

**THE RELATIONSHIP BETWEEN DEVIANCE IN SEGMENTALS  
AND SYLLABLE STRUCTURE AND IMPRESSIONISTIC  
JUDGEMENTS OF ESL PRONUNCIATION**

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B.A. (Hons), H.E.D.

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B.A. (Hons), H.E.D.

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## **SUMMARY**

### **TITLE**

**The relationship between deviance in segmentals and syllable structure and impressionistic judgements of ESL pronunciation.**

**Key words:** pronunciation, segmentals, syllable structure, consonants, vowels, English second language, judgements, ratings.

This mini-dissertation identifies segmental and syllable structure errors made by Zulu mother tongue secondary school students learning English. The purpose of this identification is to determine whether there is a relationship between the number of segmental and syllable structure errors made by the subjects and the impressionistic judgements of the speech samples made by ESL teachers

The review of the literature focuses on accent, pronunciation and the determination of an accent. A speaker's comprehensibility and intelligibility are influenced by his/her accent and way of pronouncing the language. A speaker will have difficulty in getting a message across if he/she has a low level of comprehensibility and intelligibility. It is generally acknowledged that the way in which a person speaks is judged both socially and educationally. The norm against which English is judged is Received Pronunciation (RP). The pronunciation of English in South Africa is reviewed and it is clear that there are many varieties of English spoken in South Africa. The focus of this study is on Black English as spoken by Zulus. In the literature several factors affecting the acquisition of native-like pronunciation are identified. These factors are discussed as they shed light on the reasons for the deviations found in the speech samples.

Any language consists of a number of linguistic and phonetic elements,. Two such elements are segmentals and syllable structure. These two elements are discussed in detail and then typical segmental and syllable structure deviations made by ESL learners are investigated. A comparison between the Zulu and English languages leads to an illustration of the consequences of the pronunciation differences between them.

The 40 subjects used in the study ranged in age from 17 to 18. They are all Zulu mother tongue speakers of English who attend a secondary school in Gauteng. The subjects were recorded reading a passage and a word list. These speech samples were transcribed phonetically and an error analysis was done for each sample. The number of segmental and syllable structure errors were counted. The recordings were judged by six judges, all teachers of English. The number of segmental and syllable structure errors in each speech sample was compared with the mark assigned to the speech sample by the judges. Pearson product-moment correlations were calculated in order to determine the relationship between segmental and syllable structure errors and the impressionistic judgements of pronunciation.

The results of this study seem to indicate a strong relationship between the number of segmental and syllable structure errors and the rating given to each speech sample. This indicates that segmentals and syllable structures should not be ignored or simply taken for granted in the teaching of ESL learners.

## OPSOMMING

Hierdie skripsie identifiseer segmentele- en lettergreepstruktuurfoute wat deur Zoeloe moedertaal hoërskool leerlinge gemaak word wanneer hulle Engels praat. Die doel hiervan is om te bepaal of daar 'n verwantskap is tussen die hoeveelheid segmentele- en lettergreepstruktuurfoute wat deur die studiegroep gemaak is en die impressionistiese beoordeling van uitspraakopnames.

Die literatuurstudie fokus op aksent, uitspraak en die bepalers van aksent. Die verstaanbaarheid van 'n spreker word beïnvloed deur sy/haar aksent en die manier waarop hy/sy woorde uitspreek. 'n Spreker sal sukkel om sy/haar boodskap oorgedra te kry as hy/sy moeilik verstaanbaar is. Dit word algemeen erken dat 'n persoon sosiaal en opvoedkundig beoordeel word volgens die manier waarop hy/sy praat. Die norm waarvolgens Engels beoordeel word, is RP. Die verskillende maniere waarop Engels in Suid-Afrika uitgespreek word, word ondersoek en daar word in meer diepte gekyk na "Black English" soos dit deur Zoeloes gepraat word. Daar word algemeen aanvaar dat 'n persoon wat 'n nuwe taal aanleer, daarna gaan streef om die taal uit te spreek soos wat moedertaalsprekers van die taal dit doen. In die literatuur word verskeie faktore wat die verkryging van so 'n "moedertaaluitspraak" beïnvloed, geïdentifiseer. Hierdie faktore word bespreek daar dit lig werp op die redes vir die afwykings in die uitspraak van die studiegroep.

Alle tale word saamgestel uit 'n aantal linguistieke en fonetiese elemente. Twee sulke elemente is segmentele- en lettergreepstrukture. Hierdie twee elemente word in detail bespreek en dan word tipiese segmentele- en lettergreepstruktuur uitspraakafwykings wat deur Engels tweede taal leerders gemaak word, ondersoek. 'n Vergelyking van Zoeloe met Engels lei tot 'n illustrasie van die gevolg wat die verskille tussen die twee tale het op uitspraak.

Die studiegroep het bestaan uit 40 lede wat tussen 17 en 18 jaar oud was. Almal van hulle praat Engels, maar hulle moedertaal is Zoeloe. Hulle is leerlinge by 'n hoërskool in Gauteng. Die lede van die studiegroep is op band opgeneem waar hulle individueel 'n paragraaf en 'n woordelys lees. Die opnames is foneties getranskribeer en 'n ontleding van die segmentele- en lettergreepstruktuurfouten is gedoen. Die uitspraak van die leerlinge is deur ses beoordelaars beoordeel - al ses is onderwysers wat tans Engels doseer. Die hoeveelheid segmentele- en lettergreepstruktuurfouten in elke opname is vergelyk met die punt wat deur die beoordelaars aan die opname gegee is. Pearson produk-moment korrelasies is bereken ten einde die verhouding te bepaal tussen segmentele- en lettergreepstruktuurfouten en die impressionistiese beoordeling van uitspraak.

Die resultate van die studie dui op 'n sterk verwantskap tussen die hoeveelheid segmentele- en lettergreepstruktuurfouten en die punt wat elke lid van die studiegroep gekry het vir sy/haar uitspraak. Dit impliseer dat segmentele- en lettergreepstrukture nie net geïgnoreer of as vanselfsprekend aanvaar kan word nie - dit moet eksplisiet aan Engels tweede taal leerders geleer word.

## **TABLE OF CONTENTS**

<b>ACKNOWLEDGEMENTS</b>	<b>i</b>
<b>SUMMARY</b>	<b>ii</b>
<b>OPSOMMING</b>	<b>iv</b>
<b>LIST OF TABLES</b>	<b>xi</b>
<b>LIST OF FIGURES</b>	<b>xii</b>
<b>LIST OF DIAGRAMS</b>	<b>xiii</b>
<b>CHAPTER 1</b>	
<b>INTRODUCTION</b>	
1.1 The problem defined	1
1.2 Purpose of the study	2
1.3 Hypothesis	2
1.4 Method of research	3
1.5 Programme of study	3
<b>CHAPTER 2</b>	
<b>THE PRONUNCIATION OF ENGLISH IN SOUTH AFRICA</b>	
2.1 Introduction	5
2.2 The difference between an accent and a dialect	5
2.3 The concept "accent"	7
2.4 Pronunciation	8
2.4.1 Pronunciation defined	8
2.4.2 Learning to pronounce a target language	8
2.4.3 Demographic and social determinants of accent in South Africa	10
2.4.3.1 Social class	11
2.4.3.2 Ethnic descent group	11
2.4.3.3 Associations with Britain	11



2.4.3.4	Age	12
2.4.3.5	Sex	12
2.4.4	Correlations	13
2.5	Comprehensibility and intelligibility	13
2.5.1	Elements influencing the comprehensibility of non-native speech	14
2.5.1.1	Familiarity with topic	14
2.5.1.2	Familiarity with non-native speech in general	15
2.5.1.3	Familiarity with a non-native accent in particular	15
2.5.1.4	Familiarity with a particular non-native	15
2.6	Judging pronunciation	15
2.6.1	Social judgement	16
2.6.2	Educational judgements	16
2.7	Standard/Received pronunciation (RP)	17
2.7.1	Historical background	18
2.7.2	The present-day situation in South Africa	19
2.8	Varieties of South African English	21
2.8.1	Black English	22
2.8.1.1	The history of Black English	22
2.8.1.2	A linguistic look at Black English	23
2.9	Factors that affect the acquisition of native-like pronunciation	24
2.9.1	Exposure	24
2.9.2	Sex	25
2.9.3	Motivation and affect	26
2.9.4	Ability to mimic	27
2.9.5	Modality preference	28
2.9.6	Extraversion	28
2.9.7	Communicative strategies and paralanguage	28
2.9.8	Personality	30

2.10	Conclusion	30
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### **CHAPTER 3**

#### **ENGLISH LANGUAGE SEGMENTALS, SYLLABLE STRUCTURE AND TYPICAL SEGMENTAL AND SYLLABLE STRUCTURE DEVIANCES MADE BY ESL SPEAKERS**

3.1	Introduction	32
3.2	A definition of language and phonetics	32
3.3	Segmentals	34
3.3.1	Consonants	34
3.3.1.1	The six classes	34
3.3.1.2	Place of articulation	36
3.3.1.3	Manner of articulation	37
3.3.1.4	Articulatory features	38
3.3.1.4.1	Difference in vocal chord action or voicing	38
3.3.1.4.2	Differences in tongue shape	39
3.3.1.4.3	Different articulators	40
3.3.2	Vowels	41
3.3.2.1	Differences in vowels	42
3.3.2.1.1	Inventory	42
3.3.2.1.2	Incidence	43
3.3.2.1.3	Phonetic realisation	43
3.3.2.2	The characteristics of vowels	44
3.3.2.3	Articulatory features of vowels	44
3.3.2.3.1	Quality	44
3.3.2.3.2	Length	45
3.3.2.3.3	Complexity	45
3.4	Syllable structure	46
3.5	Deviances in the pronunciation of English Second Language learners	48
3.5.1	Introduction	48

3.5.2	The sound systems of Zulu and English compared	49
3.5.2.1	Zulu and English consonants	49
3.5.2.2	Zulu-English consonantal variation	50
3.5.2.3	Zulu and English vowels	51
3.5.2.3.1	Zulu vowels	52
3.5.2.3.2	English vowels	53
3.5.2.3.3	Diphthongs	55
3.5.2.4	Summary of the vowel and consonant systems	55
3.5.2.5	An illustration of the consequences of the differences between Zulu and English vowels	56
3.6	Conclusion	58
<b>CHAPTER 4</b>		
<b>METHOD OF RESEARCH</b>		
4.1	Introduction	60
4.2	Design	60
4.3	Subjects	60
4.4	Variables	61
4.5	Instruments/Materials	61
4.6	Data collection procedure	63
4.7	Analysis	64
4.8	Conclusion	64
<b>CHAPTER 5</b>		
<b>PRESENTATION AND DISCUSSION OF RESULTS</b>		
5.1	Introduction	65
5.2	Analysis of segmental and syllable structure errors from the non- native speech samples	65
5.3	The relationship between deviance in segmentals and syllable	

	structure and impressionistic ratings of pronunciation	69
5.4	Implications of results for teaching	72
5.5	Conclusion	73
<b>CHAPTER 6</b>		
<b>CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH</b>		
6.1	Introduction	74
6.2	Conclusions	74
6.3	Recommendations for future research	77
<b>BIBLIOGRAPHY</b>		79
<b>APPENDIX 1</b>		92
<b>APPENDIX 2</b>		93

## LIST OF TABLES

Table 1:	Examples of consonant, vowel and syllable structure errors from the non-native speech samples	67
Table 2:	Descriptive statistics for the dependent and independent variables	70
Table 3:	Pearson product-moment correlations	70

## **LIST OF FIGURES**

Figure 1:	Consonant chart	36
Figure 2:	Vowel chart of Zulu vowels	53
Figure 3:	Vowel chart of English vowels	54

## **LIST OF DIAGRAMS**

Diagram 1:      Parts of the tongue

40

# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 The problem defined**

While normal humans acquire a basic competence in their first language, second language learners display great variability in the level of proficiency they attain in the target language. For example, two people, both speaking English, may have difficulty in understanding each other because of great differences in pronunciation. Although non-native pronunciation of English is characterised by deviance in several areas, when people judge or evaluate second language (L2) speakers' pronunciation, they most often judge it in terms of the speakers' overall intelligibility, the irritability of the accent, or its acceptability (Ludwig, 1982). In such judgements of pronunciation, the raters base the pronunciation score they assign on their overall impression, without attempting to count the various types of pronunciation deviances that occur.

A question concerning the judgements of pronunciation from speech samples is whether raters react equally to deviance in selected areas of pronunciation (e.g., segmentals and syllable structure) or whether each area carries a different weight in influencing the scores that are assigned (cf. Beebe, 1984; Flege & Hillenbrand, 1984; Nathan, Anderson & Budsayamongkon, 1987). A survey of the literature indicates that although numerous studies have investigated native speaker reactions to non-native speech and several reviews of the literature have been written (cf. Ludwig, 1982; Ryan, 1983), most of the studies have not investigated the effects of different aspects of pronunciation on a variety of raters' judgements. Instead, they have investigated the relationship between other, often external variables (e.g., speakers' backgrounds, comprehensibility in different accents, etc.) and native speaker reactions (cf. Suter, 1976; Brennan & Brennan, 1981). Whereas these studies mentioned above address important problems,



they do not offer much information about the extent to which each area of pronunciation contributes to various raters' judgements.

More research is needed that investigates the relationship between various evaluators' judgements of pronunciation and deviance in segmentals and syllable structure. It is also important to note that none of the studies cited above attempted to determine the relative contribution of syllable structure errors to impressionistic judgements of pronunciation and whether they play as important a role as segmentals. Because numerous studies in interlanguage phonology have shown that many groups of English Second Language (ESL) learners have difficulty with the syllable structure of English (cf. Tarone, 1980; Anderson, 1983; Weinberger, 1987), it should be of interest to determine the effect such errors have on raters' judgements of non-native pronunciation.

The following research question needs to be addressed:

- Is there a relationship between deviance in segmentals (e.g., substitution of one sound for another or the modification of a sound) and syllable structure (e.g., vowel/syllable deletion and consonant deletion) and impressionistic judgements of pronunciation in the speech of ESL speakers?

## **1.2 Purpose of the study**

The purpose of this study is to:

- determine the relationship between deviance in segmentals and syllable structure and impressionistic judgements of pronunciation in the speech samples of ESL speakers.

## **1.3 Hypothesis**

This study is based on the following hypothesis:

- Deviance in segmentals and syllable structure correlate with pronunciation judgements.

#### **1.4 Method of research**

A study was made of the relevant literature on pronunciation, Received Pronunciation, South African English, segmentals (consonants and vowels), syllable structure and the judging of pronunciation. Recordings were made of speech samples of 40 non-native speakers of English attending a secondary school in Gauteng. These speakers were Zulu mother tongue speakers ranging in age from 17 to 18. The pronunciation of each speech sample on the recording was judged by six judges, all of them teachers of English. Each speech sample was transcribed phonetically and an error analysis was done for each speech sample. The number of segmental and syllable structure errors was counted. This was compared to the mark assigned to the speech sample by the judges. These data were analysed by means of the Statistica (1991) software package. Pearson product-moment correlations were calculated in order to determine the relationship between segmentals, syllable structure and impressionistic judgements of pronunciation.

#### **1.5 Programme of study**

Chapter 2 focuses on "accent", "pronunciation", and the determinants of accent. This is followed by an explanation of comprehensibility and intelligibility and the elements influencing comprehensibility. The next section focuses on the judgement of pronunciation, both socially and educationally. Standard/Received Pronunciation (RP) and pronunciation in South Africa are discussed and then the varieties of English in South Africa are mentioned, specifically Black English as spoken by Zulus. Chapter 2 ends with a discussion of the factors that affect the acquisition of native-like pronunciation.

In Chapter 3 an attempt is made to define "language" and then segmentals and syllable structures in the English language are explored. This is followed by an investigation of typical segmental and syllable structure deviances observed in the speech of ESL learners. The Zulu and English languages are compared to try and shed light on these deviances and to illustrate the pronunciation consequences of the differences between the two languages.

Chapter 4 focuses on the methodology used in this study.

In Chapter 5 the results of the error analysis of the speech samples are presented and discussed.

Chapter 6 contains a brief conclusion and some recommendations for future research.

## **CHAPTER 2**

### **THE PRONUNCIATION OF ENGLISH IN SOUTH AFRICA**

#### **2.1. Introduction**

Of all aspects of human language, pronunciation is probably most immediately observable. A listener usually does not need much time or linguistic sophistication to detect a non-native accent, that is, pronunciation patterns that are perceived as being different from those of native speakers of the language.

In this chapter a distinction is made between an accent and a dialect and then the concept "accent" is discussed in some detail. The next section of the chapter deals with pronunciation and the determinants of an accent in South Africa. Comprehensibility and intelligibility are then considered as they are greatly influenced by a speaker's pronunciation and accent (Ludwig, 1982). According to the literature, pronunciation is judged both in an educational and in a social context (cf. Galloway, 1980; Ryan & Sebastian, 1980; Brennan & Brennan, 1981). The different studies concerned with this issue are reviewed in this chapter. When people speak English, their pronunciation can be judged against a norm, i.e. Received Pronunciation (RP). This norm is in fact a British accent, but it is accepted world-wide as the norm against which to judge English pronunciation (Gimson, 1980). This standard pronunciation is discussed and then the focus moves to pronunciation in South Africa. The different varieties of English in South Africa are mentioned before Black English is discussed in detail. The chapter ends with a discussion of the factors that affect the acquisition of native-like pronunciation.

#### **2.2. The difference between an accent and a dialect**

Roach (1991:4) defines a dialect as "a variety of a language which is different from others not just in pronunciation but also in matters such as vocabulary, grammar and

word-order". He describes differences of accent as "pronunciation differences only". This is not a new definition as, almost thirty years ago, Giles also made a distinction between a dialect and an accent. According to Giles (1970), a dialect implies variation from the standard language at most linguistic levels, while an accent implies variation from the standard pronunciation only.

Trudgill (1975:27) also explains that "the term dialect refers to any variety of a language which is grammatically different from any other and may also have a different vocabulary or pronunciation". All of us who speak English are dialect speakers, we all speak at least one dialect of English. Differences in pronunciation alone are not sufficient to be differences in dialect. Pronunciation differences make for differences of accent. Everybody speaks a dialect with an accent.

One of the most important varieties of English is the dialect that is known as Standard English. Wright (1993:10) defines Standard English as "a system of grammar and vocabulary, firmly established in text and not tied to accent". There are people world-wide who speak Standard English with a variety of accents. Standard English is the dialect used by most speakers who consider themselves to be educated. However, Standard English has nothing to do with pronunciation. It is subject to internal variation like all other dialects. It has regional variants, for example, British Standard English is not the same as South African Standard English (Trudgill, 1975). The majority of people who speak Standard English do so with various types of regional accent.

To sum up, dialects differ from each other in grammar, vocabulary, word-order, pronunciation, etc. Probably the most important English dialect is Standard English which is spoken world-wide with a variety of accents (pronunciations). Probably the most important accent world-wide is Received Pronunciation (cf. section 2.6).

### **2.3. The concept “accent”**

People differ in the way in which they use a language and the way in which they pronounce it. In South Africa there are many people who speak English as a second language. Among them there are vast differences in pronunciation, so much so that in some instances two people both speaking English can be unintelligible to each other. Why? Because they speak English with different accents. This influences the relationship between people and the way people judge each other.

According to MacCarthy (1978:89), the accent of a speaker is typically characterised by a description of the pronunciation of individual sounds, the placement of stress and of rhythm and intonation. ESL students may not recognise the difference in acceptability of various settings in English, with their contrasting social or regional implications. The student's own native setting may contain features which, without the speaker knowing it, evoke an unfavourable response from English mother tongue speakers.

Trudgill (1975:18) defines accent as being inherently merely differences in pronunciation. He explains that this means that absolutely everybody speaks with an accent - an accent is not something odd or peculiar, but something we all have.

Speaking with an accent can have positive functions. One such positive function is the encouragement of ethnic pride. According to Ryan and Carranza (1977), speaking with an accent encourages ethnic pride leading to increased acceptance of accented speech as a badge of ethnic loyalty and also maintaining a unique cultural identity and separateness from the dominant cultural group. Speaking with an accent can, furthermore, eliminate the fear of failing to succeed and the threat of losing one's original identity in the process of taking on a new language and an associated personal identity (Lambert, 1967).

However, traditionally "accent" has a negative connotation. Accented English speech has traditionally been the trademark of language minority groups as they adapt to the majority culture and language (Ryan & Carranza, 1977).

As accent is all about pronunciation, the next section deals with pronunciation.

## **2.4. Pronunciation**

### **2.4.1 Pronunciation defined**

Pronunciation can be defined as "the production of speech sounds for communication" (English Language Services, 1968:15). A more recent definition of pronunciation is "the use of sounds in spoken language" (Roach, 1991:3).

### **2.4.2 Learning to pronounce a target language**

Learning good pronunciation of a target language is in part a matter of developing motor skills: the motion of the lips, tongue, etc., necessary for the new language. These motions are habitual when people speak their native language. It is not necessary to concentrate on how to round one's lips or when to raise the back of one's tongue - these things are done unconsciously (English Language Services, 1968). However, learning a second language consists of learning a new set of habits. It is necessary for the ESL student to begin by making a conscious effort to produce the sounds of the new language as a native speaker produces them. The student's immediate problem in learning a new language is to gain automatic control of those aspects of the language that are habitual for the native speaker. A student has to spend a large amount of

time on acquiring an acceptable pronunciation, because that is necessary for intelligibility (Wells, 1982).

If a student's pronunciation is not up to standard, he will have difficulty in getting his message across. Kreidler (1989) distinguishes between bad, acceptable and good pronunciation. According to him, communication sometimes fails completely because of **bad** pronunciation. This happens when the message is sent across, but it is so marred by the pronunciation that no understanding takes place. There is a difference between acceptable and good pronunciation. Pronunciation in a second language is **acceptable** if it serves the purpose for which it was learned. In other words, pronunciation is acceptable if the basic sense of the message does get through, but communication is slow or partial. This may fall considerably short of **good** pronunciation, which can be defined as "pronunciation that doesn't attract any attention to itself because the speaker sounds like a native speaker" (Kreidler, 1989:17). To leave pronunciation to take care of itself is virtually to ensure that a really acceptable standard is never reached and that the second language learner does not make a good impression on his/her listeners.

According to Fayer and Krasinski (1987), the overall effect the student's pronunciation has on a listener comes from two sources: linguistic and non-linguistic. Linguistically, content, matters of style and matters of linguistic form play a role. The non-linguistic aspect is concerned with the listener's relationship with the speaker and what the speaker is saying, any physical characteristics of the speaker that are distracting, factors in the environment that are distracting, the psychological state of the listener and the native language of the speaker and listener.



### **2.4.3 Demographic and social determinants of accent in South**

#### **Africa**

The position of the English language in South Africa has been researched and discussed extensively by Lanham (1976, 1978, 1984), Lanham and MacDonald (1979) and Meshtrie and Dunne (1990). In Lanham and MacDonald (1979) it is reported that in South Africa there are a variety of accents used by speakers of English. The three oldest accents are: Conservative South African English, Respectable South African English and Extreme South African English. Conservative South African English is the accent closest to Received Pronunciation (cf. section 2.7). Conservative South African English derives from RP and remains closest to it at most points of pronunciation. Conservative South African English and Extreme South African English are polar opposites (Lanham, 1978). Respectable South African English is accepted as "an informal, local standard expressing high social status if not correctness in English" (Lanham, 1984:331). Standard British English is today only acquired in childhood as a peculiarly individual social experience. According to Lanham (1984), Respectable South African English is the viable standard. However, there are authors who do not agree with him (Van der Walt, 1993; Ndebele, 1987).

In the New South Africa the Black English accent has become very prominent as many key positions are occupied by black people who use English in their work situation. According to Lanham (1984), Black English is English influenced by the pronunciation, grammar, idiom and usage of African mother tongues (cf. section 2.8)

Lanham (1984) identifies the following demographic and social variables as major determinants of accent within the South African English community:

#### **2.4.3.1 Social class**

Three social classes (high, middle, low) are commonly distinguished, but categorising speakers of English into these classes is difficult. Wealth, occupation and education seem to be the main differentials. Lanham (1984) postulates that the higher the social class, the closer the accent is to RP.

#### **2.4.3.2 Ethnic descent group**

The main divisions given by Lanham (1984) are British (divided into recent versus a second, third, or later generation born in South Africa), Afrikaner (at least one parent or two grandparents) and European Jewish. Lanham's division seems incomplete without also adding African descent.

Lanham (1984) theorises that British, first generation born in South Africa has the most acceptable accent (i.e. closest to RP). The more Afrikaner blood people have in their veins, the more removed their accent is from RP. European Jewish descent is not a good indicator for accent. Generally, the accent of Africans is far removed from RP (Lass, 1995).

#### **2.4.3.3 Associations with Britain**

This variable relates to the ability to distinguish authentic British norms from others which pass as standard behaviours in the English-speaking society (Lanham, 1979). This includes attending (or having attended) an Anglican private school, being upper class, and/or receiving higher education in Britain.

As a social experience this variable provides the motivation and the exposure required to adopt Conservative South African English or Standard British English. The closer a person's associations with Britain, the more that person's accent resembles RP (Lanham, 1984).

#### **2.4.3.4 Age**

The important age here is being older or younger than 50 in 1980. Socialisation and education before or after the Second World War have significance because of socio-political changes (Lanham, 1984). (This variable is slowly becoming irrelevant for it refers to people being older than 67 in 1997 and very few such people still take part in society actively.) People who are currently 67 or older can be expected to have been educated in a British-ruled South Africa and their English would, therefore, have a good chance of resembling RP.

#### **2.4.3.5 Sex**

According to Lanham (1984) women are more assiduous in acquiring standard speech, and Standard British English or Conservative South African English is more a feature of women's than of men's speech. In 1984 the advance of Respectable South African English on the Witwatersrand appeared to be mainly due to the support of women. In other words, women have a better chance of speaking RP, because it seems to be important to them.

#### **2.4.4 Correlations**

To sum up, Lanham (1984) found the major correlations between linguistic and social variables to be:

- Conservative South African English: upper class, over 50 in 1980, recent British descent, associations with Britain, female.
- Respectable South African English: middle or upper class, female European Jewish descent.
- Extreme South African English: lower class, Afrikaner descent.

#### **2.5. Comprehensibility and intelligibility**

The accent and degree of accentedness with which a person speaks, influences that person's comprehensibility and intelligibility. Comprehensibility can be defined as "the degree to which the interlocutor understands what is said or written" (Ludwig, 1982:275).

In their study, Smith and Bisazza (1982) found that a non-native speaker's English is more comprehensible to people who have had active exposure to the particular accent with which the person speaks. In today's world with English being used frequently by non-native speakers to communicate with other non-native speakers, their study gives evidence of a need for students of English to have greater exposure to non-native varieties of English. The assumption that non-native students of English will be able to comprehend fluent non-native speakers if they understand native speakers is clearly not correct. They need exposure to both native and non-native varieties in order to improve understanding and communication (Smith & Bisazza, 1982).

According to Cruttenden (1994), an ESL student may succeed in merely speaking English with the phonetic and phonological system of his own language, in which case he is likely to be totally unintelligible to most native English listeners or, at best,

comprehensible only to the extent that a small number of information points can be decoded as a result of the general context of the situation. If an attempt is made to approximate to native English speech forms, the achievement may lie somewhere between two extremes. The lowest requirement can be described as one of *minimum general intelligibility*. This implies the possession of a set of distinctive elements which correspond in some measure to the inventory of the RP phonemic system and which are capable of conveying a message efficiently from a native English listener's standpoint, given that the context of the message is known and that the listener has had time to "tune in" to the speaker's pronunciation. At the other extreme the learner may be said to achieve a performance of *high acceptability*. This is a form of speech which the native listener may not identify as non-native, which conveys information as readily as would a native speaker's and which arrives at this result through precision in the phonetic realisation of phonemes and by confident handling of accentual and intonational patterns (Cruttenden, 1994).

Gass and Varonis (1984) postulate that there are four important elements that influence the comprehensibility of non-native speech: familiarity with topic (most important), familiarity with non-native speech in general, familiarity with a non-native accent in particular, and familiarity with a particular non-native speaker.

## **2.5.1 Elements influencing the comprehensibility of non-native speech**

### **2.5.1.1 Familiarity with topic**

In their study, Gass and Varonis (1984) found that sentences that have a context supplied are easier to interpret than sentences that are not placed within a context. This suggests that familiarity with topic plays a major role in

the comprehensibility of non-native speech. Familiarity with the topic of discourse greatly facilitates comprehension.

#### **2.5.1.2 Familiarity with non-native speech in general**

Prior experience with non-native speech facilitates comprehension. Pica and Long (1982) found that experienced ESL teachers used fewer comprehension checks to verify their own comprehension in the classroom than inexperienced ESL teachers did. Gass and Varonis (1984) determined that familiarity with non-native speech in general facilitates comprehension.

#### **2.5.1.3 Familiarity with a non-native accent in particular**

According to Gass and Varonis (1984), familiarity with a particular non-native accent facilitates comprehension of the speech of another non-native speaker of that language background. The more a person hears a particular non-native variety of English, the better that person will understand that specific variety.

#### **2.5.1.4 Familiarity with a particular non-native**

Familiarity with a particular non-native speaker facilitates comprehension of that person's speech (Gass & Varonis, 1984). If a person gets to know a non-native speaker well, that person will understand the non-native's speech well.

### **2.6. Judging pronunciation**

The way people speak and how listeners interpret their manner of speaking have important consequences for their interaction with other people. A number of studies have shown that evaluative reactions of listeners are differentially biased toward speakers of certain varieties of a language (cf. Galloway, 1980; Ryan & Sebastian, 1980; Brennan & Brennan, 1981). Specifically, listeners tend to rate speakers of the standard

language or upper-class speech styles more favourably than speakers of lower class, regional or ethnic varieties.

Several studies have shown that people are often judged by the way they speak (Sebastian, Ryan & Corso, 1978; Piazza, 1980; Eisenstein & Verdi, 1985; Fayer & Krasinski, 1987). If a person uses a language in such a way that it irritates, it has a negative influence on those who have to listen. This negativity has social and educational implications.

### **2.6.1 Social judgement**

Studies on pronunciation and the way it influences social judgements have over the years generally found that the more accented the speech, the lower the rating for status, solidarity and social acceptance (cf. Lambert, 1967; Ryan & Sebastian, 1980; Omaggio Hadley, 1993). The earliest work in this area was done by Lambert and his associates (cf. Lambert, 1967). They found more positive social ratings of readings with standard pronunciation or upper class speech than of readings with lower class or ethnic speech varieties. Ryan and Carranza (1975) and Brennan and Brennan (1981) both studied the reaction of adolescents to accented speech. Both studies pointed to a less favourable social rating for speakers with a lower-class, regional or ethnic accent. These findings are supported by the research of Arthur, Farrar and Bradford (1974), Giles and Powesland (1975), Ryan and Carranza (1975), and Ryan and Sebastian (1980).

### **2.6.2 Educational judgements**

Judgements of the proficiency of many English second language students are made by non-native speakers of the language (Koster & Koet, 1993). Ervin

(1977) and Galloway (1980) focused on this issue and both found native speakers who are not teachers to be more tolerant of pronunciation deficiencies than non-native speakers (teachers and non-teachers) and native-speaking teachers. Galloway (1980) found evidence that non-native speaking teachers are the least accepting of second language students' attempts at communication, while Ervin (1977) noted that non-native speaking teachers were cautious in rendering evaluations of higher proficiency students.

Williams, Whitehead and Miller (1971) investigated a similar issue and found that teachers in American schools assigned more positive ratings to the speech of Anglo children than to the speech of Black or Mexican-American children. Furthermore, within each ethnic group, the speech of middle-class children was favoured over that of low-class children. Ortego (1969) and Carter (1970) both found that an accent can reduce chances for educational and occupational success if it evokes a prejudicial attitude in the listener. Clearly, further empirical research into the judgements of native versus non-native speaking teachers are in order.

## **2.7. Standard/Received Pronunciation (RP)**

According to Gimson (1980) the English (also in South Africa) are very particular and sensitive as to the way their language is pronounced. Because they are class-conscious, the "wrong accent" may hinder promotion in all spheres of life. The attitude which regards a certain set of values and a certain accent as more acceptable suggests that there is a standard for comparison. It is clear that a standard pronunciation exists (Titlestad, 1994).

The vast majority of people who speak Standard English (the dialect discussed in section 2.2) do so with various types of regional accent. The most common and internationally



most accepted accent is called Received Pronunciation (RP). Trudgill (1975) explains that this is the accent used by some Standard English speakers who speak English with an accent which is clearly British, but not associated with a specific region in England.

Lanham (1978) explains that in South Africa the Received Standard pronunciation has pronunciation norms approximating those of "general British RP" as described by Gimson (1980). This pronunciation can be classified as something between Conservative and Respectable South African English (cf. section 2.4.3).

### **2.7.1 Historical background**

There has always been "a great diversity in the spoken realisations of English" (Gimson, 1980:88). Different people in different parts of the world use different varieties of the language. These varieties differ to such an extent that speakers of English from different parts of the world sometimes find it difficult to understand each other. Gimson (1980) postulates that there are different reasons for these varieties: young people's speech is usually different from that of older people; the speech of different communities does not develop at the same rate in the same direction; and different parts of the country are open to different external influences. But, for the last five centuries, one kind of pronunciation of English has become more and more socially preferable to others. The pronunciation used by speakers in the Southeast of England (especially London) began to acquire social prestige. This is the accent that is now known as RP. Pronunciation has become a marker of position in society (Gimson, 1980).

### 2.7.2 The present-day situation in South Africa

In 1992 The English Academy decided to accept British English as a norm for South Africa. They justified their decision as follows:

The proposal that standard British English should be the norm is based on practical considerations and the belief that unless care is taken, a local variety of English may depart so radically from its parent stem as to lose some of the most admirable qualities of expressiveness and precision which it possesses. If the process goes unchecked, the local form may even cease to be internationally understood, as has happened with the pidgin English of West Africa and the Pacific Islands (Van der Walt, 1993).

The Academy's proposal is supported by authors such as Jeffery (1993), Titlestad (1994) and Foley (1995). The Academy's proposal has, however, not been accepted without opposition. The opposing point of view is that the proliferation of varieties of English must be recognised (cf. Alexander, 1992; McDermott, 1992). Kachru (1992:2) insists that the various "Englishes" be acknowledged to emphasise "WE-ness", and not the dichotomy between us (native speakers) and them (non-native speakers). Ndebele (1987) even postulates that South African English must be open to the possibility of becoming a **new** language with not only a new vocabulary, but also incorporating grammatical features unique to indigenous African languages.

The debate has been capped by a brief article by Abbott (1991). He points out that English is increasingly the international means of communication, hence the need for mutual intelligibility. He acknowledges that English in each region will have an indigenous lexical set but points out that a certain grammatical, lexical and phonological uniformity is needed which can be provided by what he calls

"mother-tongue Englishes". He warns of the limited scope for mutual comprehension internationally if the main features of each form of English become too divergent. He points out that what learners want to learn is not always what linguists want to teach them, that unlearning is more difficult than learning and that it is demoralising to go through education and then find that the English one has been learning does not work with outsiders.

According to Quirk and Widdowson (1985), **intelligibility** is the central issue. An English that is not nationally and internationally intelligible cannot be accepted as a standard.

Intelligibility of English in South Africa is problematic because of pronunciation (Foley, 1995). Although English is the native language of relatively few South Africans it is widely known and used as a second language. It is one of the country's eleven official languages and the principal language of commerce and industry. Some of the users of English as a second language have a very near-native way of pronunciation, but many are almost incomprehensible when they speak English (Jacobs, 1994).

For Gimson (1980) it is disturbing that in South Africa English functions as a *lingua franca* superimposed upon a large number of indigenous languages. He observes that the indigenous phonological structures are such that the efficacy of spoken English as a means of communication is lost as intelligibility tends to fall to a very low level.

Gimson is not the only one who finds the pronunciation of English in South Africa worrying (cf. Edmunds, 1987; Amuzu, 1992; Greer, 1994). When a person speaks, he is judged - consciously or unconsciously. The way a person

speaks determines what people think of him in a social context and in an educational context it determines marks and results.

## **2.8. Varieties of South African English**

Lanham (1976) and Lanham and Macdonald (1979) state that there are five distinct varieties of English used in five overlapping communities in the South African society: Indian English, African/Black English, Afrikaans English, Coloured English and English as a mother tongue. Some of these varieties have sub-classes such as South African Township English as a sub-class of African English. [It was found that 80% of urban Blacks use it as their everyday language (Mersham, 1987)].

The varieties differ mainly in terms of pronunciation. As Lanham and Macdonald (1979:34) put it: "diversity in the SAE community is located in phonetic trends associated with 30 phonological variants". Variants of a variable may be more or less advanced in the trend and ideolectal accent profiles differ in this respect. However, trends in different directions from the same point in phonological structure make qualitative differences in lectal varieties of SAE far more pronounced than in for example, Australian English.

There is some variation in accent among users of English as a home language in South Africa. Quite a few use RP, but the grammatical structures of Standard English generally prevail among educated users of English, whether English first language speakers or not.

It is quite normal to find a particular local brand of English in a country, for example, South African English, where non-English words are incorporated in an English text (An excellent example is the work of Herman Charles Bosman).

According to Mersham (1987), many South African words are used quite regularly by English-speaking South Africans. He gives some examples: *trek*, *commando*, *come right* (meaning "resolve itself") and *just now* (meaning "in a little while"). Other unique South Africanisms are: *takkies*, *braai*, *sarmies*, *bakkie*, *robot*, *mealie meal*, *location*, etc. (Mersham, 1987:68-69). Mersham (1987:69) gives examples of regional words: Natal/KwaZulu English: *bush pigs* (good friends), *indunas* (officials), *kaydaars* (visitors from Gauteng), etc. English in Gauteng: *souties* (English speakers), *munchies* (food), *pozzie* (residence), etc. Black South African English: *Johnnies* (soldiers), *gattas* (the police), *spot* (shebeen), *bra* (brother), etc.

There are social standards which correlate with social status and this is chiefly determined by accent. Much fun is made, for example, of Extreme SAE. Evidently SAE lexis is acceptable, but not SAE accents. Apparently South Africans still regard RP as the standard for spoken English. Jeffery (1993) mentions that it was found in many parts of the world that speakers regularly downgraded their own regional accents and dialects.

As the focus of this paper is the pronunciation of English by secondary school students with an African language as their mother tongue, a closer look at Black English is necessary.

## **2.8.1 Black English**

### **2.8.1.1 The history of Black English**

Mawasha (1982) explains that Black English, as a second language variety of English, emerged in the period ending in the 1870s. The pattern and tradition of Black English was set in the great mission institutions, first in the Cape Colony and then in Natal. The pioneer missionary-teachers were well aware

that literary education was the most powerful instrument in the propagation of the Christian religion and the Western concept of education, both of which were spread through the length and breadth of Africa. According to Mawasha (1982) the education of Blacks in missionary schools led to the birth of an idea among Blacks that English is an elevated language. The English language and the concept "enlightenment" - that is being converted to Christianity and being schooled according to the Western education model - became synonymous.

Lanham (1984) tells us that mission education was elitist, with significant consequences. An authentic learning context for English in and outside the classroom was provided and until the 1950s the highest levels of competence in English in anglophone countries of Africa were found among Black South Africans. In the past thirty years Black English has emerged as a speech pattern influenced in pronunciation, grammar, idiom and African mother tongue users. One of the possible reasons for this is that non-native speakers of English became teachers of English. The influence of African mother tongues was less obvious in the period when missions provided most of the education for Blacks (Lanham, 1984). Although it has increased in quantity, the quality of Black English has declined seriously in the past thirty years (Jeffery, 1993). In Black-White interaction, the intelligibility of Black English to Whites and the comprehensibility of SAE by Blacks pose problems. The communicative incompetence in English of Black students now attending English-speaking universities is a problem that needs to be addressed urgently (Jacobs, 1994).

#### **2.8.1.2 A linguistic look at Black English**

The nineteen million or so Black South Africans speak a variety of languages (and within these languages a variety of dialects), most of which are not

mutually intelligible (Alexander, 1992). Today English is the preferred medium of communication across the broad spectrum of the Black South African elite, especially the educated and urbanised (Alexander, 1988). Mawasha (1982) believes that this heavy linguistic tilt towards English has engendered certain beliefs bearing on the education of Black South Africans within the context of multicultural/multilingual South Africa. First among these is the belief that the use of African languages as a medium of instruction and learning will inevitably lower the standards of education and training of Black South Africans. Black South Africans have confidence in English as an instrument for acquiring, storing and transmitting knowledge. However, many people who really aspire to speaking Standard English with an RP accent seem not to be able to do so. The next section takes a look at the factors that influence the acquisition of native-like pronunciation.

## **2.9. Factors that affect the acquisition of native-like pronunciation**

Several studies have investigated different factors that have an influence on the acquisition of native-like pronunciation. These studies can be synthesised as follows:

### **2.9.1 Exposure**

Scovel (1969; 1981) and Selinker (1972) support the widely held belief that adults are incapable of making the fine neuromuscular adjustments necessary to reproduce the sounds of another language. This has led researchers to the idea of a critical period in human linguistic development, the Critical Period Hypothesis (Penfield & Roberts, 1959; Lenneberg, 1967) - a period during which the learning of a new sound system happens automatically and leads to perfect results (Scovel, 1969, 1981; Selinker, 1972). Studies of accent retention among

learners who acquired English in a naturalistic setting seem to support the existence of such a period (Oyama, 1976; Fathman, 1982).

Studies involving formal exposure to the L2, on the other hand, indicate that youth confers no immediate advantage in learning to pronounce foreign sounds. Olsson and Samuels (1973) report that under formal training conditions, older children and adults were superior to younger children in learning to imitate German words that were meaningless to them. Snow and Hoefnagel-Hohle (1982) found that under controlled input conditions, the ability to imitate meaningless Dutch words that contained sounds difficult for English speakers to pronounce, was easier for adults than for children. Thus, Cummins (1981) postulates that adults display an advantage over children if phonetic training is a cognitively based operation involving conscious manipulation of sounds.

The results of these studies suggest that future investigations should take into account the type of environment in which the second language was acquired. The reason for this is that predictors of success in acquiring a new sound system differ in accordance with the type of primary exposure to the second language.

### **2.9.2 Sex**

Asher and Garcia (1969) found Spanish-speaking girls to be more successful in acquiring native-like pronunciation in English than boys, especially in the beginning stages of learning. Snow and Hoefnagel-Hohle (1982), on the other hand, found no significant difference between boys and girls in the ability to imitate unfamiliar Dutch words. Suter (1976) did not find any influence of sex on pronunciation.



According to Thompson (1991) women reported significantly greater concern for pronunciation and rated themselves to be better mimics than did the men. Women in Thompson's study were judged to have better accents and higher oral speaking proficiency ratings than men. This study points to continued superiority of women even after prolonged residence in America.

Research results on this topic seem to be equally divided between superiority of boys and superiority of girls. More research is needed to settle this matter.

### **2.9.3 Motivation and affect**

Is authenticity of pronunciation related to the way an individual feels compelled to make an effort to modify previously established patterns of pronunciation to sound like a native speaker of the target language? The answer depends on the type of primary exposure to the target language. On the one hand, the extent to which students of English as a second language feel that having good pronunciation is important for them is one of the predictors of their pronunciation accuracy in English (Suter, 1976; Purcell & Suter, 1980). On the other hand, Oyama (1976) found no evidence that motivation to improve English had any relationship to mastery of its phonological system by Italian-speaking immigrants in the US.

The role of integrative vs. instrumental motivation has long been the focus of debate among language researchers. Whereas many studies show that positive attitudes toward members of the target language community and the desire to integrate into that community generally have a facilitating effect on language learning, other studies show integrative motivation either to be a weak predictor of second-language achievement or instrumental motivation to be a better

predictor of success (Gardner & Lambert, 1972; Bialystok & Frohlich, 1977; Morris & Gerstman, 1986).

Studies of the relationship between pronunciation accuracy and L2 learners' identification with the L2 community and its culture, report mixed results. Oyama (1976) found that pro-American orientation and identification had no significant effect on pronunciation scores of Italian speakers of English in the US. However, Gatbonton (1975) reported that French Canadians produced difficult English sounds better if they identified with the English-speaking Canadians. On the other hand, Suter (1976) found a negative correlation between ESL students' desire to integrate into the American speech community and the quality of their pronunciation in English.

The above discussion indicates that no fully conclusive research results on this topic are available yet.

#### **2.9.4 Ability to mimic**

Ability to mimic emerged as one of the predictors of pronunciation accuracy. This was measured in a test where the speaker was told to mimic the investigator in the pronunciation of specific speech sounds. Suter (1976) and Purcell and Suter (1980) found a tendency for superior mimics to be more accurate in their pronunciation of English. Thus the ability to mimic has an influence on successful pronunciation.

### **2.9.5 Modality preference**

Studies on this topic produced contradictory results. At least two studies of "good language learners" have concluded that ear-mindedness is linked to success in general language mastery (Pimsleur, Sundland & McIntyre, 1966; Naiman, et al., 1978), but according to Thompson (1991) the relationship between ear-mindedness and L2 pronunciation has not been specifically studied.

### **2.9.6 Extraversion**

It has been suggested that an extraverted personality may help one acquire greater mastery of a second language because it predisposes the learner to engage in more practice and to get more input (Chastain, 1975; Schumann, 1976, 1978; Naiman et al., 1978). However, Bush (1982) found a negative correlation between extraversion and quality of English pronunciation among Japanese learners of English. Suter (1976) observed no significant correlation between extraversion and pronunciation ratings among English as a Foreign Language students of Asian and Middle Eastern background.

These research results seem to call for a repeat of these studies so that conclusive results can be arrived at.

### **2.9.7 Communicative strategies and paralanguage**

The success of the communicative act depends on the attitudes of both the interlocutor and the L2 user (Ludwig, 1982). L2 users employ certain devices to enhance communication, maintain an interlocutor's continued attention, and eventually overcome the linguistic barriers posed by an incomplete knowledge of the L2.

Lacking appropriate vocabulary and grammar items, L2 speakers often resort to communicative strategies. Linguistically these strategies include approximation, word coinage, circumlocution, translation and/or language switch, and an appeal for assistance. Non-verbally they may resort to mime, simply avoiding specific topics, or abandoning the message entirely (Ludwig, 1982).

Research points to the use of communicative strategies in a specific hierarchy. Ervin (1977) identifies the following hierarchy: topic avoidance, approximation, circumlocution and description, coinage and misuse. Albrechtsen, Henriksen and Faerch (1980) postulate that the four most important communicative strategies are: literal translation, language switch, self-correcting and restructuring.

Making a fair number of errors when using the target language together with moderate use of communicative strategies give a negative impression, but not using communicative strategies at all also gives a negative result. Galloway (1980) found that a visible effort to communicate on the part of the students elicited a favourable response from the evaluators. Gestures, facial and body movements (smiling, moving closer) evoked positive feelings towards the speakers who used them. Conversations between native speakers and L2 learners are facilitated by eye contact, proxemics and related physical phenomena.

From the above it is clear that using communicative strategies can facilitate communication to a great extent.

### **2.9.8 Personality**

Native speakers do not judge individuals on their linguistic ability only (Ludwig, 1982). It, therefore, makes sense that L2 learners have a reasonable fear of appearing foolish when speaking the target language. Irritation is a crucial obstacle to establishing a positive rapport and successful communication, even more important than comprehensibility. "Learners do not improve the attitude they evoke toward themselves and the content of what they say simply by increasing their correctness" (Albrechtsen et al., 1980). Native speakers are more interested in *what* L2 speakers say than in *how* they say it. Linguistic errors per se do not determine the whole of what others think of L2 users. Personality plays an important role in the impression a non-native speaker makes when speaking a second language.

### **2.10. Conclusion**

To conclude - accents differ in pronunciation only, dialects differ in aspects such as vocabulary, grammar and word-order. A second language speaker's pronunciation of a language (accent) can be classified as bad, acceptable or good and this determines how well such a speaker's message comes across. The main demographic and social determinants of accent in South Africa are: social class, ethnic descent group, associations with Britain, age and sex. The comprehensibility of a non-native accent can be influenced by such factors as: familiarity with topic, familiarity with non-native speech in general, familiarity with a non-native accent in particular and familiarity with a particular non-native.

A non-native speaker is judged by his/her accent. In a social context this implies that the more accented the speech, the lower the social acceptability of the speaker. Educational judgements are also made on the basis of accent. It was found that an accent can

reduce the chances for educational and occupational success if it evokes a prejudicial attitude in the listener.

It seems that in South Africa a person's pronunciation is judged against the norm of RP. The English Academy has accepted British English spoken with an RP accent as the norm. However, the Academy does not have the whole-hearted support of all linguists in the country. One of the main arguments against the acceptance of RP as the norm for English in South Africa is that there is a proliferation of varieties of English spoken in South Africa and the acceptance of one over the others results in a dichotomy between the native speakers and the non-native speakers of English. The varieties of English spoken in South Africa differ mainly in terms of pronunciation. Black English is a very prominent variety in the new South Africa.

It is not necessary to speak a variety of English if one is not an English mother tongue speaker. A native-like pronunciation is possible, but there are certain factors that affect the acquisition of such a native-like pronunciation. These factors are: exposure, sex, motivation and affect, ability to mimic, modality preference, extraversion, communicative strategies, paralanguage and personality.

## **CHAPTER 3**

# **ENGLISH LANGUAGE SEGMENTALS, SYLLABLE STRUCTURE AND TYPICAL SEGMENTAL AND SYLLABLE STRUCTURE DEVIANCES MADE BY ESL SPEAKERS**

### **3.1. Introduction**

To be able to pronounce a language in a native-like manner, the phonetics of that language needs to be mastered. This chapter attempts to define language and phonetics and then discusses segmentals. "Segmentals" refers to consonants and vowels as speech sounds. The syllable structure of the English language is also discussed. This refers to the arrangement of phonemes into certain patterns to form syllables and how the syllables are arranged to form words. Segmentals and syllable structure are discussed extensively as they provide the background for the next section of the chapter, i.e. deviances in the pronunciation of ESL learners. As the subjects in this study were Zulu mother tongue speakers, the last section of this chapter attempts to shed some light on the differences between English and Zulu.

### **3.2. A definition of language and phonetics**

Every normal person speaks at least one language; many people speak more than one. Many definitions of language have been made, but the following one contains the elements that many scholars agree on: "A language is a system of arbitrary vocal symbols by which members of a social group cooperate and interact" (English Language Services, 1968:1). Another very useful definition of language is given by Gimson (1980:4): "Language is a system of conventional signals used for communication by a whole community".



If language is a system it must be organised. Therefore, it consists of significant sound units, the inflection and arrangement of words and the association of meaning with words. As vocal systems are arbitrary, there is no necessary or natural connection between form and meaning. Speech is not the same as writing - writing is a system of communication based on language and language is a system by means of which the members of a social group cooperate and interact (English Language Services, 1968).

Speech preceded writing and language in writing was originally an attempt at reflecting the spoken language. In English there is often an obvious lack of relationship between sound and spelling. Words are often pronounced completely differently from what the spelling implies. According to Cruttenden (1994), a written form of English has existed for more than a thousand years and though the pronunciation of English has been constantly changing during this time, few basic changes in the spelling have been made. The result is that "written English is often an inadequate and misleading representation of the spoken language of today" (Cruttenden: 1994:4). The following is an example of the lack of relationship between sound and spelling in the English language: *touch*, *thought*, *through*, and *out* all contain the combination of the two letters *o* and *u*, but the pronunciation of these two letters is different in each word.

According to the English Language Services (1968), language is a set of habits developed in early childhood and reinforced throughout a person's lifetime by continual practise. These habits involve movements of the tongue, the lips, the vocal cords, etc. which produce speech sounds. The noises that we call speaking are actually sound waves going through the air. If a person understands the language being spoken we say that understanding takes place (English Language Services, 1968).



Crutenden (1994:4) defines phonetics as, "the production, transmission, and reception of the sounds of English". This chapter concerns itself with the production of speech sounds and deviances in the way these sounds are produced.

### **3.3. Segmentals**

From a practical phonetic standpoint it is convenient to distinguish two types of speech sounds, simply because the majority of sounds may be described and classified most appropriately according to one of two techniques:

1. The type of sound which is most easily described in terms of articulation, since one can generally feel the contacts and movements involved. These sounds can be with or without voice and are known as the **consonantal** type or consonants.
2. The type of sound depending largely on very slight variations of tongue position. Such sounds are generally voiced and are known as the **vowel** type or vowels (Gimson, 1980:32).

Vowels and consonants together are referred to as segmentals (Kreidler, 1989).

#### **3.3.1 Consonants**

Different authors distinguish different numbers of consonant classes. For the purpose of this paper, a combination of Kreidler's (1989) and Gimson's (1980) classifications are used.

##### **3.3.1.1 The six classes**

According to Kreidler (1989), **stops**, **fricatives**, **nasals** and **liquids** are all [+consonantal]. This means that in their articulation both lips, the lower lip or some part of the tongue impede the flow of air in some way, in some part of

the mouth. Gimson (1980) adds **plosives** (stops) and **affricates** to the [+consonantal] group. These six classes together are called **CONSONANTS**. Vowels and glides are articulated without an impedance of the flow of air, therefore, they are [-consonantal]. For vowels and glides it is the shape of the oral cavity (determined by the position of the tongue and lips) in which air is flowing freely that determines the quality of the sound produced. Glides are like certain vowels in their production, but they are like consonants in the positions they occupy in syllables and larger units (Kreidler, 1989).

Kreidler (1989) distinguishes between the different classes of consonants according to their manner of articulation, specifically in whether or not the articulation is characterised by periodic vibration of air particles and in whether or not the airstream is escaping from the mouth during the articulation.

Kreidler's consonant classes are illustrated in the international consonant chart (Roach, 1991). This chart contains all the international consonants (figure 1).

Figure 1: Consonant chart

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			ʀ					ʁ		
Tap or Flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j				
Lateral approximant				l		ɭ	ʎ	ʟ			
Ejective stop	pʰ			tʰ		ʈʰ	cʰ	kʰ	qʰ		
Implosive	ɓ ɗ			ɗ ɗ			cʼ ɟʼ	kʼ ɡʼ	qʼ ɢʼ		

(Roach, 1991:40)

### 3.3.1.2 Place of articulation

The place of articulation refers to where in the mouth the obstruction is formed. According to Cruttenden (1994:29-30) the chief points of articulation are:

- Bilabial: The two lips are the primary articulators, e.g. [p, b, m].
- Labio-dental: The lower lip articulates with the upper teeth, e.g. [f, v].
- Dental: The tongue tip and rims articulate with the upper teeth, e.g. [ð, θ], as in *then* and *think*.
- Alveolar: The tip or blade of the tongue articulates with the alveolar ridge, e.g. [t, d, l, n, s, z].
- Palato-alveolar: The blade, or tip and blade, articulates with the alveolar ridge and there is at the same time a raising of the front of the tongue

towards the hard palate, e.g. [ʃ, ʒ, tʃ, dʒ] as in English *ship*, *measure*, *beach*, *edge*.

- Palatal: the front of the tongue articulates with the hard palate, e.g. [k, g],
- Velar: The back of the tongue articulates with the soft palate, e.g. [k, g, ŋ] the last as in *sing*.
- Glottal: An obstruction, or a narrowing causing friction but not vibration, between the vocal folds, e.g. [h].

### 3.3.1.3 Manner of articulation

The obstruction made by the organs may be total, intermittent, partial, or may merely constitute a narrowing sufficient enough to cause friction. There is controversy regarding the manner of articulation of consonants. As Gimson is regarded as an authority on this matter, his classification will be used for the purposes of this study. Gimson (1980:34-35) identifies the following chief types of articulation, in decreasing degrees of closure:

- Complete closure - **plosives**: a complete closure at some point in the vocal tract, behind which the air pressure builds up and can be released explosively, e.g. [p, b, t, d, k, g]; **affricates**: a complete closure at some point in the mouth, behind which the air pressure builds up; the separation of the organs is, however, slow compared with that of a plosive, so that friction is a characteristic second element of the sound, e.g. [tʃ, dʒ] and **nasals**: a complete closure at some point in the mouth but, the soft palate being lowered, the air escapes through the nose. These sounds are continuants and, in the voiced form, have no noise component; they are, to this extent, vowel-like, e.g. [m, n, ŋ].

- Partial closure - **laterals**: a partial, but firm closure is made at some point in the mouth, the airstream being allowed to escape on one or both sides of the contact, e.g. [l].
- Narrowing - **fricatives**: two organs approximate to such an extent that the airstream passes between them with friction, e.g. [f, v, θ, ð, s, z, ʃ, ʒ].

According to Kreidler (1989:35), **liquids** (laterals and trills) and **nasals** are “musical” like vowels. Although the airstream is obstructed in some way, the vocal tract still acts like a resonance chamber in which air particles flow in periodic waves. **Fricatives** and **stops** - obstruent consonants - are articulated with total or near total obstruction of the airstream so that resonance is minimal or absent. For **liquids** and **fricatives** air flows out of the mouth during articulation; thus any of these consonants can be held - continued - as long as the lungs provide air. **Nasals** can also be prolonged since air escapes during their articulation, but through the nasal cavity alone. A **stop**, since it involves complete obstruction of the breath stream, is essentially an instant of silence. A stop can be prolonged only in the sense that the period of silence is maintained for a longer period of time (Kreidler, 1989; Cruttenden, 1994).

#### 3.3.1.4 Articulatory features

To describe the articulation of a consonant is to tell what articulatory features are relevant. In general, three kinds of features can be distinguished:

##### 3.3.1.4.1 Differences in vocal chord action or voicing

At any place of articulation, a consonantal articulation may be voiceless or voiced (Cruttenden, 1994:29). Kreidler (1989) explains that the vocal

chords vibrate during some articulations and not during other articulations. Articulations with such vibrations are **voiced**, or, in the notation of a binary system, [+voice]. Consonants without vocal chord vibration are **voiceless**, or [-voice]. Where English **stops** or **fricatives** exist in pairs like /t,d/ or /s,z/ the two members of the pairs are alike in all respects except that one is [-voice] and one is [+voice]. Therefore, the feature [voice] is distinctive for stops and fricatives. On the other hand, all **liquids** and **nasals** are [+voice], and voicing is not distinctive in these classes - it is not relevant for telling how one liquid differs from the other or one nasal from the other nasals.

#### 3.3.1.4.2 Differences in tongue shape

According to Cruttenden (1994:15) the tongue is, "by far the most flexible of all the movable organs within the mouth and is capable of assuming a great variety of positions in the articulation of both vowels and consonants".

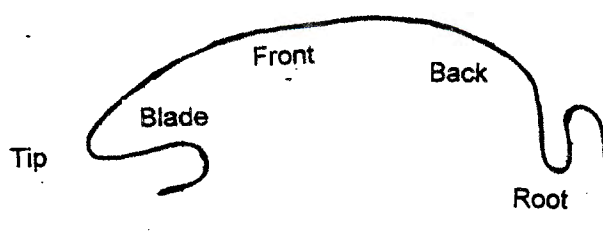
Kreidler (1989) explains that the surface of the tongue may be relatively flat, unshaped or it may be altered so that it has a groove along the centre line of the top surface, or it may be drawn in at the sides, or drawn back at the tip. To deal with these differences two features are recognised: [sibilant] and [lateral]. The feature [+sibilant] indicates the presence of a groove, or slight trough, along the centre line, and [-sibilant] means that there is no such groove. The feature [+lateral] means that the tongue sides are curled inward, and [-lateral] indicates the absence of such curl. The feature [sibilant] is common among **fricatives** and **stops**, the feature [lateral] indicates differences in the class of **liquids**. All **nasal** consonants

are articulated with a flat tongue, so that these features are not distinctive for nasals (Kreidler, 1989).

### 3.3.1.4.3 Different articulators

According to Kreidler (1989:37), in English the airstream may be obstructed, wholly or partially, by **the lower lip** or any one of three parts of the tongue. Cruttenden (1994:15) explains that the tongue is a complex muscular structure which does not show obvious sections; yet, since its position must often be described in considerable detail, certain arbitrary divisions are made. When the tongue is at rest, with its tip lying behind the lower teeth, that part which lies opposite the hard palate is called the front and that which faces the soft palate is called the back, with the region where the front and back meet known as the centre. These areas together with the root are sometimes called the body of the tongue. The tapering section facing the teeth ridge is called the blade and its extremity the tip. The edges of the tongue are known as the rims. The three parts of the tongue that can then, according to Kreidler (1989), obstruct the airstream are: **the tip of the tongue, the front of the tongue and the back of the tongue** (diagram 1).

Diagram 1: The parts of the tongue



(Roach, 1991:9)

The above articulators may be said to lie along the lower edge of the oral cavity. Along the upper edge are the areas in which the articulators make contact or near-contact:

- the upper lip
- the upper front teeth
- the alveolar ridge (the 'terraced' hump behind the upper teeth)
- the hard palate (the area which is separated from the nasal cavity by a bony structure)
- the velum (soft palate), (the posterior area of the roof of the mouth with no bone above it) (Kreidler, 1989; Cruttenden, 1994).

The main difference between consonants and vowels lies in the way they are pronounced. Simplistically it can be said that there is always an obstruction of the air flow when a consonant is pronounced, whereas vowels are pronounced without such an obstruction.

### **3.3.2 Vowels**

The differences between consonants are fairly trivial compared to the differences between vowels. There are several different analyses that linguists have made of English vowels. According to Kreidler (1989), these analyses vary quite a bit from one another for two reasons: firstly, different dialects of English have somewhat different systems of vowels; these differences are not so vast as to prevent English-speakers from different parts of the world from understanding one another, but they are enough to be quite noticeable, and the differences make the task of description considerably more difficult than the description of consonants. Secondly, different descriptivists give more importance to different



features. Vowels differ from one another in length, tenseness, tongue movement, etc. Even when describing the same system of vowels, it is possible for two linguists to disagree about which features seem more relevant.

### 3.3.2.1 Differences in vowels

Do the following words have the same vowel sounds? *Lock* and *log*, *pat* and *bad*, *cot* and *caught*, *bomb* and *balm*, *pork* and *fork*, *hurry* and *furry*. Any speaker of English will have an immediate answer to these questions, but in each case there are other speakers who will give the opposite answer. Whereas there is a general uniformity in English consonants, the above example illustrates that there are interesting differences in vowels.

According to Gimson (1980), the description of vowel sounds, especially by means of the written word, has always presented considerable difficulty. He postulates that a description of vowel-like sounds must note "the position of the soft palate, the kind of aperture formed by the lips and the part of the tongue which is raised" (Gimson, 1980:39).

Kreidler (1989) postulates that the differences between vowels are of three kinds: in the INVENTORY of the vowels, in their INCIDENCE, and in their PHONETIC REALISATION (pronunciation).

#### 3.3.2.1.1 Inventory

The **inventory** of vowels is the number of vowel phonemes which contrast with one another - which are capable of differentiating words (Kreidler, 1989). Different dialects of English have different vowel inventories. This

is an especially important consideration in this paper as African languages generally have only five vowel sounds (Wells, 1982). The way in which this aspect of language is manifested can be illustrated by the following two examples. In the North of England a word like *nut* is spoken with the vowel of *foot* and, therefore, it can be said that there is no *nut*-vowel ([ʌ]) in that dialect (Kreidler, 1989:49). In South Africa an African mother tongue learner of English may say *bad* with the vowel of *bird* and, therefore, it can be said that there is no *bad* vowel ([æ]) in their dialect.

#### 3.3.2.1.2 Incidence

The term **incidence** refers to the occurrence of particular vowels in particular sets of lexical items. Speakers of different dialects may have the same number of vowels available for making distinctions but use them in different sets of words. For example, some speakers pronounce *father*, *lather* and *rather* so that they rhyme, others pronounce *lather* with a different first vowel. This is a trivial matter in itself, but it illustrates a much bigger matter. There are whole sets of words like *half*, *laugh*, *glass* and *bath*, which are pronounced with different vowels by different speakers of English - differences in the incidence of the vowel phonemes they have (Kreidler, 1989:50).

#### 3.3.2.1.3 Phonetic realisation

Finally, to understand differences of **phonetic realisation** it would help to hear a number of people from different parts of the English-speaking world pronounce the word *house*. They will all pronounce the same vowel, but their ways of rendering the vowel are quite different. The differences lie in

the articulatory features - the positions and movements of tongue and lips (Kreidler, 1989:50).

### **3.3.2.2 The characteristics of vowels**

The features which distinguish stops, fricatives and nasals cannot be used to distinguish between vowels. All vowels are:

- [+syllabic], i.e. capable of carrying stress and pitch,
- [-consonantal], i.e. made without impeding the air flow,
- [+continuant], i.e. articulated with air going continuously out of the mouth,
- [+sonorant], i.e. made with regular patterns of vibration,
- [+voice], i.e. produced with vocal cords vibrating, and
- [-sibilant], i.e. produced with a flat tongue surface (Kreidler, 1989:56).

### **3.3.2.3 Articulatory features of vowels**

What are the articulatory features which make vowels differ from one another? Cruttenden (1994) and Gimson (1980) give a detailed description of the articulatory features distinguishing each vowel sound, while Kreidler (1989) discusses the articulation of vowels according to the following general features:

#### **3.3.2.3.1 Quality**

Kreidler (1989) postulates that vowels differ from one another in quality. Quality is determined by the shape of the resonance chamber, which in turn depends mainly on the position of the tongue. The front, centre or back of the tongue may be positioned at different heights. The shape of the oral

cavity depends on the shape of the lips - whether they are more rounded or more spread. A vowel is thus characterised as being "front, central or back, as high, mid, or low, and as rounded or unrounded" (Kreidler, 1989:56).

#### **3.3.2.3.2 Length**

Vowels can differ in length. Any vowel can be stretched out or clipped short, but some vowels are typically shorter than others. The *tree* and *chick* vowels, for example, are similar in quality but the first is typically longer than the second (Kreidler, 1989:57). In phonetic transcriptions, a colon after a symbol indicates a longer vowel sound than the same symbol without the colon, e.g. [i:] and [i].

#### **3.3.2.3.3 Complexity**

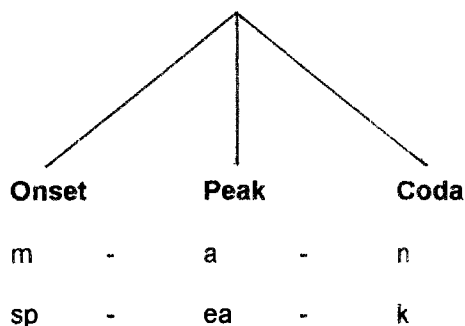
There may be a difference of complexity in the pronunciation of vowels. This is the familiar distinction between a simple vowel (monophthong) and a compound vowel (diphthong). For a simple vowel, the tongue and lips remain relatively stable throughout the articulation. A diphthong is made with the tongue (and lips) moving. Gimson (1980:128) defines a diphthong as two "vocalic elements" forming "a glide within one syllable". Kreidler (1989) recognises three kinds of diphthongs for English: those made with the front of the tongue moving upward, those made with the back of the tongue moving upward and those in which the tongue moves toward a mid-central position.

### 3.4. Syllable structure

Every language has phonemes, and every language has its own common patterns in which phonemes are arranged to form syllables and the syllables are arranged to form larger units. In English there are never more than two vowels in sequence in a single word (cruel, radio), but clusters of two, three or more consonants are fairly common (prescribes, tempts).

Every English word consists of at least one syllable, and many have two, three, four or more. A syllable is hard to define, but fairly easy to recognise. Every syllable has a structure, a sequence of some of the phonemes of the language. It is important to investigate what general structures are possible and impossible for English syllables. Different languages have different kinds of syllable structure. Describing the possible syllable structures is part of describing the sound system of a language. Roach (1991:67) explains that phonetically a syllable can be described as consisting of a centre which has little or no obstruction to air flow and which sounds comparably loud; before and after this centre (that is, at the beginning and end of the syllable) there will be greater obstruction to airflow and/or less sound.

Every English syllable has a centre or PEAK, an element which is [+syllabic]. As we have seen all vowels are [+syllabic] by definition (cf. section 3.2.2.2). Every word, phrase or sentence has as many syllables as it has syllabic elements, and vice versa. The peak may be preceded by one or more non-syllabic elements, which constitute the ONSET of the syllable, and it may be followed by one or more non-syllabic elements which constitute the CODA. In *cat* the onset is /k/, the peak is /æ/, and the coda is /t/; the word *ox* has a zero onset, the peak is /ɒ/, and the coda is /ks/. These concepts can be illustrated as follows:



Kreidler (1989:85-86) gives the following rules for syllabifying spoken English words:

1. If two vowels occur in sequence, the syllable break is between the vowels (e.g. cha.os, cru.el).
2. If one consonant occurs between two vowels and the second is strong, the consonant is part of the second syllable (e.g. re.'pent, va.'cation).
3. If two vowels are separated by a consonant cluster, syllable division depends on what consonants are in the cluster. If the cluster is of the type that can occur word-initially and the following vowel is strong, the whole cluster is part of the syllable with the strong vowel (e.g. de.'cline, re.'quire). If the second vowel is weak, the first consonant of the cluster is ambisyllabic (e.g. 'sa^cred, 'pro^blem).
4. If the consonant is one which cannot occur in an initial position, the consonants are divided in such a way that the second syllable begins with a single consonant of a cluster that can appear initially (e.g. can.dy, at.las).

All the above elements feature when it comes to the pronunciation of words in English. For mother tongue speakers of the language it comes naturally without their having to think about it, but for ESL speakers it takes a lot of practice and concentration. Anyone who has ever learnt a second language will know that pronunciation plays a leading part in the process. If one cannot pronounce properly one cannot communicate properly (MacCarthy, 1978).

Communication in the classroom relies heavily on pronunciation. Pronunciation is also judged in the classroom and deviances in pronunciation attract attention (Fayer &

Krasinski, 1987) and result in poor oral marks and even a negative attitude towards the speaker (Cooper, 1989).

### **3.5. Deviances in the pronunciation of English Second Language learners**

#### **3.5.1 Introduction**

According to Anderson-Hsieh, Johnson and Koehler (1992) the major areas of pronunciation are segmentals, prosody, syllable structure and voice quality. This study concentrates on deviance in segmentals and syllable structure. Deviance in segmentals involves errors in consonants and vowels, such as the substitution of one sound for another (e.g. *but* pronounced as [bʌd]) or the modification of a sound (e.g. *extra* pronounced as [ɛkstRə]) (Beebe, 1984; Flege and Hillenbrand, 1984; Nathan et al., 1987). Syllable structure errors involve the addition of a segment or syllable (e.g. *film* pronounced as [fɪlðm]), the deletion of a segment or syllable (e.g. *must* pronounced as [mʌs]), or the reordering of segments in syllables. The most common type of syllable structure errors are consonant deletion and vowel insertion (Tarone, 1980; Anderson, 1983; Broselow, 1983, 1984; Sato, 1984; Karimi, 1987).

Flege and Port (1981) mention three reasons for the pronunciation errors made by non-native speakers. Firstly, errors occur when there is not a comparative sound in the phonemic inventory of the native language. Such errors are called language transfer errors. Secondly, errors occur where speakers pronounce some allophones or phonemes (which are not common in their language) incorrectly; and lastly, interference might result from cross-language differences in the phonetic implementation of a feature.

The following section of the paper focuses on the differences between Zulu and English, for the subjects in this study are Zulu mother tongue learners of English. Although the focus of the following section of this paper is Zulu and English, according to Adendorff and Savini-Beck (1993) other indigenous languages like Tswana and Sotho, for example, have similar sound systems to Zulu. Therefore, the observations made about the sound systems of Zulu and the English spoken by Zulu students of English may be generalised to other indigenous languages and other varieties of learner English respectively (Adendorff & Savini-Beck, 1993).

### **3.5.2 The sound systems of Zulu and English compared**

If the sound systems of Zulu and English are compared, some reasons for the deviances in the speech samples used in this study become clear. In this section of the paper the term 'vowel(s)' refers to all the vowel sounds, not the letters *a*, *e*, *i*, *o* and *u*. The same applies to the term 'consonant(s)' which is used to refer to speech sounds, rather than to the letters.

#### **3.5.2.1 Zulu and English consonants**

Wells (1982) points out that African languages tend to have relatively large consonant systems but the consonants tend to be subject to severe phonotactic constraints. Hence, in African-English syllable final consonants and consonant clusters suffer more first-language interference than do single initial and intervocalic consonants.



Difficulty with the dental fricatives [θ] and [ð] is widespread. It is very common for alveolar plosives to be used, thus *thick* = *tick* [tik], *their* = *dare* [dɛ]. (Wells, 1982:640). Generally it is not the articulation of particular consonants in themselves which suffers severe first-language interference in African-English phonetics, but their combination in clusters and unfamiliar syllabic positions.

### 3.5.2.2 Zulu-English consonantal variation

Jacobs (1994) conducted a very meaningful study in which the following conclusions regarding consonantal variation in Zulu-English (ZE) phonetic descriptions were reached:

#### Group 1: Fricatives → stops

Voiced and voiceless interdental fricatives [ð] and [θ] were in free variation with alveolar stops [d] and [t]. Instead of having the tongue apex extended out between the upper and lower teeth in such a way that friction is created by the air flowing between the teeth, the airstream is stopped by raising the tongue blade toward the alveolar ridge and producing a plosive. E.g. *there* pronounced as [dɛ], and *think* pronounced as [tɪŋk].

#### Group 2 [+voiced] → [-voiced]

The data offered evidence of a tendency to devoice certain obstruents. Five consonant classes particularly affected by this form of free variation are bilabial, alveolar, and velar plosives, the palatal affricate [dʒ] and the central alveolar fricative [z]. The position of the consonant in the word is also important - final [+voiced] consonants tend to devoice very frequently. E.g. *judge* pronounced as [dʒʌts]

#### Group 3: Affricate → fricative

An interesting free variation in many ZE idiolects is the modification of the voiceless palatal affricate [tʃ] into the voiceless alveopalatal fricative [ʃ]. Instead of producing a palatal stop closure followed immediately by a slow release of the closure, friction is created in the alveopalatal region from the beginning of the phone to its end, producing a spirant. E.g. pronouncing *Charles* as [ʃɑ :ls].

### 3.5.2.3 Zulu and English vowels

Wells (1982) points out that a study of the phonetics of English as a second language in Africa reveals that the vowels are one of the major areas of difficulty for Africans learning English. Most African languages have a relatively small vowel system (though the consonant systems are often elaborate). In many instances there are only five contrastive vowels - [æ, e, ɪ, ɒ, ʊ].

There are few Africans who can make the distinction between *fleece* and *kit* (RP [i:] vs. [ɪ]) without special training. Absence of this distinction is one of the most characteristic features of African English (Dreyer, Wissing & Wissing, 1996) with homophones such as *leave-live*, *beat-bit*, *seen-sin*, *Don't sleep on the floor - Don't slip on the floor*. A word such as *ticket* is usually [tikit] (Wells, 1982:637).

Some African speakers of English merge the vowels of *dress* and *face*, using a simple [ɛ]-type vowel for both *red* and *raid*, *get* and *gate*, *pepper* and *paper*. In South Africa the mergers are slightly different from those found further

North, in that *strut* and *start-bath-palm* are merged as [a], and *trap*, *dress*, *nurse* and *square* as [ɛ]. As elsewhere, [ɒ] covers *lot* and *thought-North-force*, [i] covers *fleece* and *kit* (meaning that Black English *sister* [sista] sounds very different from the RP [səstə]), and [u] covers *foot* and *goose*. Although both Zulu and Xhosa have five-vowel systems, they include allophonic [e] and [o], used in English for *face* and *goat* respectively (Wells, 1982:639).

Lanham (1984:342) identifies certain salient Black English variables in pronunciation:

1. No long-short contrasts appear in vowel nuclei (a highly functional opposition in South African English): *tick* = *teak*, *head* = *haired*, *pull* = *pool*.  
This was also found by Dreyer et al. (1996).
2. No schwa quality vocoids exist; thus *bird* = [bed], *teacher* = [ti[a]
3. [e] : [æ] opposition is lost.
4. Stress contrasts are obscured.

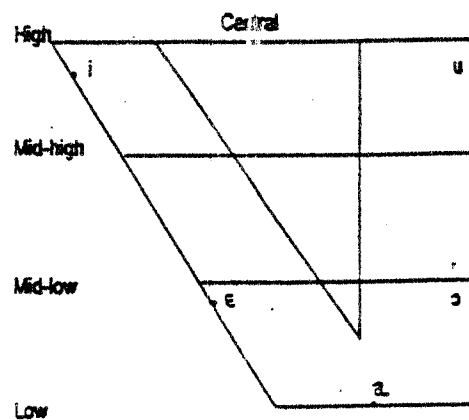
### 3.5.2.3.1 Zulu vowels

Van Wyk (1978:59) illustrates the five basic Zulu vowels in the list below. The symbol used to represent the first vowel in each word is given in the right hand column:

lima	"plough"	[i]
thenga	"buy"	[ɛ]
thanda	"love"	[a]
bona	"see"	[ɔ]
funa	"seek"	[u]

The Zulu vowels can be plotted on the vowel chart (Figure 2) according to their articulation.

Figure 2: Vowel chart of Zulu vowels



(Adendorff & Savini-Beck, 1993:234)

### 3.5.2.3.2 English vowels

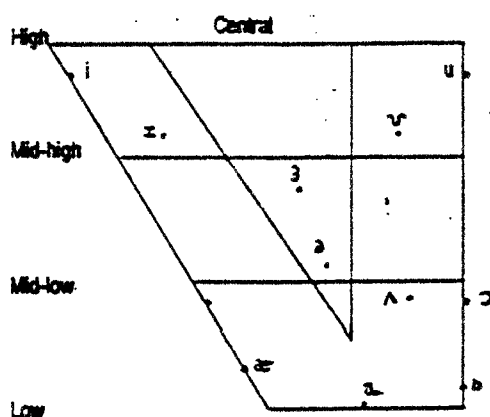
In comparison to Zulu, English has many more vowels as shown in the following list of words compiled by Adendorff and Savini-Beck (1993:235). The symbol used to represent the vowel in each word is given in the right hand column. In the case of the last word in the list the symbol represents the first vowel in the word:

hit	[ɪ]
heat	[i]
bed	[ɛ]
bird	[ɜ]
bad	[æ]
cut	[ʌ]
cot	[ɒ]
cart	[a]

caught	[ɔ]
pull	[ʊ]
pool	[u]
about	[ə]

The English vowels can be plotted according to their articulation on the vowel chart in Figure 3:

Figure 3: Vowel chart of English vowels



(Adendorff & Savini-Beck, 1993:236)

To summarise, the differences between English and Zulu vowels are as follows:

1. The English language has many more vowels than the Zulu language has.
2. English vowels are spread throughout the vowel chart with clusters of vowels where Zulu has only one.
3. Zulu has no mid-central vowels, i.e. vowels that are articulated with the tongue midway between the roof and the floor of the mouth and in the central part of the mouth.

### 3.5.2.3.3 Diphthongs

In Zulu there are no diphthongs, i.e. vowels which have a longer articulation than the simple vowels that have been considered above. During the articulation of a diphthong, articulation starts with the tongue in one position and ends with the tongue in another (Adendorff & Savini-Beck, 1993:237). The words in the following list compiled by Clark and Yallop (1990:362) contain the diphthong represented by the symbol in the right hand column:

boy	[ɔɪ]
hay	[eɪ]
code	[oʊ]
hide	[aɪ]
beard	[ɪə]
hair	[eə]
how	[aʊ]
Tour	[ʊə]
Cute	[ʌʊ]

Zulu does not include any segments of this type. If the diphthongs which occur in English are added to the simple vowels indicated in the vowel chart, then English has 21 vowels, while Zulu has only 5.

### 3.5.2.4 Summary of the vowel and consonant systems

In comparison to Zulu, English has:

- more vowels,
- clusters of vowels where Zulu has one vowel,

- two central vowels which Zulu does not have,
- vowels which are inherently long and similar ones which are inherently short
- diphthongs,
- the consonant sounds [θ] and [ð] found in *thought* and *then* respectively (dental fricatives), and
- the consonant sounds in *church* and *measure*, namely [tʃ] and [ʒ] respectively.

### 3.5.2.5 An illustration of the pronunciation consequences of the differences between Zulu and English vowels

The differences mentioned in the previous sections influence the English of the L2 learners in that they are likely to rely on mother tongue preferences when articulating English vowels and consonants in spoken discourse. By way of illustration the pronunciation of the following two sets of words will be considered:

*bird* - *bad* - *bed*                      and                      *hit* - *heat*.

As pointed out previously (cf. section 3.5.2.4), the sound system of Zulu does not include a central vowel [ɜ] such as the one found in the word *bird*, or the low, front vowel [æ] found in the word *bad*. However, Zulu does have a vowel which is articulated in the same general area of the mouth as the English vowel [e] found in *bed*, viz. [ɛ] found in *thenga*. Not having the vowel [ɜ] in Zulu, the second language learner of English, when pronouncing the word *bird*, approximates the closest vowel he is familiar with, viz. [ɛ]. The same is true when the second language learner pronounces the word *bad* which

includes the vowel [æ], a vowel not found in Zulu. He approximates the closest vowel in Zulu, viz. [e]. The result is that the learners pronunciation of the words *bed*, *bird* and *bad* sound very similar, if not the same, making it difficult for the listener, in the absence of disambiguating context, to work out which word is being used (Adendorff & Savini-Beck, 1993).

Zulu does not have the short vowel [ɪ] found in the English word *hit*, but has a vowel articulated in much the same area, i.e. [i], found in the English word *heat*. The second language learner of English, when pronouncing the word *hit*, which includes a vowel unfamiliar to him, may, therefore, use the nearest sound in Zulu, a long vowel similar to the one found in *heat*. He may therefore lengthen the vowel in *hit* so that his pronunciation of *hit* and *heat* sound similar. As in the case of the vowels in *bird* - *bad* - *bed*, the second language learner of English does not produce, nor sometimes perceive, the sound distinctions familiar to mother-tongue speakers of English (Adendorff & Savini-Beck, 1993).

Consider the consonants found at the beginning of the two words:  
*this* - *thing*.

One of the differences between English and Zulu is that the sound system of English includes the sounds [θ] and [ð] found in the word *thing* and *this* respectively. Recall that the latter is the voiced counterpart of the former. Both sounds are articulated with the tongue behind the top row of teeth or between the teeth. As the sound system of Zulu does not include either of these sounds, Zulu speakers may have difficulty articulating the words *thing* and *this* in the way that a mother tongue speaker of English does. The English second language learner may substitute/approximate to the two



closest sounds in Zulu and therefore substitute the voiceless consonant [t] for [θ] and the voiced consonant [d] for [ð]. The sounds which are substituted are articulated with the tongue on the ridge behind the top row of teeth. Thus *this* would be pronounced as [dɪs] and *thing* as [tɪŋ] (Adendorff & Savini-Beck, 1993).

### 3.6. Conclusion

Two main elements of the English language are segmentals and syllable structure. "Segmentals" refers to vowels and consonants and syllable structure alludes to the way in which phonemes are arranged to form syllables and words.

Consonants can be divided into six classes according to their manner of articulation. Consonants are articulated in different places, in different manners and with different features. In general, three kinds of features can be distinguished: differences in voicing, tongue shape and articulators. Vowels differ from each other in inventory, incidence and phonetic realisation. Every English word consists of at least one syllable. Every syllable has a structure. In English this structure consists of an onset, a peak and a coda.

When learners of English as a second language pronounce words and sentences, deviances in the pronunciation of segmentals and syllable structures are fairly common. When the sound systems of Zulu and English are compared it becomes clear why Zulu mother tongue learners of English mispronounce certain words. Zulu has a large consonant system, but the consonants are subject to severe phonotactic constraints. Generally it is not the articulation of particular consonants that suffer first language interference, but their combination in clusters and unfamiliar syllabic positions. Zulu has only five contrastive vowels (while English has 21), and no diphthongs. It can be

expected that Zulu mother tongue learners of English will have difficulty in pronouncing a language which differs so much from theirs.

## **CHAPTER 4**

### **METHOD OF RESEARCH**

#### **4.1 Introduction**

The purpose of this chapter is to give an outline of the methodology employed in this study in an attempt to structure the study and to allow other researchers to replicate the study or similar studies using the same methodology.

The methodology is discussed under the following headings:

- Design
- Subjects
- Variables
- Instruments/Materials
- Data collection procedure
- Analysis

#### **4.2 Design**

A correlational research design was used in this study.

#### **4.3 Subjects**

The accessible study population included 78 grade 12 pupils in a secondary school in Gauteng. Cluster sampling was done in that the students selected to participate in this study ( $n=40$ ) were the ones with Zulu as mother tongue. The students selected to participate in this study were selected in such a way as to ensure that there was a

balance between high (e.g., 70%) and low (50%) oral proficiency. This was done by means of oral marks given to them by their English teacher (cf. section 4.6). It was felt that a wide range of proficiencies would ensure greater variability in error frequencies, and this was needed to establish whether any relationship existed between the global pronunciation judgements and deviance in the areas of pronunciation that were investigated.

All precautions were taken not to frighten, embarrass or negatively affect the lives of the subjects. Permission for using these subjects was obtained from the principal of the school and the pupils themselves. Their wish to remain anonymous was honoured in that each subject was given a number. It was explained to them that only the researcher would have access to the original data by which the subjects might be identified. In doing so their identities were kept confidential. Experimenter responsibility was affirmed in that before the subjects were recorded they were briefed as to the purpose and expectations of the study.

#### **4.4 Variables**

The two sets of variables studied in this research were deviance in segmentals and syllable structure, and the judgement of pronunciation. The **dependent variable** was, therefore, judgements of pronunciation and the **independent variables** were deviance in segmentals and syllable structure.

#### **4.5 Instruments/Materials**

The researcher made use of a Bell and Howell tape recorder to record the speech samples of the selected subjects. The oral reading passage from the SPEAK test was given to the subjects to read (cf. Appendix 1). This specific passage was selected to

ensure that pronunciation and not grammar was evaluated. The subjects were also given a word list to read in which words occur that highlight the pronunciation deviances of ESL speakers (cf. Appendix 2). The word list was drawn up by the assistant supervisor of this study (Prof. D.P. Wissing), an internationally recognized phonetician. The word list was judged to be suitable for highlighting the typical pronunciation deviances of speakers with an African mother tongue.

A professional sound studio was employed to randomly dub all 40 non-native speech samples onto the same tape for the global ratings. As Fayer and Krasinski (1987:318) found that a listener's judgement is influenced by the intelligibility of the previous speaker, a short segment of the same passage read by the non-natives was read by a native speaker of Conservative English and recorded, and then dubbed onto the tape in between the non-native speech samples. These native speaker segments, which were not evaluated, served as a native speaker reference, their purpose being to reduce the influence that one non-native speech sample might have on the next one being rated.

The speech samples were rated by six ESL teachers on a score sheet specially designed for use in this study. Seven points were used: 0; 0,5; 1; 1,5; 2; 2,5 and 3. The lowest point on the scale represented heavily accented speech that was unintelligible. The midpoint represented accented, but intelligible speech, and the highest point on the scale represented near-native speech. The rating was done by all raters simultaneously in a single sitting in approximately two hours. After the samples were rated, interrater reliability coefficients were computed between all possible pairs of raters. The correlations were found to be strong, ranging from 0,85 - 0,92. Having established that the interrater reliability was acceptable, the six scores given by the six raters for each speaker were averaged, and the mean score was used as the pronunciation variable.

The speech samples were transcribed phonetically in order to identify any deviances. The transcription was done by the researcher. Deviances were determined by comparing the transcriptions of the speech samples with the phonetically transcribed Received Pronunciation as found in the **English Pronouncing Dictionary** (Jones, 1981).

#### **4.6 Data collection procedure**

For the purpose of examination procedures at school the subjects each received an oral mark. The pupil's oral ability was assessed in an interview with the teacher. Pupils were required to deliver a prepared speech, engage in an informal conversation and read a passage chosen by the teacher. These oral marks were obtained and by analysing them it was determined that the study group represented a wide range of proficiencies.

For the purposes of this study the subjects were recorded reading a passage and a word list. They were individually recorded during school hours in the school's audio visual room. Pupils were tested individually on their own as it was found that some of them were very shy of reading in front of others. Each recording took about 90 seconds. After the audio tape had been dubbed, the rating for each individual was done. The average mark of the six marks given by the six raters was computed. After the comparison between the correct pronunciation and the phonetic transcription of each speech sample, the number of deviances for each pupil was counted.

The following data were then available: oral marks, average marks given by the six raters and the number of deviances in each speech sample for each pupil.

## **4.7 Analysis**

The data were analysed by means of the Statistica (1991) software package. Pearson product-moment correlations were used to determine the strength and direction of the relationship between the deviances in segmentals and syllable structure and the pronunciation judgements. Cohen's (1977) effect sizes were used to determine if the correlations were practically significant. Cohen's effect size  $r$  was used to calculate the correlation between two variables. Cohen uses the following scale for the  $r$  values:

Small effect - 0,1

Medium effect - 0,3

Large effect - 0,5

## **4.8 Conclusion**

In this chapter the method of research employed in this study was discussed in some detail in an attempt to structure the study and to allow other researchers to replicate the study or similar studies using the same methodology.

## **CHAPTER 5**

### **PRESENTATION AND DISCUSSION OF RESULTS**

#### **5.1 Introduction**

This chapter is devoted to the presentation and discussion of the analysed data. The aim of this chapter is to attempt to answer the question posed in Chapter 1:

- Is there a relationship between deviance in segmentals (e.g., substitution of one sound for another or the modification of a sound) and syllable structure (e.g., vowel/syllable deletion and consonant deletion) and impressionistic judgements of pronunciation in the speech of ESL speakers?

#### **5.2 Analysis of segmental and syllable structure errors from the non-native speech samples**

In Table 1 examples of errors made by the subjects in the speech samples are given. It was interesting to note that subjects made fewer syllable structure errors (71) than segmental errors (560). Segmental errors were widespread, especially in the word list. This can be explained by the nature of the word list, being specially designed for speakers of Black English and, therefore, containing words that they are likely to mispronounce. Of the 30 words in the word list, only 5 were pronounced correctly by all subjects. A total of 30 words from the reading passage was mispronounced by the subjects in the study.

In the segmental category a total of 560 errors was made, of which 172 were consonant errors and 388 were vowel errors. Syllable structure errors were less common with 35 epenthesis errors and 36 deletion errors.



Of the segmental errors, the most common phonemic consonant error was the mispronunciation of *duck* as [dʌg], while the mispronunciation of [r] as [R] (in words such as *serious*, *during*, *extra*, *prevent* and *protection*) was the most prevalent subphonemic consonant error. This was unexpected as devoicing is usually common among second language learners of English (Lass, 1995). Interestingly enough, another South African study (Wissing & Zonnefeld, 1996) detected the same unexpected phenomenon, i.e. (-voiced) stops being pronounced as (+voice). Among the vowel errors there were six very common errors in the phonemic category, namely (from most common to least common) the pronunciation of *avoided* as [ʌvɔɪdɪd], *national* as [nɛʃənəl], *turn* as [tɜ:n], *serious* as [sɪrɪəs], *body* as [bɔɪ] and *heard* as [hɛd]. By far the most common subphonemic vowel error was the pronunciation of *person* as [pɛsən], with the following errors also being general: *heat* being pronounced as [hɪt] and *team* as [tɪm].

Of the syllable structure errors, epenthesis and deletion errors were equally common (35 and 36 errors respectively). The vowel epenthesis error of pronouncing *film* as [fɪlɪm] was very widespread (33 of the 40 subjects made this error). The consonant epenthesis error made most often was the pronunciation of *or* as [ɔ:r] instead of [ɔ:]. When the deletion of consonants, vowels and syllables was analysed, the most prevalent errors were the pronunciation of *must* as [mʌs] and *relatively* as [rɛlətɪv].

Included in Table 1 are errors which were made by ten or more subjects.

Table 1: Examples of consonant, vowel and syllable structure errors from the non-native speech samples

<u>Error type:</u>	<u>Word in which error occurred:</u>	<u>Error:</u>	<u>Phonetic transcription:</u>
<b><u>Segmentals:</u></b>			
<i>Consonant:</i>			
Phonemic -	eyes	z → s	[aɪs]
	cease	s → z	[si:z]
	duck	k → g	[dʌg]
	leaf	f → v	[li:v]
	clothing	ð → θ	[klaʊðɪŋ]
Subphonemic -	serious	r → R	[sɪəRɪəs]
	loose	s → ʒ	[lu:ʒ]
<b><u>Segmentals:</u></b>			
<i>Vowels:</i>			
Phonemic -	bad	æ → ɛ	[bɛd]
	heard	ɜ: → ɛ	[hɛd]
	national	æ → ɛ	[neɪʔnəl]
	turn	ɜ → ɛ:	[tɛ:n]
	Titch	ɪ → i:	[ti:t]
	winters	ð → ɑ	[wɪntɑs]
	cold	ʊʊ → ɔ	[kɔld]
	serious	ɪə → ʊ	[sʊrɪəs]
	body	ɒ → ɔ	[bɔdɪ]

Subphonemic -	item	$\partial \rightarrow \varepsilon$	[aɪtɪm]
	avoided	$\partial \rightarrow \alpha$	[αvɔɪdɪd]
	work	$3: \rightarrow \varepsilon$	[wɛk]
	head	$\varepsilon \rightarrow \varepsilon:$	[hɛ:d]
	Tom	$\partial \rightarrow \partial:$	[tɔ:m]
	team	$i: \rightarrow I$	[tɪm]
	heat (heated, overheated)	$i: \rightarrow I$	[hɪt]
	person	$3: \rightarrow \varepsilon$	[pɛsɒn]
<b><u>Syllable</u></b>			
<b><u>structure:</u></b>			
<i>Epenthesis:</i>			
Consonant -	or	$\emptyset \rightarrow r$	[ɔ:r]
Vowel -	film	$\emptyset \rightarrow \partial$	[fɪlɒm]
<b><u>Syllable</u></b>			
<b><u>structure:</u></b>			
<i>Deletion:</i>			
Consonant -	it	$t \rightarrow \emptyset$	[ɪ]
	must	$t \rightarrow \emptyset$	[mʌs]
	batch	$t \rightarrow \emptyset$	[bæʃ]
	cold	$d \rightarrow \emptyset$	[kɔʊl]
	becomes	$s \rightarrow \emptyset$	[bɪkʌm]
Vowel-Syllable -	relatively	$lɪ \rightarrow \emptyset$	[rɛlɪtɪv]
	protection	$\partial \rightarrow \emptyset$	[prɪtɛkʃən]
	excessive	$ɪv \rightarrow \emptyset$	[ɛksɛsɪv]

### **5.3 The relationship between deviance in segmentals and syllable structure and impressionistic ratings of pronunciation**

The descriptive statistics for the dependent and independent variables investigated are presented in Table 2. The mean values for the segmental and syllable structure error rate indicate a substantial rate of error in both the word list and the reading passage.

The slightly higher error rate in the reading passage for both the segmentals and the syllable structure deviances might indicate that as soon as ESL learners are required to produce speech in a context they make more errors which might consequently have an influence on intelligibility and comprehensibility. This seems to contradict Thompson's (1991:198) statement that "materials containing an artificially high frequency of difficult sounds may place excessive demands on the ability of L2 speakers to monitor their pronunciation and may, therefore, result in a greater number of deviations from phonetic norms, thereby creating a perception of greater accentedness than is the case with materials presenting a normal distribution of L2 sounds". In this study the word list can be said to contain "an artificially high frequency of difficult sounds" as it was especially designed to contain sounds difficult for speakers of Black English to pronounce and yet it did not result in a "greater number of deviations from phonetic norms".

Table 2: Descriptive statistics for the dependent and independent variables

Variable	Mean	Std Deviation	Minimum	Maximum
Pronunciation rating	1,70	0,44	0,75	2,59
Segmental error rate				
- word list	9,12	3,52	1,00	16,00
- reading pass.	9,65	4,19	0,00	17,00
Syllable structure				
- word list	5,84	2,45	1,00	13,00
- reading pass.	6,32	5,19	1,00	15,00

The mean values for the segmental errors and the syllable structure errors both indicate an average rate of error, and the minimum and maximum values indicate a sufficient range of values for each variable.

Table 3 presents the correlations among all the variables for the whole group (n=40).

Table 3: Pearson product-moment correlations

	Segmental errors		Syllable structure errors	
	Word list	Reading pass	Word list	Reading pass
Pronunciation rating	-0,52*+++	-0,67*+++	-0,47*++	-0,60+++

\*  $p < 0,05$

++ - medium effect size

+++ - large effect size

The results indicate that the correlations between the pronunciation score and the independent variables are moderate to very strong and significant at the  $p < 0,05$  level. The pronunciation ratings had negative correlations with the segmental error rate (for both the word list ( $r=-0,52$ ) and the reading passage ( $r=-0,67$ )) and the syllable structure error (for both the word list ( $r=-0,47$ ) and the reading passage ( $r=-0,60$ )) (cf. Table 3)). The results also indicate medium to large effect sizes ( $r = 0,5$ ). This seems to imply that the results are practically significant and that teachers, educators, etc. should take cognizance of the importance of the pronunciation of segmentals and syllable structure features.

As was mentioned in Chapter 1, the judges in this study did not attempt to analyse the errors made in the speech samples or count the number of errors made in each speech sample, but all of them judged the speech samples with many segmental and syllable structure errors more harshly than those with few such errors. This study clearly indicates that errors in the areas of segmentals and syllable structure contribute to raters' reactions.

In Chapter 2 it was mentioned that Cruttenden (1994) distinguishes between minimum general intelligibility and high acceptability of pronunciation. The intelligibility of the subjects in this study will lie somewhere between these two extremes as the mean value of the group's pronunciation rating is 1,70 out of a possible 3.

The ratings given by the judges may have been influenced by some of the elements mentioned by Gass and Varonis (1984) (cf. Chapter 2). Before the judging session, the judges were told what the topic of the reading passage was so that the first few speakers would not be disadvantaged because the judges would at first not know what the passage was all about. **Familiarity with topic** could thus have aided the intelligibility of the speakers. Only one of the judges has never taught speakers of Black English. The

other judges were **familiar with non-native speech in general**. Two of the judges are themselves speakers of Black English, so they were especially **familiar with the particular non-native accent** used by the subjects in the study. One of the judges was a teacher of these specific speakers and did indeed recognise some of the voices on the tape. She was, therefore, **familiar with particular non-natives** used in the study.

#### **5.4 Implications of results for teaching**

These results suggest, although they do not show conclusively, that students who make segmental and syllable structure errors are penalised for these errors in impressionistic judgements of pronunciation. Knowledge of these findings can benefit teachers of ESL students for they show the relative importance of correctly pronouncing segmentals and syllable structures.

According to MacCarthy (1978) teachers must measure performance selectively as selectivity allows teachers to focus on those elements that native speakers find irritating or distracting. Expecting accentless speech is unrealistic so teachers should concentrate on errors that result in semantic confusion, such as errors in segmentals and syllable structure.

Already in 1968 the English Language Services advised teachers to make students realise the human side of second language use, to point out to them that people will avoid those whom they have difficulty understanding. What students say is as important as how they say it. Correctly pronouncing segmentals and syllable structures is vital for comprehensibility.

MacCarthy (1978: 15-17) makes the following suggestions for the teacher:

1. Always speak at a normal conversational speed.

2. Correct mistakes.
  3. Make it clear that you expect a superior performance from every student.
  4. Review frequently.
  5. Avoid the use of the student's native language in the classroom.
  6. Avoid discussions about the language being learned.
  7. Avoid introducing large numbers of new words.
- It seems necessary to add a point 8: Teach students to pronounce segmentals and syllable structures correctly.

## **5.5 Conclusion**

From the findings in this study, which are supported by previous research (Johansson, 1978; Tarone, 1980; Anderson, 1983; Broselow, 1983, 1984; Sato, 1984; Karimi, 1987; Anderson-Hsieh, et al., 1992), it is clear that there is a statistically significant relationship between deviance in segmentals and syllable structure and impressionistic judgements of pronunciation in the speech of ESL speakers.



## **CHAPTER 6**

# **CONCLUSION AND RECOMMENDATIONS FOR FUTURE RESEARCH**

### **6.1 Introduction**

The purpose of this chapter is to provide some tentative conclusions about the relationship between deviance in segmentals and syllable structure and impressionistic judgements of ESL pronunciation. An attempt is made to indicate possible applications of these results for teachers of English as a second language. Recommendations for future research are also indicated.

### **6.2 Conclusions**

According to Oyama (1976), reading is more accented than spontaneous speech when the overall quality of pronunciation is evaluated by means of a scaling technique. This might indicate that the large number of pronunciation deviances in the speech samples can to a certain extent be attributed to the fact that the samples were not recordings of spontaneous speech, but recordings of reading.

The reason why spontaneous speech was not used in this study is because Lanham (1984) states that a comparison of South African Black English (SABE) reading with spontaneous speech suggests that reading provides the clearest evidence of the nature of the rules or conventions of SABE.

As the judges represented teachers of English that are English mother tongue, Afrikaans mother tongue and Zulu mother tongue, the results are indicative of the way other such teachers might judge such speech samples. However, as only two teachers from each

of the relevant language groups were used, the results cannot be generalized to all such teachers. This would only be possible if similar studies were conducted and the same results were obtained.

The motivation for setting up the panel of judges in such a way comes from previous research (Kachru and Quirk, 1981; Quirk, 1987; Smith, 1976, 1981; Strevens, 1978) where it was found that a speaker's comprehensibility in a language is usually based on the judgement of the native speakers of that language. Smith and Bisazza (1982:259) postulate that this criterion is no longer appropriate for speakers of English as an international language. A more useful evaluation would be judgment by both native and non-native speakers. It is very likely that one person's English is more comprehensible to one category of listeners than to another.

The results of this study may have been influenced by the experience of the judges. According to Thompson (1991) and Koster and Koet (1993), inexperienced raters generally perceive greater accentedness than experienced raters, and inexperienced raters are more stringent in rating the degree of accentedness than experienced listeners. One can deduce that language experts make sympathetic listeners. But there is disagreement as to the reliability of raters - should one use ordinary individuals or language experts? Should the raters be native speakers or non-native speakers? Empirical evidence seems to be equally divided. (The experience of the judges in this study ranged from 2 years to 19 years.)

Thompson (1991) and Koster and Koet's (1993) hypothesis is supported by various authors: Fayer and Krasinski (1987:321) found that non-native speakers are less tolerant of non-native errors than are native speakers. It may be that tolerance increases as language proficiency increases. Or non-natives may be embarrassed by their compatriots' struggles in the non-native language.

In this study only teachers were used as judges. This is justified by the literature stating that there is no statistical difference between the judgements of teachers and non-teachers (Galloway, 1980; Ervin, 1977), but non-teachers seem to be more accepting of L2 communications.

The findings of the research undertaken by the writer into the judgment of ESL pronunciation point to a significant relationship between deviance in the pronunciation of segmentals and syllable structure and impressionistic judgment of ESL pronunciation. The results indicate that there are moderate to very strong correlations between the pronunciation scores assigned by the judges and the independent variables. The pronunciation ratings correlated negatively with the segmental error rate (for both the word list and the reading passage) and the syllable structure errors (again for both the word list and the reading passage). The results of this study are, first of all, meaningful for the specific school which the subjects attend. The teachers of English at this school now know that the pupils' intelligibility is marred because they mispronounce segmentals and syllable structures. The teachers should, therefore, spend time on teaching the pronunciation of these two elements. Exactly how they should do this has not been researched by anybody and is a possible topic for future research.

It can be expected that the results of this study can probably also be generalised to other schools in the same region (Gauteng). These schools also have speakers of Black English as pupils and have the same problem with comprehensibility and intelligibility. They will benefit from knowing that deviance in the pronunciation of segmentals and syllable structure have a big influence on the comprehensibility of such pupils. But, just knowing about it would not rectify the problem. Teachers of English need to teach these pupils not to make such errors.

To a lesser extent, the results may even be meaningful to all South African schools with students speaking Black English. But, because the study was performed with a small study group, the results are less generalisable.

### **6.3 Recommendations for future research**

This study is by no means extensive or comprehensive. The deviances in the speech samples are not fully representative of the whole scope of deviances observed in the speech of speakers of Black English.

The results of this study may have been influenced by the ratio of non-native judges (4) and English mother tongue judges (2). But the number of judges is too small to make meaningful deductions about this matter. However, the following research findings are worth considering: Ervin (1977) found native speaking teachers most critical. Non-native speaking teachers were the most accepting of all raters for the communications of the lowest proficiency students. Non-native speaking teachers were "cautious in rendering evaluations of high proficiency students" (Ervin, 1977:58). Clearly, further empirical research into the judgements and criteria of native vs. non-native evaluators and of teachers vs. non-teachers of a target language, are in order. Other studies of this nature must not overlook pedagogical styles and expectations in comparing native speakers as teachers with non-native speakers as teachers.

When interpreting the results of this study, it must be kept in mind that attitudes and grading policies differ from one teacher to the next, there is no unity of judgement. Albr chtsen et al. (1980) found a high degree of consistency of judgment between "naive", that is, non-linguistically trained, American judges of the L2 performance of ESL students from a variety of backgrounds. Ensz (1982), Olsson (1973) and Politzer (1978) identify some factors (sex, age, profession, school or education experience) that affect the judgements of evaluators. Basically it can be said that young, not well-trained judges

are more accepting of errors of all types. The judges used in this study ranged in age from 25 to 55 and they all have at least a teaching diploma. But, again the number of judges used is too small to represent statistically significant groups.

The number of participants in this study is very small and bigger groups should be evaluated in order to confirm the findings of this study as the results are by no means conclusive. Perhaps speech samples of students of other provinces should also be evaluated and analysed.

The following research questions could afford more insight into the relationship between deviance in segmentals and syllable structure and impressionistic judgements of ESL pronunciation:

- How does the impressionistic judgment of ESL pronunciation of teachers and non-teachers, native speakers and non-native speakers differ?
- Is there a relationship between deviance in the pronunciation of segmentals and syllable structure and overall language proficiency?
- Should teachers be trained to focus on the teaching of the pronunciation of segmentals and syllable structure? How should teacher training courses be adapted to include this?
- Is there a relationship between the types of vowel errors and the judgment of pronunciation?
- What role does prosody play in the impressionistic judgment of pronunciation?

## **BIBLIOGRAPHY**

- ABBOTT, G. 1991. English across cultures: the Kachru Catch. **English Today**, 25:56-57.
- ADENDORFF, R. & SAVINI-BECK, M. 1993. The teaching of English vowels and consonants in the New South Africa. **Journal for Language Teaching**, 27:232-248.
- ALBRECHTSEN, D., HENRIKSEN, B. & FAERCH, C. 1980. Native speaker reactions to learners' spoken interlanguage. **Language Learning**, 30:394.
- ALEXANDER, N. 1988. English as the linking language in South Africa. **Language Projects Review**, 3:22-34.
- ALEXANDER, N. 1992. A language policy for a future South Africa. (In: YOUNG, D. (Ed.). 1992. How do we ensure access to English in a post-apartheid South Africa? *Proceedings of the English Academy of Southern Africa Conference*, Cape Town, 1-3 July.)
- AMUZU, K. 1992. The role of English in education in the New South Africa. **English Usage in Southern Africa**, 23:129-141.
- ANDERSON, J. 1983. Syllable simplification in the speech of second language learners. **Interlanguage Studies Bulletin**, 3:4-36.
- ANDERSON-HSIEH, J., JOHNSON, R. & KOEHLER, K. 1992. The relationship between native speaker judgments of nonnative pronunciation and deviance in segmentals, prosody, and syllable structure. **Language Learning**, 42:529-555.

- ARTHUR, B., FARRAR, D. & BRADFORD, G. 1974. Evaluation reactions of college students to dialect differences in the English of Mexican-Americans. **Language and Speech**, 17:255-270.
- ASHER, J.J. & GARCIA, R.C. 1969. The optimal age to learn a foreign language. **Modern Language Journal**, 8:334-341.
- BEEBE, L. 1984. Myths about interlanguage phonology. (In: ELIASSON, S. (Ed.). Theoretical issues in contrastive phonology. Heidelberg: Groos.)
- BIALYSTOK, E. & FROHLICH, M. 1977. Aspects of second language learning in classroom settings. **Working papers on bilingualism**, 13:1-26.
- BRENNAN, E.M. & BRENNAN, J.S. 1981. Accent scaling and language attitudes: Reactions to Mexican American English speech. **Language and Speech**, 24:207-221.
- BROSELOW, E. 1983. Non-obvious transfer: On predicting epenthesis errors. (In: GASS, S.M. & SELINKER, L. (Eds.). Language transfer in language learning. Rowley, Massachusetts: Newbury House Publishers.)
- BROSELOW, E. 1984. An investigation of transfer in second language phonology. **International Review of Applied Linguistics in Language Teaching**, 22:253-269.
- BUSH, D. 1982. Introversion-extraversion and the EFL proficiency of Japanese students. **Language Learning**, 32:109-132.
- CARTER, T.P. 1970. An interview with Thomas P. Carter. **National Elementary Principal**, 50:94-97.

CHASTAIN, K. 1975. Affective and ability factors in second language acquisition. **Language Learning**, 25:153-161.

CLARK, J. & YALLOP, C. 1990. An introduction to phonetics and phonology. Oxford: Basil Blackwell.

COHEN, J. 1977. Statistical power analysis for The Behavioral Sciences. Revised Ed. New York: Academic Press.

COOPER, P.A. 1989. An evaluation of attitudes towards conservative and extreme South African English dialects. **English Usage in Southern Africa**, 20:39-53.

CRUTTENDEN, A. 1994. Gimson's pronunciation of English. London: Edward Arnold.

CUMMINS, J. 1981. Age on arrival and immigrant second language learning in Canada: A reassessment. **Applied Linguistics**, 11:132-149.

DREYER, C. 1994. An introduction to research in language learning. Potchefstroom: Departement Sentrale Publikasies, PU vir CHO.

DREYER, C., WISSING, D.P. & WISSING, M. 1996. The relationship between cognitive styles and pronunciation accuracy in English as a second language. **South African Journal of Linguistics**, supplement 34:37-62.

EDMUNDS, C. 1987. The importance of Primary ESL teaching in a changing South Africa. **Education Journal**, 97:9-11.



EISENSTEIN, M. & VERDI, G. 1985. The intelligibility of social dialects for working class adult learners of English. *Language Learning*, 35:287-298.

ENGLISH LANGUAGE SERVICES, INC. 1968. English pronunciation: A manual for teachers. New York: The Macmillan Company.

ENSZ, K. 1982. French attitudes toward typical speech errors of American speakers of French. *Modern Language Journal*, 66:133-139.

ERVIN, G. 1977. A study of the use and acceptability of target language communication strategies employed by American students of Russian. Dissertation. Ohio State University.

FATHMAN, A. 1982. The relationship between age and second language productive ability. (In: KRASHEN, S.D., SCARCELLA, R.C. & LONG, M.H. (Eds.). Child-adult differences in second language acquisition. Rowley, Massachusetts: Newbury House Publishers.)

FAYER, J.M. & KRASINSKI, E. 1987. Native and nonnative judgments of intelligibility and irritation. *Language Learning*, 37:313-326.

FLEGE, J.E. & HILLENBRAND, J. 1984. Limits on phonetic accuracy in foreign language speech production. *Journal of the Acoustical Society of America*, 76:708-721.

FLEGE, J.E. & PORT, R. 1981. Cross-language phonetic interference: Arabic to English. *Language and Speech*, 24:125-146.

FOLEY, A. 1995. English as the language of choice at South African Colleges of Education: or, the lingo, the jingo and the damned standard. Paper presented at the *English in Africa* Conference. (Grahamstown, 12 September.)

- GALLOWAY, V. 1980. Perceptions of the communicative efforts of American students of Spanish. **Modern Language Journal**, 64:430.
- GARDNER, R.C. & LAMBERT, J.E. 1972. Attitudes and motivation in second-language learning. Rowley, Massachusetts: Newbury House Publishers.
- GASS, S. & VARONIS, E.M. 1984. The effect of familiarity on the comprehensibility of nonnative speech. **Language Learning**, 34:65-89.
- GATBONTON, E. 1975. Systematic variations in second language speech: A sociolinguistic study. Unpublished doctoral dissertation. Montreal, Quebec: McGill University.
- GILES, H. 1970. Evaluative reactions to accents. **Educational Review**, 22:211-227.
- GILES, H. & POWESLAND, P.F. 1975. Speech Style and Social Evaluation. New York: The Macmillan Company.
- GIMSON, A.C. 1980. An introduction to the pronunciation of English. London: Edward Arnold.
- GREER, A. 1994. The position of English in the New South Africa. **The Transvaal Education News**, 92:9-10.
- JACOBS, M. 1994. Consonantal variation in Zulu English mesolect. **South African Journal of Linguistics**, 12:16-25.
- JEFFERY, C. 1993. Standards in South African English. **English Academy Review**, 10:14-25.

- JOHANSSON, S. 1978. Studies of error gravity: Native reactions to errors produced by Swedish learners of English. Goteborg, Sweden: Acta Universitatis Gothoburgensis.
- JONES, D. 1981. English pronouncing dictionary. London: J.M.Dent & Sons.
- KACHRU, B.B. 1992. English as an international language: An attitudinal approach. **Studies in the Linguistic Sciences**, 22:113-119.
- KACHRU, B.B. & QUIRK, R. 1981. The pragmatics of non-native varieties of English. New York: St. Martin's Press.
- KARIMI, S. 1987. Farsi speakers and the initial consonant cluster in English. (*In: IOUP, G. & WEINBERGER, S. (Eds.). Interlanguage phonology: The acquisition of a second language sound system. Cambridge, Massachusetts: Newbury House Publishers.*)
- KOSTER ,C.J. & KOET ,T. 1993. The evaluation of accent in the English of Dutchmen. **Language Learning**, 43:69-92.
- KREIDLER, C.W. 1989. The pronunciation of English. A course book in phonology. Oxford: Blackwell.
- LAMBERT, W.E. 1967. A Social Psychology of Bilingualism. **Journal of Social Issues**, 23:91-109.
- LANHAM, L.W. 1976. English as a second language in Southern Africa since 1820. (*In: DE VILLIERS, A. (Ed.). 1976. English speaking South Africa today. Cape Town: Oxford University Press.*)

- LANHAM, L.W. 1978. South African English. (In: LANHAM, L.W. & PRINSLOO, K.P. (Eds.). Language and communication studies in South Africa. Cape Town: Oxford University Press.)
- LANHAM, L.W. 1984. English in South Africa. (In: LANHAM, L.W. & PRINSLOO, K.P. (Eds.). 1984. English as a world language. Cambridge: Cambridge University Press.)
- LANHAM, L.W. & MACDONALD, C.A. 1979. The standard in South African English and its social history. Heidelberg: Julius Groot Verlag.
- LASS, R. 1995. South African English. (In: MESHTRIE, R. (Ed.). 1995. Language and social history: Studies in South African Sociolinguistics. Cape Town: David Phillip.)
- LENNEBERG, E. 1967. Biological foundations of language. New York: Wiley and Sons.
- LUDWIG, J. 1982. Native-speaker judgments of second-language learners' efforts at communication: A review. *The Modern Language Journal*, 66:274-283.
- MACCARTHY, P. 1978. The teaching of pronunciation. Cambridge: Cambridge University Press.
- MAWASHA, A.L. 1982. English teaching and the multi-cultural environment. (In: EAGLESON, R.D. (Ed.). English in the Eighties. Adelaide: AATE.)
- MCDERMOTT, L. 1992. Conquering the tower of "standard" mythologies. (In: YOUNG, D. (Ed.). 1992. How do we ensure access to English in a post-apartheid South Africa? *Proceedings of the English Academy of Southern Africa Conference*, Cape Town, 1-3 July.)

- MERSHAM, G. 1987. South African English as a means for intercultural communication. *Lantern*, 36:23-31.
- MESHTRIE, R. & DUNNE, T.T. 1990. Syntactic variation in language shift: the relative clause in South African Indian English. *Language Variation and Change*, 2: 31-56.
- MORRIS, B.S.K. & GERSTMAN, L.J. 1986. Age contrasts in the learning of language-relevant materials: Some challenges to the Critical Period Hypothesis. *Language Learning*, 36:311-331.
- NAIMAN, N., FROHLICH, M., STERN, H.H. & TODESCO, A. 1978. The good language learner. Toronto, Ontario: Ontario Institute for Studies in Education.
- NATHAN, G., ANDERSON, W. & BUDSAYAMONGKON, B. 1987. On the acquisition of aspiration. (*In*: IOUP, G. & WEINBERGER, S. (Eds.). *Interlanguage phonology: The acquisition of a second language sound system*. Cambridge, Massachusetts: Newbury House Publishers.)
- NDEBELE, N.S. 1987. The English language and social change in South Africa. *English Academy Review*, 4:1-16.
- OLSSON, L.L. 1973. The effects of different types of errors in the communication situation. (*In*: SVARTVIK, J. (Ed.). *Errata: Papers in Error Analysis*. Lund: Sweden Publishers.)
- OLSSON, L.L. & SAMUELS, S.J. 1973. The relationship between age and accuracy of foreign language pronunciation. *Journal of Educational Research*, 66:263-268.
- OMAGGIO HADLEY, A. 1993. Teaching language in context. Massachusetts: Heinle & Heinle.

- ORTEGO, P.D. 1969. Some cultural implications of a Mexican American border dialect of American English. **Studies in Linguistics**, 21:77-84.
- OYAMA, S. 1976. A sensitive period for the acquisition of a nonnative phonological system. **Journal of Psycholinguistic Research**, 5:261-283.
- PENFIELD, W. & ROBERTS, L. 1959. Speech and brain mechanisms. New York: Atheneum Press.
- PIAZZA, L.G. 1980. French tolerance for grammatical errors made by Americans. **Modern Language Journal**, 64:425.
- PICA, T. & LONG, M. 1982. The classroom linguistic and conversational performance of experienced and inexperienced teachers. Paper presented at the 16th annual TESOL convention. May 1-6, Honolulu, Hawaii.
- PIMSLEUR, P., SUNDLAND, D.M. & MCINTYRE, R. 1966. Underachievement in foreign language learning. New York: Modern Language Association.
- POLITZER, R.L. 1978. Errors of English speakers of German as perceived and evaluated by German natives. **Modern Language Journal**, 62:257.
- PURCELL, E.T. & SUTER, R.W. 1980. Predictors of pronunciation accuracy: A reexamination. **Language Learning**, 30:271-287.
- QUIRK, R. 1987. Discourse across cultures: strategies in world Englishes. Englewood Cliffs: Prentice-Hall.

- QUIRK, R. & WIDDOWSON, H.G. 1985. English in the world: teaching and learning the language and literatures. Cambridge: Cambridge University Press.
- ROACH, P. 1991. English phonetics and phonology: a practical course. Cambridge: Cambridge University Press.
- RYAN, E.B. 1983. Social psychological mechanisms underlying native speaker evaluations of nonnative speech. **Studies in Second Language Acquisition**, 5:148-159.
- RYAN, E.B. & CARRANZA, M.A. 1975. Evaluative reactions of adolescents toward speakers of standard English and Mexican American accented English. **Journal of Personality and Social Psychology**, 31:855-863.
- RYAN, E.B. & CARRANZA, M.A. 1977. Ingroup and outgroup reactions to Mexican American language varieties. (In: GILES, H. (Ed.). *Language, ethnicity and intergroup relations*. London: Edward Arnolds.)
- RYAN, E.B. & SEBASTIAN, R.J. 1980. The effects of speech style and social class on social judgments of speakers. **British Journal of Social and Clinical Psychology**, 19:229-233.
- SATO, C. 1984. Phonological processes in second language acquisition: Another look at interlanguage syllable structure. **Language Learning**, 34:43-47.
- SCHUMANN, J.H. 1976. Affective factors and the problem of age in second language acquisition, **Language Learning**, 25:209-235.

- SCHUMANN, J.H. 1978. Social and psychological factors in second language acquisition. (*In*: RICHARDS, J. (Ed.). *Understanding second and foreign language acquisition*. Rowley, Massachusetts: Newbury House Publishers.)
- SCOVEL, T. 1969. Foreign accents, language acquisition, and cerebral dominance. *Language Learning*, 19:245-253.
- SCOVEL, T. 1981. The recognition of foreign accents in English and its implications for psycholinguistic theories of language acquisition. (*In*: SAVARD, J.G. & LAFORGE, L. (Eds.). *Proceedings of the Fifth International Association of Applied Linguistics*. Quebec, Quebec: University of Laval Press.)
- SEBASTIAN, R.J., RYAN, E.B. & CORSO, L. 1978. Social judgments of speakers with differing degrees of accentedness. Paper presented at the meeting of the Ninth World Congress of Sociology. Uppsala: Sweden Publishers.
- SELINKER, L. 1972. Interlanguage. *International Review of Applied Linguistics in Language Learning*, 10:209-231.
- SMITH, L.E. 1976. English as an international auxiliary language. *A Journal of English Language Teaching in Southeast Asia*, 7:38-53.
- SMITH, L.E. 1981. *English for cross-cultural communication*. New York: St. Martin's Press.
- SMITH, L.E. & BISAZZA, J.A. 1982. The comprehensibility of three varieties of English for college students in seven countries. *Language Learning*, 32:259-269.



- SNOW, C.E. & HOEFNAGEL-HOHLE, M. 1982. Age differences in the pronunciation of foreign sounds. (In: KRASHEN, S.D., SCARCELLA, R.C. & LONG, M.H. (Eds.). *Child-adult differences in second language acquisition*. Rowley, Massachusetts: Newbury House Publisher.)
- STATISTICA, INC. 1991. CSS: Statistica (compact statistical system). United States of America.
- STREVENS, P. 1978. From the classroom to the world: From student to citizen, from teacher to educator. *Foreign Language Annals*, 11:349-356.
- SUTER, R.W. 1976. Predictors of pronunciation accuracy in second language learning. *Language Learning*, 26:233-253.
- TARONE, E. 1980. Some influences on the syllable structure of interlanguage phonology. *International Review of Applied Linguistics in Language Teaching*, 18: 139-152.
- THOMPSON, I. 1991. Foreign accents revisited: The English pronunciation of Russian immigrants. *Language Learning*, 41:177-204.
- TITLESTAD, P.J.H. 1994. The standard English debate and South Africa: A discussion paper. *Journal for Language Teaching*, 29:178-193.
- TRUDGILL, P. 1975. *Accent, dialect and the school*. London: Edward Arnold.
- VAN DER WALT, C. 1993. ESL or SAE? How about a new English? *Journal for Language Teaching*, 27:290-304.
- VAN WYK, E.B. 1978. *Praktiese fonetiek vir taalstudente: 'n inleiding*. Durban: Butterworths.

- WEINBERGER, S.H. 1987. Interlanguage phonology: The acquisition of a second language sound system. Cambridge: Newbury.
- WELLS, J.C. 1982. Accents of English 3 - Beyond the British Isles. Cambridge: Cambridge University Press.
- WILLIAMS, F., WHITEHEAD, J.L. & MILLER, L.M. 1971. Attitudinal correlates of children's speech characteristics. Austin, Texas: Center for Communication Research.
- WISSING, D.P. & ZONNEVELD, W. 1996. Final devoicing as a robust phenomenon in second language acquisition: Tswana, English and Afrikaans. **South African Journal of Linguistics**, supplement 34:1-37.
- WRIGHT, L.S. 1993. English in South Africa: Effective communication and the policy debate. Grahamstown: Rhodes University.

## **APPENDIX 1**

### **Reading passage**

During cold winters people must be extra careful to prevent excessive exposure to cold and serious loss of body heat. Layers of light, loose clothing give better protection than one thick heavy item. Between each layer there is a film of trapped air which, when heated by the body, acts as excellent insulation. Tight clothing should be avoided because it does not leave room for the trapped air. When people exercise or work hard, layered clothing becomes particularly important. As they move about they may get overheated. If a person becomes too warm, layers of clothing can be removed during the active time, and put back on when the exercise is stopped. By wearing layers of clothing during activity, a person can avoid an unnecessary chill.

## **APPENDIX 2**

### **Word list**

ice	cup
bad	bud
heard	dug
Pat	cease
Tom	leave
ten	tooth
football	badge
it must be	cub
had	bud
national team	dug
eyes	seize
head	leaf
turn	soothe
catch	batch
	teach
	Titch