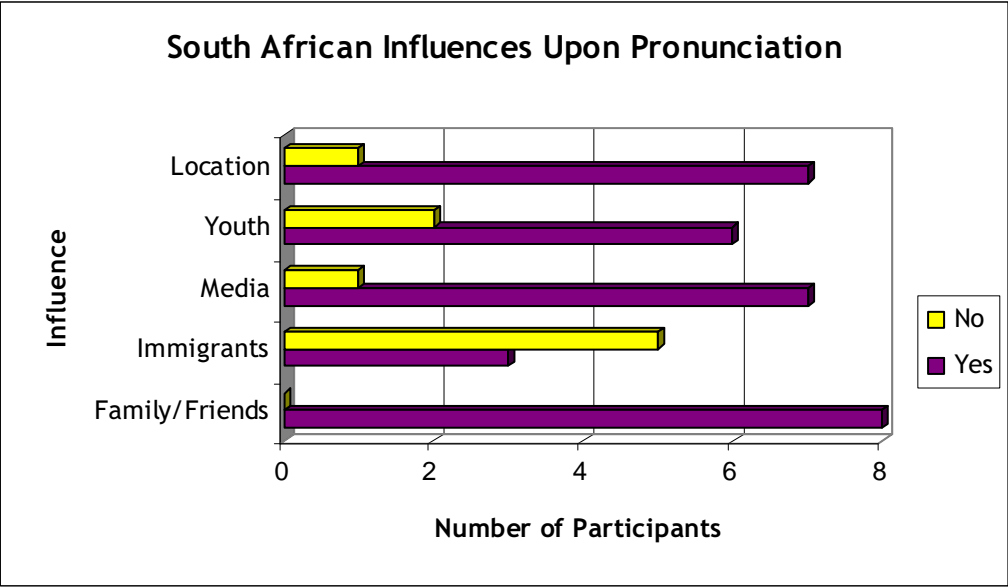
New Zealand Participants

	Yes	No
Family/Friends	8	0
Immigrants	3	5
Media	5	3
Youth	4	4
Location	7	1



South African Participants

	Yes	No
Family/Friends	8	0
Immigrants	3	5
Media	7	1
Youth	6	2
Location	7	1



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