Phonological Variation in Nigerian English

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A List of Vowel and Other Symbols Used

iː close, front, long

ɪ close, front, short

e raised half-close, front, short

ɛ half-close to half-open, front, short

eː half-close, front, long

ɛː half-open, front, long, reflex of R.P. /ɛə/

ɛ̈ː half-open, centralized, long, reflex of R.P. /əː/

æ raised open, front, short

æː raised open, front, lengthened

a open central, short

aː open central, long

ə half-open to half-close, central, weak

ʌ raised open central, short

əː half-open to half-close, central, long

ɨ close central, unrounded

ʉ close central, rounded

ɑː open back, unrounded, long

ɒ open back, slightly rounded, short

ɔ half-open, back, fairly rounded, short

ɔ̈ half-open, back, centralized, short

ɔː half-open to half-close, back, rounded, long

o half-close, back, rounded, short

uː close, back, rounded, long

aɪ glide from open central to close front

aʊ " " " " " " back

ɔɪ " " " or half-open back to close front

ɪə " " close front to central

ɛə " " half-close or half-open front to central

ɘo glide from central to close back

oɘ " " close back to central

ɔɘ " " half open back to central

ɛa " " half-open or half-close to open central

ɪa " " close front to open central

ʊa " " " back " " "

ɛa: As for last three above but with second element

ɪa: considerably lengthened and possible re-syllabifi-

ʊa: cation

¯ over a vowel symbol indicates vowel length in phonemic transcriptions

´ over a vowel symbol indicates high tone

` over a vowel symbol indicates low tone (mid tone is unmarked)

ˇ indicates rising tone

ˆ indicates falling tone

All other symbols and diacritics have I.P.A. values

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Abstract

The study is based on tape recordings of the English of forty-five Nigerians, fifteen each from the three major ethnic groups - Hausa, Igbo and Yoruba. This corpus was transcribed phonetically and analyzed both phonologically and socilinguistically.

Chapter One is introductory and offers a general overview of the literature and then places the study and its methodology in this context. The next three chapters focus on the range of phonological systems used by speakers of each mother-tongue and variation within these systems at the levels of consonants, vowels and the syllable in that order.

A pyramid-shaped continuum with R.P. at its top, Hausa English at its left base and Southern Nigerian English at its right base is proposed to account for the complex interaction of phonological systems in the Nigerian English continuum.In Chapter Five, an attempt is made to measure the relative proximity of various groups of speakers to R.P. and to explore the possible determinants of this proximity.

In Chapter Six, the melody and intonation systems of Nigerian English - which are very different from those of R.P. - are investigated and the two systems compared. The Conclusion relates the findings of the study to the teaching of oral English in Nigeria.

Preface

The idea that has now been translated into the present thesis started as mere wishful thinking in 1975 when I was writing an essay on Nigerian English as part of the requirement for the M.A. degree of the University of Leeds. I was aware of the rich and exciting rewards to be obtained from reseaching into Nigerian spoken English but lacked the necessary phonetic and linguistic training to undertake the task. That I have now been able to do so is due to the sacrifice, kindness and dedication of many people who have either taught me, encouraged me or otherwise enabled me to work on the project by solving some of my other problems. To these I owe a debt of gratitude.

I would like to thank, first and foremost, my supervisor Dr Gerry Knowles for teaching me Phonetics, for supervising my work so well and for his kindness and encouragement.

I am also grateful to Dr Francis Katamba for welcoming me into his Phonology classes, for very helpful comments on the first draft of some of my chapters and for allowing me free access to his library.

This study was first begun at the University of Ibadan under the supervision of Professor Ayo Banjo. I am most grateful to him for his enthusiasm and encouragement during those initial stages.

I am also grateful to Alhaji Ahmed Ibrahim Kontagora of the Federal Radio Corporation of Nigeria, Kaduna and Alhaji Sule Ladan of the Nigerian Broadcasting Corporation, Kaduna for allowing me access to their respective

archives. My thanks are also due to Mallam Yuguda Kila, formerly of the Kano Scholarship Board, for rare administrative compassion.

I am also grateful to Dr Loreto Todd of the University of Leeds who supervised my first essay on Nigerian English and persuaded me to think of a bigger enterprise.

But perhaps I owe more gratitude to my informants, especially those who responded to my questionnaire and permitted me to use their speech samples, than to anyone else. In the same category as my 'main informants' are my 'supplementary informants' - those who allowed me to record them in their rooms or came to the University of Lancaster Phonetics Laboratory and willingly parted with their voices ! Mr Biodun Owoeye acted not only as my principal Yoruba informant but also as my first statistics teacher. Mr Femi Osanife very kindly took over the role of Yoruba informant when Mr Owoeye left Lancaster, and in fact provided all the data on Yoruba and Nigerian English used in Chapter Six. Mr Peter Nwaogboso Ụkwụ acted, with characteristic cheerfulness, as my Igbo informant throughout and Mallam Bello Bako Dambatta acted as my Hausa English informant for the purpose of the comparison mentioned in Chapter Six. Mr Paul Potts (M.A. in Linguistics, Lancaster, 1979/80) acted - unwittingly - as my R.P. informant for a time. But perhaps I should single out two of my supplementary informants for special thanks: Mr Geoffrey Sampson and Mr Harry Johnson both of the School of English, University of Lancaster, who, at very short notice, sacrificed over one hour of their time in order to allow me to

photograph fundamental frequency contoursof their varieties of English (Southern British English and Northern British English respectively) for comparison with Nigerian English.

I am also deeply grateful to Mr Len Uphill, Experimental Officer in charge of the Phonetics Laboratory for his help and technical advice and for his many acts of kindness. I am also grateful to the staff of the Inter-Library Loans section of Lancaster University Library for so efficiently obtaining many articles, books and theses for me.

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CHAPTER ONE

Introduction

> "... a new English, still in full communion with its ancestral home but altered to suit its new African surroundings"

..0 This was how the leading Nigerian novelist, Chinua Achebe, characterized the kind of English that could "carry the weight of [his] African experience" as a creative writer. But it can just as easily be used to describe the kind of English spoken and written by ordinary Nigerians, the kind of English that has come to be known as "Nigerian English". However, although the existence of Nigerian English is no longer a matter of controversy, its precise characteristics and distinguishing features have not yet been adequately and comprehensively defined. It is clear even to the most casual observer that Nigerian English is not a single variety of English but a conglomeration of many varieties which relate to one another in sufficient respects to qualify for a common cover term. However, even such a simple claim has not yet been empirically tested, though there is no shortage of impressionistic opinions about the exact number of such varieties.

The present study is therefore an attempt to describe Nigerian English where it is arguably most Nigerian - in the spoken form - based on the speech of forty-five Nigerian speakers of Hausa, Igbo and Yoruba. Since Nigerian English is not one, but several, varieties, this description is handled within a variationist framework.

Thus variation in the spoken English of Nigerians is explored on several different levels: geographical, ethnic, social and linguistic. Such an approach has made it possible for a model which captures the interaction of several phonological systems within the Nigerian English continuum to be worked out. Throughout the study, the total context in which language is learned and used is taken into account because we are concerned as much with explanation as with description.

1.1. Nigerian English: An Overview of the Literature

As a field, Nigerian English is very long on 'reflections' and pre-analytical hunches but very short on systematic, data-based studies. Notable among the major studies is Adesanoye's (1973) which was a Ph.D thesis presented to the University of Ibadan. Adesanoye was interested in Nigerian written English and based his study on articles published in the Nigerian press, law court judgements, letters written by junior workers of the University of Ibadan and retrieved from their personal files etc. Adesanoye studied the nature and frequency of grammatical and lexical 'deviations' in his corpus and concluded that Nigerian (written) English was a continuum in which three varieties could be identified, the third being the closest to Standard English. There was no rigid equation of any variety with any educational level, though there was shown to be progressive decrease in the frequency of deviations as the educational or occupational level of the writers rose. Thus primary school graduates and university

junior workers were observed to be users of the first variety while secondary school graduates, most magistrates and many journalists were observed to be users of the second variety. Most university lecturers, high court and supreme court judges, newspaper editors and other sophisticated authors were classified as users of the third and most cosmopolitan variety. It is noteworthy that such a correlation of formal educational levels with the levels of 'competence' in *spoken* English is untenable as will be shown in Chapter 5.

Two criticisms of Adensanoye are pertinent: his informants came from the South, and most of them from the Yoruba ethnic group, but his findings are projected as representing English in the whole country. The second criticism concerns the stylistic diversity of his corpus: how reasonable is it to compare an application from a university junior worker with the text of a high court judgement, or a newspaper's editorial with the more hastily written correspondent's report? Clearly there are issues of stylistic comparability which Adesanoye did not even address himself to.

Afolayan (1968) also studied Yoruba English. His University of London PhD thesis was explicitly concerned with the "linguistic problems of Yoruba learners and users of English". Afolayan studied the 'problems' of Yoruba speakers in phonology, lexis and syntax and his approach was that of a contrastive linguist interested in error analysis. One of the limitations of his study is that it covered too wide an area and his two-volume thesis

is more of a mine of unprocessed data than a repository of analytical insights.

Afolayan could not give phonology the attention it deserved since his study was concerned with all levels of linguistic analysis. Nuttal (1961) on the other hand, was concerned exclusively with phonology. Hers was an M.A thesis presented to Manchester University and was explicitly a study of "the interference of Hausa with English". It belongs, therefore, in the same category as Afolayan's in being an error-analysis type of study. These studies are very valuable in providing detailed data-based insights into varieties of Nigerian English but interference is only one factor out of many which combine to shape any second language variety of English.

More recently, Ekong (1978) carried out a data-based study aimed at describing "the vowel system of a standard variety of Nigerian spoken English" which she presented as an M.A. thesis to the University of Ibadan. Considering the constraints of time (a mere three months) and scope under which she operated, Ekong's was a remarkable achievement. She had a very narrow informant-base which was not heterogeneous enough to represent the whole country. She reconciled the contradictions in the number of vowels used by individual speakers and variations by the same speakers in different styles by arbitrarily suggesting the following vowel system for the sample group (1978, p.80):



Vowels in circles are marginal in the proposed system. However, no one speaker had all the vowels in the proposed system, and only "12 contrasts were made consistently by at least 50% of the speakers (1978, p. 67)." Ekong was of course looking for a 'standard vowel system' and so had to abstract an ideal from her data. As will be seen in Chapter Three, we prefer to work out individual vowel systems for our speakers and then show how the different systems relate to one another in a continuum.

A different kind of study is Tiffen's (1974) who carried out a survey of the intelligibility of Nigerian English to British listeners for a University of London PhD. Tiffen recruited 24 undergraduates of Ahmadu Bello University in 1968 as his informants. They were selected in equal numbers from the Hausa and Yoruba ethnic groups; no Igbo speakers were included because Tiffen could not have access to a similar group of Igbo undergraduates as the Nigerian civil war (1967-70) was being fought at the time. Tiffen had 240 British people who had no previous familiarity with Nigerian English listen to his 24 informants so that each informant was listened to by 10 listeners. Tiffen also used an R.P. speaker as a control

informant. He then computed instances of intelligibility failure for each informant from the point of view of each listener and then averaged the computations for each informant's ten listeners. Tiffen then converted these figures to percentages of each informant's over-all intelligibility. The R.P. speaker was found to be 99.4% intelligible and the Nigerians ranged from an intelligibility rating of 92.7% to 29.9%. The mean intelligibility rating of all the Nigerians as a group was 64.4%. Tiffen also analyzed instances of intelligibility failure which analysis offers insights into the nature of divergence between Nigerian English and R.P.

Other major studies of Nigerian English include a collection of very scholarly articles edited by Spencer (1971) - especially his own "West Africa and the English Language", Bamgbose's "The English Language in Nigeria" and Kirk-Greene's "The Influence of West Africa on the English Language". More recently, UbahakWe (1979) has edited an equally valuable collection of articles dealing with "the varieties and functions of English in Nigeria".

Dunstan (1969) edited a very useful collection of articles which deal exclusively with contrastive analyses of the phonetics and phonology of English and 12 of the languages of Nigeria - including Hausa, Igbo and Yoruba. As a handbook for teachers of English, Dunstan's is an indispensable book but as we shall show, mother-tongue interference accounts for only a part of the divergence between Nigerian English and R.P.

It is useful to survey some of the minor studies of Nigerian English according to their collective topics.

Salami (1968) called the existence of a Nigerian variety of English into question. He insisted that if it did exist, we had no right to speak about it before it had been adequately described and defined. Such a description had to be based on "a proper linguistic analysis of the different types of English spoken in Nigeria and [it had] to distinguish clearly between 'simple mistakes' and 'legitimate' Nigerian usage" (1968, p. 105). This echoed the report of the Ford Foundation committee (Jacobs 1966) which looked into the teaching of English in Nigeria which stated (1966, pp. 92-3):

> One of the greatest language problems which Nigeria will have to face in the coming years is that of the development of a standard form of Nigerian English. It seems fairly obvious that such a standard will *not* be the R.P. of the British Isles, but it is not quite so obvious as to what it *will* be. In order that the decision be a wise one, it is necessary to base it on data which are not available. Research to uncover these facts will have to be conducted by scholars of high competence. Their inquiry should be designed to provide the answers to the following questions:
> a) What are the varieties of English spoken in Nigeria at the present time?
> b) In what way do they differ from
> 1) each other?
> 2) other varieties of English spoken in West Africa?
> 3) varieties of English spoken by native speakers of English?

A similar call was made by Fresco (1967).

Various pre-analytical typologies of Nigerian English have been proposed. Brosnahan (1958) observed that Southern Nigerian English was similar to the English spoken "all along the West Coast of Africa" (1958, p. 105). He identified four levels of English in Southern Nigeria: Pidgin, spoken by people who had no education, a primary school level, a secondary school - teachers'

college level, and a university level which was the closest of the four levels to R.P. Our study contradicts Brosnahan's impressionistic classification which was coterminous with education. As will be shown in Chapter Five, education does not correlate markedly with the Nigerian speaker's level of approximation to R.P.

Strevens (1965) recognized three broad types of English in West Africa, namely type 1 spoken in Northern Nigeria, Northern Ghana, Sierra Leone and "possibly the Gambia" (1965, p. 113); type 2 spoken in Southern Nigeria and Southern Ghana and type 3 spoken in Freetown. According to Strevens, the Freetown type differed from the others in that it used "a system of sentence stress" which was precisely what Jones (1960) said it did not.[1] Strevens also claimed that "Educated African Pronunciations" stood apart from less educated accents by employing vowel length distinctions, a /s/ - /z/ distinction and a system of sentence-stress and intonation that approximated that of R.P. It is, of course, possible that because of what Banjo (1970) calls the "decolonization of the English language in Nigeria" Strevens' 'Educated African Pronunciations' no longer have the features he attributed to them in 1965. On the whole Strevens' classification is of little value: it covered too large a geographical area and was based on impressionistic reflection rather than hard data.[2]

Walsh (1967) classified all the varieties of English spoken by 'educated' Nigerians as one general *type* which was further divisible into mother-tongue-based

varieties and then into sub-varieties until the idiolectal level is reached. Like Strevens's, Walsh's typology was not based on falsifiable empirical evidence.

Banjo (1971b) was interested in identifying the variety of Nigerian English that was both socially acceptable to Nigerians and internationally intelligible with the aim of setting it up as a standard for teaching and broadcasting. He identified four varieties which occupied "points on a cline". At one end, there was a variety of English which made liberal use of mother-tongue phonology and at the other end was another that was indistinguishable from British English. These would correspond to the two ends of the continuum we propose for Nigerian English in Chapter Three. In between Banjo's two ends, there were two middle varieties, one close to the mother-tongue extreme and the other close to the British English end. Banjo rejected the two varieties at either end of his cline, the one because it was not internationally intelligible and the other because it was not socially acceptable. He also rejected the middle variety that was close to the mother-tongue end because it was equally unintelligible internationally and so settled for the third variety (the middle variety which was close to the British English end) which he considered to be both socially acceptable and internationally intelligible. This variety would correspond to the accents of our"sophisticated" speakers (see Chapter Five). However, unlike Banjo, we are prepared only to identify the end points of our continuum leaving the number of divisions within the continuum unspecified because demarcation

lines cannot be drawn on empirical grounds.

There are numerous other articles on Nigerian English - many of them on practical problems facing learners, teachers and examiners such as Stevenson (1969), Sofenwa (1975), Banjo (1976), Grieve (1967) and Kapelinski (1965) which we cannot review in detail.[3]

The present study is an attempt to answer the call of Jacobs (1966), Freso (1967) and others for a comprehensive study of Nigerian spoken English. We explore and attempt to answer questions such as the following:

(i) What varieties of English are spoken in Nigeria and what features do they share with one another?

(ii) How are these varieties different from one another and from R.P.?

(iii) What is the most objective way of accounting for the complex interaction of these varieties with one another? Is a division of these varieties of English into a number of discrete types empirically justifiable?

(iv) To what extent are extralinguistic factors correlateable with variability in Nigerian English?

1.2.0. Theoretical Issues

A study such as this is necessarily multi-dimensional. Being a study of a second language it has to take into account developments made in contrastive linguistics, interference theory and second language

acquisition. Being a study of spoken language, it must bring to bear upon it developments in phonological theory. Finally, being a study of variation, it must incorporate the recent theoretical insights of sociolinguistics.

However, this does not exhaust the list of subjects from which explanation has been sought in the study. These include history, statistics and sociology. We are primarily interested in explanation and have been prepared to seek it in any discipline. Language is a product of human culture and any comprehensive study of it must take into account the total context in which it is learned and used - psycholinguistic, social and historical among others. For this reason, we have found it more profitable to adopt a flexible eclectic approach to all theories and disciplines in our search for reasonable explanations which fit our data. The alternative would have been a narrow, rather partisan single theoretical approach, the sole aim of which would be to demonstrate the superiority of the theory over its rivals rather than to account for the data. In the following sections, we review developments and controversies in second language acquisition, phonological theory and sociolinguistic theory in that order and relate them to the present study.

1.2.1. Second Language Acquisition

Studies in second language acquisition are usually concerned with very young learners acquiring a second language in a natural setting or with adult learners acquiring a second language in a more formal setting. In

the former case, it has been found that "first and second language learning is similar in natural situations" (Ervin-Tripp 1978, p. 205). In the latter case, the product of the learning process has been found to be so different from both the first and the second language that it has been christened 'interlanguage' (Selinker 1972). It is important to note that Selinker himself made the point that he was concerned "with a psychological perspective" (1972, p. 216, f.n. 15) rather than sociolinguistics and that on the latter ground his 'interlanguage' would be inapplicable to stable second language regional varieties of English, such as Indian English and West African English.

We do not regard Nigerian English as an interlanguage from any perspective. The Nigerian child begins to learn English quite early - at the age of six - and continues to receive formal instruction in it until he leaves secondary school at the age of 17 or 18. All this time he uses English intensively - it being the medium of instruction after the first three years of schooling, and, more importantly, the official language and, at the elite level, the language of cross-ethnic communication and the mass media. However, unlike the English-speaking children who were acquiring French in Switzerland studied by Ervin-Tripp (1978), the Nigerian child does not learn English in a "natural setting". Also, unlike Spanish-speaking Mexican engineers learning English in order to be able to read American engineering journals, the Nigerian child starts quite early. Thus by the time the Nigerian child completes his formal edu-

cation (say after taking a university degree) he has practically ceased to be a learner of English - except in so far as language learning, even in the case of first language speakers, is a life-long process. The term 'interlanguage' which implies an intermediate stage between the first and second language is therefore inappropriate as a label for Nigerian English.

However, the variety of English so acquired by the Nigerian speaker is very different in many respects from any native variety of the language. Scholars have tended to account for this difference only in terms of analyzing 'errors' made by the second language speaker. Almost inevitably, such error analyses point to mother-tongue interference as the chief source of 'deviance'. It should be stated here that the present study is *not* an error analysis. As an extension of the principle of objectivity in linguistics which abandoned the prescriptive notion of the inherent inferiority of non-standard variants of a native language in relation to the standard form, we view regional and national variants of English in those parts of the world where it is intensively used as a second language as being merely *different* but not *deviant* from any native variety of the language.

An isolated second language learner can commit errors but a whole country cannot be considered to be in error. A linguistic error acquires such a status by violating some rule of a given variety of the language which then renders it unacceptable to all normal users of that

variety. Since the Nigerian speaker is not isolated but part of a community of several million speakers of that variety of English, he cannot be considered to be in error unless it can be shown that his performance violates the rules accepted and used by most members of the Nigerian speech community. It is therefore more profitable to study Nigerian English objectively with a view to understanding the nature of its rules and the patterns of variation within it as well as the correlation of such patterns with social attributes than to examine it from the point of view of a native model.

There are differences between first and second language learning which profoundly affect the acquired language in each case. We shall be concerned solely with the acquisition of phonology and for convenience, we shall use a hypothetical Igbo child for illustration. The Igbo child acquires her mother-tongue as schematized in Fig. 1.1. She hears Igbo from her parents and other Igbo-speaking people in a natural setting. As soon as she is able to speak, she begins to produce such Igbo utterances as her *natural linguistic capacity* will permit at that particular stage in her development. The output is speech that is recognizably Igbo.

When she is six years old, and having virtually acquired the phonology of Igbo to an adult standard, the Igbo child goes to school. There she is taught to read and write both Igbo and English by Igbo teachers who have themselves never been taught by a native speaker of English. A lot of the English teaching is done formally in the classroom, but our Igbo child also learns a lot

from other pupils in the school, from radio and television, and, occasionally, from her parents. As she gets older, she begins to learn even more English from books and newspapers. She does not have a teacher who is a native speaker of English until she goes to university, by which time the phonology of her English has virtually ossified. Unlike when she learns Igbo, the channel through which she learns English is dual - i.e. she learns it both through speech and the written word. Unlike when she learns Igbo - when her natural linguistic capacity is language-neutral - now when she learns English, this natural linguistic capacity has been largely replaced by the exigencies of Igbo phonology, though a residue does survive. Her acquisition of English phonology is therefore affected by the medium through which she acquires it (speech *and* writing - and hence orthographic influence), by the nature of the model to which she is exposed (Igbo-speaking teachers of English), by the already acquired Igbo phonology as well as such residues of her natural linguistic capacity as survive. The process is schematized in Fig. 1.2.

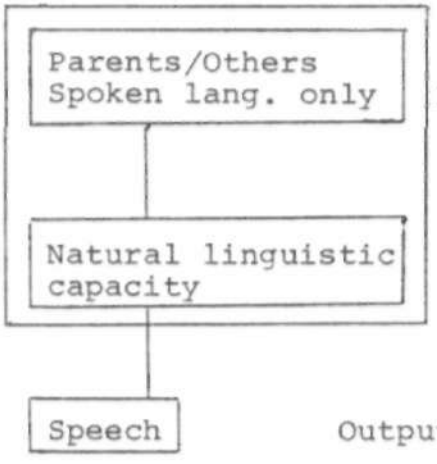


Fig. 1.1
Native Language Learning

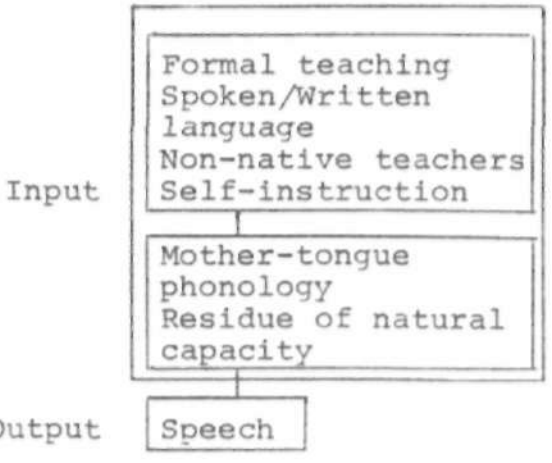


Fig. 1.2.
Second Language Learning

Scholars have tended to overlook the complex components of the input to second language learning and to examine the output only, thereby arriving at the simplistic explanation that the difference between the output of the second language speaker and that of a native speaker is the result of interference by the second language speaker's mother-tongue. Used in this way, interference is a much abused term. Interference ought to be used to refer to those differences between the two languages which are traceable to the influence of the mother-tongue and to no other source. Thus the Igbo child who uses an identical vowel system for both Igbo and English cannot be said to be the victim of interference per se, unless it can be shown that the model to which she has been exposed contains as many vowels as those of the target model in which case interference properly refers to her native language obstructing her acquisition of such a system.

As will be evident in the following chapters, interference as properly defined above accounts for a relatively small amount of the differences between Nigerian English and R.P. English orthography is probably a far more important source of divergence between the two kinds of English than interference per se.

1.2.2. The Relevance of Phonological Theories

The analysis of natural speech data tends to call the validity of most phonological theories into question. This is so even where the language under study is a native one because speakers are not as consistent as theoreticians would have them be. Nevertheless many insights which theoreticians produce either on the basis of idealized data or some other data turn up as quite valid for completely different data. The tragedy is that disciples and champions of each theory fail to realize that theirs only offers a partial explanation of reality. Instead, each theory is regarded by its protagonists as the best.

When the phonologist tries his hand at analyzing a second language where the complexity of variation and non-homogeneity is even greater, the inadequacy of his tools becomes even clearer. Wells (1973) who studied the adaptation of pronunciation by Jamaica-born immigrants in London found that the structuralist and transformationalist descriptions of language "as though it were a single coherent system ... when this was not strictly the case ..." (1973, p. 115) was inadequate in studying highly variable data.

Traditional phonemics, like other theories of phonology, assumes that the speaker and the speech community are consistent and homogeneous and is equipped only to handle predictable linguistic

variation. Thus Moulton (1960) found it ill-equipped to handle heterogeneous data. Phonemes have 'allophones' which are either in 'complementary distribution' or 'free variation'. But as students of sociolinguistics, we now know that so-called free variation is not free but rule-governed, and to a large extent correlateable with extralinguistic factors.

Prosodic analysis is still unsurpassed in the depth of the insights it throws into non-segmental phenomena. However, its analysis of segmental phenomena is not correspondingly insightful; indeed its polysystemicism is as far removed from reality as some of the abstract analyses of generative phonology.

Generative phonology as a branch of transformational grammar is concerned with the description of an ideal speaker-hearer's competence. This aim cannot be farther away from the aim of the present study which is to describe and account for the *performance* of forty-five *real* speaker-hearers. However, with sufficient determination, there is no reason why it should not have been possible to force our data into the formalism of generative phonology.

One can hardly outdo such critics of generative phonology as Foley (1977) (who says it is not a theory of phonology but is merely transformational phonetics), Donegan and Stampe (1979) (who say it is not a theory) and Sampson (1980) (who shows that as a theory it is "prima facie implausible" but is nevertheless fun to practise!). The fact that feature-counting is proposed in the standard theory as the best way to evaluate the explana-

tory adequacy of a rule means that generative phonologists spend most of their time and energy thinking about the best formalism in which to express a rule rather than seeking genuine explanation.

Natural generative phonology is an attempt to remedy this obsession with mechanical formalism and to provide a less abstract and more down-to-earth version of generative phonology, hence the qualification 'natural'. Natural generative phonology is a considerable improvement on the standard theory and is particularly relevant to the present study in that it makes claims about syllabic phonology for which Nigerian English provides a good testing ground (see Chapter Four).

An even more radical departure from Chomsky and Halle's (1968) generative phonology is Donegan and Stampe's natural phonology. This is a 'back to nature' phonology which seeks natural, i.e. phonetic explanation for phonological phenomena. It is particularly insightful in throwing light on phonological universals and child language acquisition. However, it is an over-reaction to the abstractness of generative phonology in that it errs on the side of common sense by reducing all phonology to phonetics. In particular, natural phonology has nothing interesting to say about phonological processes which have no phonetic motivation. As Anderson (1981) said, *not all phonology can be reduced to mechanical, phonetic* factors because language is not only a product of the human vocal apparatus but of the human mind as well. Nevertheless, we have found some of the claims of natural

phonology valid in understanding Nigerian English. For example, natural phonology claims that assimilation is a natural process and will apply in a foreign language which provides learners with the opportunity if that is not available in the native language. This has been found to be true in that Igbo and Yoruba speakers, in whose languages consonants do not occur syllable-finally and where therefore consonant assimilation does not occur (apart from that of syllabic nasals to the place of articulation of the following consonant) nevertheless show extensive consonant assimilation when they speak English.

Theoretical phonology as proposed by Foley (1977) is another reaction to generative phonology which seeks to offer an alternative to it. Foley's is a commendable and bold attempt to propose a theory of phonology which rightly lays emphasis on *explanation* rather than description. However, while the goal of Foley's theory is admirable, his exposition of it founders disastrously. As correctly pointed out by Katamba (1979), Foley's attempt to divorce phonological theory from a phonetic base smacks of sophistry. In particular, one cannot imagine on what grounds other than phonetic the notion of phonological strength and weakness is arrived at. How else, other than on phonetic grounds, do we know that when p changes to Φ, that is a weakening process and that when Φ changes to p, that is a strengthening process? Although Foley rightly accuses Chomsky and Halle of excessive formalism, he is guilty of the same offence to a greater degree than they are: he uses Greek letters to conceal the phonetic basis of his strength scales. Thus the manner

of articulation parameter is called p and the place of articulation parameter is called α. Like Hooper (1979), Foley provides consonant strength hierarchies whose validity we test against evidence from Nigerian English in Chapter Four. It is difficult to falsify Foley's claims even where they are palpably false because he has been careful enough to provide provisos in the form of language-specific "parochial conditions" which may violate his so-called universal hierarchies. In fairness to Foley, he also consistently hedges his claims with "unless evidence is adduced to the contrary". Nevertheless, as Katamba (1979) points out, Foley's data-base (mainly Indo-European languages) is too narrow for the kind of universal claims he makes.

We return now to our data. It was clear right from the transcription stage that none of these phonological theories could fairly and sensitively account for the great variability of the data. Take the /θ/-/t/ opposition in the output of speaker (lO) for instance. When all the words which have /θ/ in English were counted in his corpus, it was found that he had [θ] on six occasions, [t̪] on two occasions and [t] on one occasion. If we adopt the traditional phonemic approach, [t̪] and [t] would be allophones of /θ/ and since their distribution (as well as of [θ], the principal member) is not predictable on phonological grounds they would be said to be in 'free variation'. But then [t] is also a member of another phoneme /t/ and, as Prague School phonologists would say, the two phonemes are neutralized in which case an archiphoneme /T/ is set up to incorporate the two at the point of neutralization.

The trouble is, the point at which neutralization occurs cannot be stated with the same degree of confidence that final plosive neutralization can be stated in German for instance. This is because although speaker (10) knows that the phone in question is [θ], he cannot produce it all the time in normal natural speech, though he represents it accurately in his writing as 'th' as distinct from 't' and the presence of the dental [t̪] as an exponent of this phone in his speech also testifies to the fact that in his mental representation of it, /θ/ is different from /t/.

Similarly, speaker (82) has the following tokens of variants of English /ð/: [ð] 32, [z] 15, [d̪] 4, [d] 4 (58%, 27%, 7% and 7% respectively). What is important here is not the 'complementary distribution' of these variants or their 'free variation' but the proportion of each variant in relation to the total number of tokens counted. Once these proportions are counted, it will be clear that there is a sociolinguistically significant pattern to the variation.

While phonemic systems have been set up for some speakers on the basis of the statistical prominence of major variants, it has not been found necessary to exclude either /θ/ or /ð/ from the phonemic system of any of our speakers even where [θ] or [ð] occurs less frequently than other variants. This is because even one token of either [θ] or [ð] is an indication that the phoneme does exist underlyingly.[4] The choice and proportion of variants is the central concern of this study.

In the case of vowels, however, phonemic systems were

set up for speakers strictly on the basis of observed statistical tendencies. For example, speaker (58) has the following realizations of what in English is consistently /ə/: [ə] 9%, [a] 41%, [ɔ] 24%, [ɛ] 11% (=85%; the other 15% are shared between [ɨ] , [o], [a:], [ɪ:] and [ø]). This distribution pattern is correlatable with the orthographic vowel which represents the schwa in (58)'s corpus. The realizations of [ə] and [a] which add up to 50% correspond to those words where the spelling is 'a' 'er' as in 'achieve' and 'teacher' respectively. [ɔ] and [ɛ] correspond to orthographic 'o', 'u', 'our', 'or' and 'e' and non-final 'er' respectively as in 'behaviour', 'suggestion' and 'judgement' and 'performance' [illegible]. In this case, instead of setting up a phoneme /ə/ , which occurs only in a small proportion in a predictable (orthographic) class of words, it was decided to treat [ə] along with [a] as members of the phoneme /a/ which corresponds to English /æ/ and to regard all other vowels which occur where [ə] would occur in English as members of cognate phonemes in the speaker's system - e.g. [ɔ] as a member of /ɔ/ which corresponds to English /ɒ/.

Later, when the sociolinguistic analysis proper was made, each speaker's proportion of an English (i.e. R.P.) phonological variant was taken into account, so that (58)'s [ə]-proportion, for instance, showed up in our total assessment of the proximity of his speech to R.P.

Our phonological model, which consists of phonemes and their variants (ie 'allophones', a term we would prefer not to use because of its connotations in traditional phonemics which are inadmissible in our analysis), may appear inadequate to handle the kind of variation we are confronted with. Daniel Jones, for instance, has the 'variaphone' and the 'diaphone' to handle variability similar to that found in our data.

The concept of a 'variaphone' is useful in a traditional phonemic analysis where the speaker is assumed to be consistent, having stable phonemes and well-defined allophones. The'variaphone' is then used to characterize "sounds which are liable to'variation' independently of their phonetic context" (Jones(1962), p.205). This concept is redundant in our analysis since it is the exception rather than the rule for a speaker to have stable 'phonemes'.

A 'diaphone' is a sound which encompasses two different phonemes in two different systems - such as Hausa English /a:/ and Southern Nigerian English /ɔ/ in 'turn'. In the present study, we do not find the 'diaphone' very useful either. Since /a:/ and /ɔ/, for instance, are members of different full-fledged phonological systems belonging to different individual speakers or groups of speakers, it would seem that a model which presents a comprehensive view of the interaction of such systems

in a continuum and of the speakers who possess these systems in a speech community is preferable to one which restricts itself to an account of the relationship between individual members of different phonological systems. In other words, we consider it more profitable to resolve the issue at the sociolinguistic than at the abstract phonological level.

1.2.3. On Studying Variation in Language

It is clear from the foregoing review of phonological theories that they are ill-equipped to handle highly variable natural data. Consequently, a variationist approach was adopted in the present study.

Various models for the study of variation in language are available. The best known of these is probably William Labov's (1966). Labov was interested in the correlation between linguistic and sociological variables in New York. He identified five sensitive phonological variables, four styles and four socio-economic classes. He then interviewed and tape-recorded informants representing the various socio-economic classes, eliciting speech of varying degrees of formality ranging from casual speech, careful speech, reading (connected passages) and word-lists. The result was a convincing correlation between the phonological and the sociological variables. Members of the lowest status group - the lower class - were observed to use the most stigmatized phonological variants most often and members of the highest status group - the upper middle class - were observed to use the most prestigious phonological variants most often. Members of each social class were also observed to use more of the prestige variants in the most formal style (word lists and minimal pairs), fewer in reading connected

passages, fewer in careful speech and fewer still in casual speech.

Labov's work in New York was an important stride forward not only for sociolinguistics but also for linguistic theory. His use of tape-recordings of scores of speakers (albeit elicited and therefore not strictly natural speech) was revolutionary as was his systematic quantification of phonological variables and their variants. Prior to Labov, dialectologists made no attempt to quantify either their linguistic data or the demographic characteristics of their informants. This model has been applied to other sociolinguistic studies, notably that of English in Norwich by Trudgill (1974).

Labov's contribution to linguistic theory is also noteworthy. Prior to his studies, linguists - i.e. Chomskyan transformationalists - were interested only in the ideal speaker-hearer and in an idealized language - as represented in this ideal speaker's competence. Variation - both individual and social - was therefore part of performance and thus outside the linguist's purview. Labov was able to show that no speaker was wholly consistent in his use of language and that variation was explicable if studied in its proper social, stylistic and historical contexts. He therefore proposed the study of performance as the central business of linguistics (1970). Labov also proposed 'variable rules' as a way of incorporating variation into linguistic theory. These are optional rules written in the generative notation which specify the structural description which may favour the occurrence of a particular variant and the social and stylistic

factors which hierarchically enhance or inhibit the occurrence of the variant in question (1972). Some of Labov's associates (e.g. Cedergren and Sankoff (1974)) have carried the notion of variable rule to the level of mathematical accuracy: by translating empirically attested tendencies into a computer programme, they have produced statistical versions of the variable rule, complete with probabilities of its occurrence in specific situations. Indeed Sankoff (1972) is reported to have gone further to claim that the speaker knows "not only --- the hierarchical ordering of the constraints on variability but also the amount contributed by each to the probability of rule operation" (Wolfram and Fasold (1974), p. 120).

A different kind of approach to variation which makes flexible use of Labov's techniques is Milroy's (1980) study of language and social networks. This is an intensive sociolinguistic study of a relatively small Northern Ireland working-class community. Language is found to correlate with social networks - a speaker's network of social contacts. Milroy employs more sophisticated statistical techniques than those used by Labov (1966). But like Labov, Milroy is interested in the correlation of linguistic and sociological variables (albeit social networks rather than socio-economic class).

But variationists such as Bickerton and De Camp are more interested in linguistic variation than in the correlation of this with linguistic factors. Bickerton (1971, 1975) was concerned with linguistic variation within the Guyanese Creole - Standard English continuum and how the various levels of the continuum related to one another.

As a result of his observation of unpredictable and sudden switching from one level to the other by his informants even when extralinguistic factors were held constant and the failure of Labov-type 'channel cues' to induce a style shift in his informants, Bickerton is cynical about the validity of correlating linguistic and extralinguistic variables. His "dynamic view of language" is more interested in how speakers as individuals rather than as members of any group relate to one another in a rank along a linguistic continuum rather than a socilogical index.

De Camp (1971, 1973) was similarly more interested in linguistic than in sociolinguistic variation. In particular, he was interested in the hierarchical ordering of linguistic variables, how one variable implies another or excludes it. Like Bickerton, De Camp is very critical of Labov's methodology- especially the prior sorting of speakers into sociological categories to which linguistic categories are later correlated "instead of correlating these non-linguistic variables *to* the linguistic data..."(1971,p.355)

The present study is interested in establishing the range of phonological systems used in Nigerian English. It is also interested in both linguistic and sociolinguistic variation. Although it would have been easier to devote the whole thesis to sociolinguistic variation and to replicate the Labov model (based, say, on 90 speakers, 3 social 'classes', 5 phonological variables and 4 styles) - it was felt that given the state of knowledge in Nigerian English at

the commencement of this study, this would have been intellectually irresponsible, to say the least.Variation can only be properly studied when the larger linguistic context - call it the norm - has been sufficiently defined.

Various degrees of reservation about the efficacy of the linguistic interview as a data-gathering device have been expressed. Labov (1966, p. 58) was aware that the "...formal procedures of the interview are always open to the suspicion that the linguist is creating the language that he is studying" and Ekong (1978,p.19)found that her"major problem was getting the informants to speak freely. It is doubtful that complete real-life speech style can be recorded in an interview situation and other techniques would need to be explored". Similarly, Bickerton (1971, p.476) maintains that the sociolinguistics of the future must be based on natural human speech and must be obtained through techniques that are now "available only to government and industrial spies and divorce peepers".

As a modest step towards the 'sociolinguistic of the future', our data were recorded from Nigerian television while our speakers were engaged in a normal human activity, albeit a stylistically formal one.One of the shortcomings of this technique is that the quality of some of the recording is not very high but care was taken to ensure that only perfectly audible material which enabled a close and accurate transcription to be made was selected.Another shortcoming of the technique is that it restricted us to recording most speakers in one style only, thereby missing the opportunity of studying stylistic variation both within individual speakers and also between social and

other groups of speakers. Thirdly, the choice of television as a source of data effectively precludes the possibility of comparing the various strata of the Nigerian socio-economic continuum since it is only members of the upper stratum - the elite - who are important enough to appear on television.

However, in view of the already wide scope of the study (phonological, sociolinguistic) it is felt that the limitation on the study of stylistic variation and the comparison of different socio-economic groups are very welcome indeed. In any case, since the study already focuses on the three major ethnic groups in Nigeria, there is little point in complicating it further by multiplying the number of sociological variables.

It is doubtful whether the Labov model can handle sociolinguistic variation in Nigerian English for several reasons. In the first place, Labov's model assumes the existence and crystallization of social classes, which African sociologists unanimously agree have not yet taken shape in Africa. Sociologists analyze African societies in terms of three groups: the residual mass at the bottom of a pyramid, the sub-elite or incipient middle class in the middle of the pyramid and the elite at the top (Lloyd 1966, Plotnicov (1970). Within the elite, sociologists have not yet worked out a hierarchy of prestige or status with which one might attempt to correlate linguistic variation, hence our inability to test the effect of occupation on our speakers' degree of proximity to R.P. in Chapter Five.[5]

Unlike Labov and his associates we transcribed and quantified all phonological variables relevant to both a linguistic and sociolinguistic study, rather than a handful of carefully selected variables. This enabled us to back up any phonological system we posit with statistical evidence. This also made our sociolinguistic study much richer, in that we had an almost limitless number of phonological variables to attempt to correlate with extralinguistic variables so that no sociolinguistically significant pattern is likely to have been overlooked.

1.3.0. The Historical Setting

The country now known as Nigeria came into formal existence in its present form only in 1914. Before then various components of it had had independent existence as city-states, larger kingdoms and even empires some of which extended beyond Nigeria's present borders.

The first recent contact between West Africans and Europeans was in the 15th century when Portuguese ships stumbled on the coast of West Africa on their way to India. Trade in innocent commodities was then established and the Portuguese were soon joined by other European traders, including the British. With the discovery of the New World and its settlement, the legitimate trade in

commodities was replaced by the savage slave trade. As trading contacts strengthened, British traders established trading posts all along the coastal towns of West Africa. These were later followed by official consulates which looked after British interests in the area.

In the middle of the 19th century Britain began to assume a more direct political role in West Africa. British consuls signed treaties of protection with local chiefs and in 1851, the British were so deeply involved in what was superficially a local dispute over succession to the chieftaincy of Lagos that they bombarded the city and annexed it ten years later. When the European powers met to settle their arguments over territorial claims in Africa in Berlin in 1855, Britain had enough treaties to enable her to lay effective claim to all the areas which now form Southern Nigeria.

Early in the present century, Lord (then Captain) Lugard, was able to conquer the rulers of the Sokoto Caliphate and thus take over the control of what is now Northern Nigeria. This part of the country, then known as the Central Sudan, was ruled separately by the British as the Protectorate of Northern Nigeria until 1914 when it was merged with the Protectorate of Southern Nigeria to form the country now known as Nigeria. Britain relinquished formal claims to this territory in 1960 when Nigeria became independent.

West Africans began to learn English almost as soon as the British replaced the Portuguese as their major trading partners. Since this learning of English took place in

response to the exigencies of trade, the form of the language was a Pidgin. Okon (1972) reports that Calabar chiefs and traders (in the South-Eastern part of Nigeria) had had over two centuries of contact with Europeans before a mission of the Presbyterian Church arrived there in 1846. Indeed some Calabar chiefs were literate as far back as the late 18th century and kept diaries, part of one of which has survived.[6]

But formal education started in Nigeria only in 1842 when the first mission school was opened in Badagry in (present-day) Lagos State. This marked the beginning of a long enterprise by missionaries to provide the population of Southern Nigeria with education.

When Britain abolished the slave trade in 1807, the Royal Navy intercepted slave-carrying ships along the West African coast and freed their human cargo. These liberated slaves were then settled in Freetown, Sierra Leone. Many of them were of Yoruba extraction who were victims of the on-going Yoruba intra-tribal wars (early 19th century). Many of these former slaves became Christians and literate and some returned to their country as preachers. The demand for education among these de-tribalized Africans in Sierra Leone was such that by 1876, Fourah Bay College in Freetown had sought and obtained affiliation to the University of Durham.

Many of these articulate and educated liberated slaves or their descendants were very much in evidence in Lagos in the latter half of the 19th century. They had a vigorous press which clamoured for African rights and pre-shadowed the advent of militant nationalism in

Nigeria. It is also important to note that as the first Nigerian elite was predominantly Yoruba in origin, Yoruba has had considerable influence on the development of Nigerian English as we shall see in Chapter Six.

It was an accident of history that the initial teaching of English in the two segments of Nigeria - North and South - was carried out by two separate, and in some respects very different groups of teachers. This is one explanation for the divergence between North and South in the pronunciation of English which we shall document in the following chapters. In the South, all education was in the hands of the Church from the middle of the 19th century until the turn of the present century.[7] Many of the missionaries who taught English in those early days were neither native speakers nor adequately trained to do so. The Church Missionary Society was one of the few Anglican missions which supplied native speakers of English but many of their agents in Yorubaland were German - for example the Rev. C. A. Gollmer, G.F.Bühler, Hinderer, Mann etc. The Roman Catholic Mission had mostly French and Irish agents and the Church of Scotland mission had Scottish and Irish agents. The Baptist Mission had mostly Black American agents. But even where native speakers of English were available (such as Irish, Scottish, English and Black American agents) they could not do all the teaching themselves, partly because of the high rate of European mortality in West Africa at the time, which limited their desire to penetrate too deep into the hinterland and partly because there were too many pupils and, in any case, these missionaries

considered themselves first and foremost as preachers and teachers of the three R's only second.

Indeed the colonial government had to resort to a series of carrot and stick measures to ensure the teaching of the three R's in mission schools and to raise their academic standards and prevent them from becoming merely places for reciting the gospel. The most important of these measures was the linking of grant-in-aid to progress in the three R's and the availability of qualified teachers on the staff.

Most of the teaching in mission schools was done by semi-literate Africans - either emancipated slaves from Sierra Leone or teachers 'trained' locally but as Jordan (1948) aptly notes "the word 'trained' is a little euphemistic, as they really got nothing more than daily tuition in Religion and English from a Father or Brother, combined with a few demonstration lessons per week in the art of inculcating the 3 R's".[8] The Sierra Leoneans were invariably adults who had mastered their native language before being kidnapped and sold into slavery, so that the English they did learn could not have been very different in phonology from the Creole that their descendants still speak. Nor were the West Indians who came with the Calabar mission of the Church of Scotland much different from the Sierra Leoneans in that they too spoke an English-based Creole albeit as members of a second or third generation who spoke no African language at all. Thus by the beginning of the present century there was not a single European schoolmaster in the Western Protectorate of the Colony of Southern Nigeria

(i.e. Yorubaland) "most of the teachers being Southern Nigerians".[9] As the Yoruba-speaking areas became self sufficient in the supply of teachers, they began to export some of their surplus to other areas of the South.[10] In any case, because the missions were centrally controlled there was free movement of local teachers and agents from one part of the South to another.

This was an important unifying factor for the two major varieties of English in Southern Nigeria, Igbo and Yoruba English and an important explanation for their very close similarity. Now, once an English-speaking elite, or sub-elite, had emerged in Southern Nigeria (the argument can be enlarged to include the whole of coastal Anglophone West Africa), people learning English there aspired to no other standard of pronunciation than that of the elite to whose membership they aspired, hence the fossilization of the standard of pronunciation at its early twentieth-century level. It is significant that this standard does not appear to be affected by the significantly higher levels of education now attainable by Nigerians.

In the North, on the other hand, education was, right from the start, in the hands of the government since, as part of the undeclared terms of surrender, Northern chiefs had been assured by the invading Captain (later Lord) Lugard that there was to be no interference in their religion. This policy in practice meant that Christian missionaries were actively discouraged, if not forbidden, from operating in Moslem areas.[11] But not even this gesture from the Colonial government was enough to assure

Northerners that it was safe to submit themselves to Western education without risking conversion to Christianity.

Consequent upon the government assuming responsibility for education right from quite early in the North, education assumed a very different character from that in the South. Here, upper class colonial officials sought to cultivate an indigenous counterpart in the same fashion as they themselves were brought up. The schools that were established were not meant for the multitude of the people but for the children of chiefs and their clients, the latter often sent by chiefs unwilling to entrust their own children to the Europeans. They were not allowed to be taught by simply anyone who professed to be literate but by ex-Etonian, ex-Oxbridge men. Thus no Sierra-Leonean, West Indian or Southern Nigerian teachers had any influence on the development of English pronunciation in the North. Indeed it was not until 1947 when the first all-Nigeria Legislative Assembly met that educated Southerners and Northerners came face to face with one another on any large scale. This is an important factor in understanding North-South divergence in English pronunciation.

Contrary to the situation in the South where English, German, Irish, French, West-Indian, American, Scottish, Sierra-Leonean and Southern Nigerian teachers taught English as their various backgrounds dictated, and where a common standard arose out of the amalgam of accents taking refuge in the orthography whenever under pressure, a successful attempt was made by R.P.-speaking school-

masters in Katsina College to introduce students to the phonetics of English and to lay as much emphasis on pronunciation as was insisted upon in the English Public Schools. The most famous of these teachers was Gerald Power who "was a product of an English Public School prior to going to Oxford." (Onabamiro (1979)). There was also Charles Whitting, as well as masters who, though they might not have taught phonetics, were nevertheless products of public schools and Oxbridge and therefore supplemented the efforts of the phoneticians through their own pronunciation. These were people like S. J. Hogben (ex-Etonian) and John Bieneman who was the first head of Katsina College in 1921 (ex-Cambridge).

Hogben (1966, p.x) reports that the outstanding achievement of the educational system in the North was "in the perfection of its teaching of English at the Katsina Training College, for which Gerald Power and Charles Witting were responsible. Long were the hours that my colleagues spent in phonetics and in their patient demand for the repetition of sounds. Some indeed questioned whether such perfection was necessary. We now know that Power and Whitting were right, and all honour to them."

Bello's report (1962, p. 26) written from an ex-Katsina student's point of view concurs with Hogben's for he confirms that 'much of the teaching was in the hands of Europeans' and that "Katsina boys have always been distinguished by the excellence of their English and especially of its pronunciation. --- This was entirely due to the care that was given to the teaching, for all subjects were taught in English from the start and any slipshod

speech by the students was immediately jumped on. We had to go on saying the offending word until we got it perfectly, then we never forgot it. The result was well worth while."[12]

The result of this very careful teaching of R.P. was that an English-speaking elite was produced in the North which closely approximated the accent of the colonial elite and won the latter's admiration for the achievement. The influence of this elite was maximized by the fact that each class in the old Katsina College consisted of students from all the provinces in the North who later went back to teach in schools in their area. Thus as in the case of the South, here too accent-uniformity over a large geographical area was enhanced by the similarity of training obtained by teachers. As in the South, too, the accent of the early elite - which consisted solely of Katsina old boys - was aspired to as the local standard, though of course its phonology has been simplified in the direction of the mother-tongue since the kind of training available to the early generation has not been available to later generations of Northern students. In other words, there was bound to be a gradual shift towards the mother-tongue as generations of students moved away from the 'original' Katsina old boys. But Katsina itself is a phenomenon of comparative recency: the last of the very first students of the College died only in 1980 and present-day Northern secondary school students

are only four or five generations removed from Katsina.

1.4.0. The Linguistic Setting

Estimates of the number of languages spoken in Nigeria and the number of speakers of each language vary widely. Bamgbose (1971) citing a provisional estimate of the 1963 census, reports that the number of languages is about 400. However, as this was not based on a proper linguistic classification but on the self-reports of people responding to census enumerators' questions it may turn out to be exaggerated. A more realistic figure is something in the region of 200. Since 1963 there has not been an acceptable census though one is due in 1983. Consequently the 1963 figures which were themselves disputed have been being used with appropriate statistical adjustments for planning purposes.

According to those figures, the speakers of the ten languages now used in the broadcasts of the Federal Radio Corporation of Nigeria had the following populations in 1963: Hausa 15,000,000; Yoruba 10,000,000; Igbo 6,000,000; Fula (Fulani, Fulfulde) 3,000,000; Kanuri 3,000,000; Efik 1,500,000; Tiv 1,000,000; Ijaw 780,000; Nupe 500,000 and Edo 300,000. This amounts to 41.08 million out of the 1963 total population of 56 million, i.e. 75% of the total population. The total population of Nigeria is now variously estimated to be between 80 and 100 million.

If we sum up the populations of the speakers of the three major languages - Hausa, Yoruba and Igbo, we find that they account for 31 million speakers, or 55.5% of the 1963 population. Assuming that that proportion holds today, the three major languages thus account for more than half the population. Moreover, since each language is dominant in its regional area - Hausa in the North, Yoruba in the South-West and Igbo in the South-East, many speakers of minor languages in each region are bilingual, combining a knowledge of the dominant regional language with that of the mother-tongue. The Nigerian constitution also confers semi-official status to these three languages by providing for them to be used in addition to English in conducting the business of the Natioanl Assembly. The Nigerian National Policy on Education also calls for every Nigerian child to be "encouraged to learn one of the three major languages other than his own mother-tongue". For these reasons and because we cannot study the English spoken by members of all ethnic groups, it was decided to limit the study to speakers of Hausa, Igbo and Yoruba.

1.4.1. Language Families

According to Greenberg's classification of African languages (1963), Nigerian languages belong to three of the four language families set up for African languages. A remarkable feature of this classification is that different groups of Nigerian languages are related to languages spoken in distant parts of Africa rather than

to their immediate neighbours.

The four African language families are: Congo-Kordofanian, Afroasiatic, Nilo-Saharan and Khoisan. Most Nigerian languages appear to belong to the Niger-Congo sub-family of Congo-Kordofanian. This sub-family includes Yoruba, Igbo, Efik, Tiv, Nupe, Edo, Fulfulde, Ijọ and the Bantu languages of East and Central Africa. Igbo and Yoruba are very closely related, for they both belong to the Kwa branch of this sub-family, Igbo in Group g and Yoruba in Group c (Greenberg 1963, p.8). Both have the common areal feature of the Kwa branch- the labio-velar plosives/kp/ and /gb/ as well as similar vowel systems as we shall show in Chapter Three.

Hausa belongs to the Chadic branch of the Afroasiatic language family. Its immediate relatives in this branch are some of the languages spoken in Plateau State (Angas, Sura, Ron) in Bornu State (Bolewa, Bede), and in Gongola State (Bachama, Margi). These Chadic languages are related to the Hamito-Semitic languages of North Africa and to Arabic and Hebrew.

Kanuri appears to be the only Nigerian language which belongs to a third family- the Nilo-Saharan.

1. 4. 2. Articulatory Settings and Voice Quality

In this section, we shall briefly note some of the differences between Nigerian languages as a group and English on the one hand and between the three major Nigerian languages on the other in articulatory setting and voice quality. It must be stressed here that what follows is based on impressionistic observations which accumulated during the course of the present study rather than on detailed tests or experiments.

It is well-known that individual languages tend to have a favoured setting for the vocal apparatus and its component parts which setting in turn determines the voice quality that becomes associated with speakers of a language or group of languages. It appears that the three major Nigerian languages share many properties of articulatory setting and voice quality which set their speakers apart from speakers of British English.

their mother-tongue.

Nigerian languages appear to favour a deeper pitch range than is normal for British English speakers. Nigerian voices therefore sound deeper than British English voices. In addition, Nigerian languages favour a louder loudness range than R.P. which favours a soft loudness range. However, many rural dialects of British English differ from R.P. in favouring a loud range.

Also, while in English "the tongue is tethered laterally to the roof of the mouth ... [and] the lateral rims of the tongue very seldom entirely leave this part of the roof of the mouth ..." (Honikman, 1964, p. 76), in Nigerian languages the tongue is not anchored or retricted and can be seen to be moving vigorously and freely in the mouth during speech.

The mandibular setting for English is fairly neutral and the jaws are loosely closed (Honikman 1964, Laver 1980), but the jaws constantly open and close during speech in Nigerian languages. Also, while the lips are "neutral, moderately active" in English (Honikman, op. cit.), they are usually full participants in the vigorous movements of the jaws in Nigerian languages. In particular, in Kwa languages where back rounded vowels appear to occur very frequently, the inter-labial space is constantly constricted horizontally and expanded vertically.

The auditory effects of the two kinds of setting are of course very different. In English, the fact that the tongue, the lips and the jaws do not move energetically during speech and the fact that the mouth is rarely

wide open combine to give native speech - especially R.P. - its peculiar resonance. In Nigerian languages, on the other hand, the energetic movements of the tongue, the lips and the jaws and the relative openness of the mouth during speech as well as the favoured loudness range in these languages combine to give them - and Nigerian English - their distinctive voice quality which is both deeper and louder than that of R.P.

It follows therefore that even where a Nigerian speaker of English has mastered the segmental and rhythmic contrasts necessary for near-native fluency in English, his articulatory setting will ensure that his voice quality is very different from that of a native speaker of English unless he makes appropriate adjustments here as well. Even if such adjustments were practicable, most Nigerians would find them unnecessary or tiresome. In a situation where almost every speaker of English also speaks at least one Nigerian language as a mother-tongue and perhaps a few others as second languages, it is more convenient for a speaker to make only the minimum articulatory adjustments necessary when switching from a Nigerian language into English. This would be the case even if the two languages were spoken and used in clearly identifiable situations and occasions. What obtains in fact is that many Nigerians speak a mixture of English and their language a lot of the time, and even when a switch from undiluted native language to undiluted English is made, it is often made in a matter of seconds, sometimes interrupting discourse in one language to carry out a separate discourse in another and then resuming

the first discourse. In such a situation, it would be extremely difficult to alternate between two very different articulatory settings. In sum, therefore, most Nigerians use the articulatory setting of their mother-tongue when they speak English.

Up to this point we have not noted differences between the three major Nigerian languages but have contrasted them as a group with English. But while they collectively share the properties of setting and voice quality proposed above, they individually differ one from the other sufficiently to enable their respective speakers to be so identified.

Speakers of Hausa tend to have a lax vocal setting, a neutral velopharyngeal setting and occasional creaky voice. In Kano Hausa, the vocal musculature is especially lax, and the active articulator exerts only mild pressure upon the passive articulator. Creaky voice is used to distinguish between /b/ and /ɓ/ and /j/ and /'j/ in Hausa. In addition, back vowels do not appear to be as vigorously rounded in Hausa as they are in Igbo and Yoruba, and in any case do not occur in the language with the same frequency as in Igbo and Yoruba. The favoured lip position for Hausa is, therefore, neutral. Indeed the clear preference for a central articulation in Hausa is reflected in the reduction of /i/ and /u/ to [ɨ] and /e/ and /o/ to [a] as has been reported elsewhere (Jibril 1980).

Speakers of Igbo tend to alternate their pharyngeal setting between tenseness and laxness continuously, as that is the chief distinguishing feature between the so-

called tense and lax vowels of Igbo. This is brought about by retracting the root of the tongue and constricting the pharynx (in the case of tense voice) and expanding the pharynx (in the case of lax voice). Occasionally, Igbo speech may be characterized by breathiness, for aspiration is contrastive in some dialects of Igbo. Some Igbo consonants are distinguished by nasality from their oral counterparts, and nasality in such cases spreads onto the following vowel. Occasionally, therefore, Igbo may use a nasal velopharyngeal setting. As in Yoruba, back rounded vowels appear to predominate in Igbo and so there is a very labial quality to the language. In addition, the whole vocal tract appears to be permanently tense in Igbo, with active articulators making very firm contact with their passive counterparts. The possibility for articulatory imprecision is therefore very much less in Igbo than in Yoruba or Hausa.

Yoruba is the only one of the three languages which has phonemic nasalized vowels. The velopharyngeal setting is therefore constantly alternating between nasal and neutral in Yoruba. Even more so in Yoruba than in Hausa, the vocal musculature is lax, especially outside the Central Yoruba dialect area. Speakers of this latter dialect have the same tense vocal musculature and the same tendency to alternate between an open pharynx and a closed pharynx that characterizes Igbo due to the similarity of vowel system between the two (see Chapter Three). Like Igbo, Yoruba favours rounded

lips as a neutral position and in addition appears to have a high frequency of labial consonants (p, m, kp) which together combine to give the language a very labial quality.

These habits of articulation are transferred by speakers of each language to English. These, together with the segmental and prosodic features we shall be investigating in subsequent chapters combine to set each group apart from all others when its members speak English.

1.5.0. Procedure

The corpus on which this study is based consists of about two hours of tape-recording. This in turn was selected from 15 hours of tape-recording of Nigerians speaking on various channels of the National Television Network. The recording was made in the researcher's homes in Kano and Ibadan between October 1978 and September 1979. Most of the programmes recorded were direct transmissions from the National Network which afforded more opportunity of recording a more heterogeneous sample. As speakers' names were announced, the researcher made a quick note of them, the time of the recording, the name of the programme and the channel from which it was being transmitted. Because most of the people were public figures or had their institutional affiliations mentioned by the presenter of the programme, it was possible

to trace the addresses of most of the informants so recorded.

Between May and September 1979 questionnaires and accompanying letters were sent out to those informants who could be reached explaining that they had been recorded from television for research into Nigerian English and requesting them to give permission for their speech to be used (see Appendix). Out of 65 questionnaires sent, 29 responses were received, some within only a few days of being dispatched. This was a response rate of 44.6%.

The total number of people available for the study was 107. These are stratified by mother-tongue, occupation, education and by their response or non-response in Tables 1.1-1.4 below. Speakers other than those of Hausa, Igbo or Yoruba were excluded from the final selection. All the 25 speakers of these three languages who filled in the sociolinguistic questionnaire were then automatically selected since it was important to use informants whose personal details were known. Twenty more speakers were then hand-picked from the larger sample in such a way that members of professional or other groups who already dominated one ethnic group's respondents were avoided. For example, of the 11 Yoruba respondents, ten are university lecturers and the eleventh a broadcaster. Thus two more broadcasters, one politician and one newspaper journalist were chosen to make up the 15 required for each ethnic group. The composition of the 45 speakers finally used in the study is as set out in Table 1.5

below (which is the same as Table 5.1 in Chapter Five).

Mother-tongue	Number of Speakers
Bolewa	1
Efik	1
Fulani	2
Hausa	23
Idoma	1
Igbo	26
Ijaw	2
Ishan	2
Kanuri	2
Nupe	1
Tiv	1
Yoruba	33
Unidentified	12
Total	107

Table 1.1: Breakdown of the Larger Sample by Mother-Tongue

Occupation	Number of Speakers
broadcaster	26
politician	29
university lecturer	26
lawyer	6
civil servant	5
business executive	3
pharmacist	2
newspaper journalist	2
industrialist	1
accountant	1
student	1
musician	1
unidentified	4
Total	107

Table 1.2: Breakdown of the Larger Sample by Occupation

Terminal Educ.Level	Number of Speakers
Bachelor's Degree or higher (incl PhD)	58
Sec. School + Profess. Training	15
Unidentified	34
Total	107

Table 1.3: Breakdown of the Larger Sample by Education

Mother-Tongue	Response	Non-Response	Inaccessible	Total
Bolewa	-	-	1	1
Efik	-	1	-	1
Fulani	-	-	2	2
Hausa	7	10	6	23
Idoma	-	-	1	1
Igbo	7	4	15	26
Ijaw	-	1	1	2
Ishan	1	1	-	2
Kanuri	2	-	-	2
Nupe	1	-	-	1
Tiv	-	-	1	1
Yoruba	11	14	8	33
Unidentified	-	5	7	12
Total				107

Table 1.4: Mother-Tongue Distribution Among the Response, Non-Response and Inaccessible Groups of the Larger Sample

Occupation	Number of Speakers
newspaper journalist	2
broadcaster	10
politician	13
university lecturer	17
lawyer	1
pharmacist	1
industrialist	1
Total	45

Table 1.5: Stratification of Final Sample by Occupation

1.5.1. Transcription

A systematic phonetic transcription was used. In the case of consonants, qualities such as dentality were noted, as were prosodic features such as nasality and labiality. However, sociolinguistically irrelevant features - such as aspiration - were ignored. All diacritics used have I.P.A. values. The transcription of vowels is fairly close and takes particular cognizance of sociolinguistically significant differences. It is a systematic, rather than an impressionistic

transcription. As anyone who has attempted phonetic transcription knows, variation even within a single speaker in the production of what is, for all practical purposes a single vowel, is almost infinite, it being more front here, more back there, somewhat centralized here and slightly lengthened there. There is little point in recording all these minute variations. But where variation is sociolinguistically significant, as when a speaker realizes R.P. /ɛə/ as [ɛ:] which is a sustained open front monophthong which gives the impression of attempting to be a glide - perhaps to [ɛə] - but never quite does so, this is recorded for this speaker is very different from another who accommodates the same diphthong by glide epenthesis - [ɛjə]. The first speaker is likely to be Igbo or Yoruba and the second Hausa. These are the kind of differences that our transcription attempts to capture.

Although /e/ and /ɛ/ and /ọ/ and /ɔ/are contrastive in Igbo (Western dialects) and Yoruba, we have ignored the differences between these and other pairs of vowels in our transcription. Instead, we have paid more attention to vowel length than to its precise quality. Thus any short half-close to half open front vowel, whether produced by a Hausa, a Yoruba or an Igbo speaker is transcribed as [ɛ] and any corresponding back vowel is represented as [ɔ]. There would be little

ln recording whatever minute difference there
ɔe between, say, Hausa /o/, Igbo /ọ/ and Yoruba
ıce these are not sociolinguistically significant:
can tell the mother-tongue of a speaker simply by

listening to their [ɔ] in a word such as 'cot', for instance. A list of vowel symbols used in the transcription with an indication of their qualities in broad terms is given at the beginning of this study.

1.5.2. Analysis

When the transcription had been completed and checked, the total number of words available for the study was about 17,000. This consisted of the output of 39 speakers who had about two pages of transcribed data ranging between 400 and 460 words (totalling some 17,160 words) and the output of 6 speakers consisting of between half a page and one page of transcription, i.e. 40-180 words (totalling some 668 words). This was then analyzed, using R.P. as a frame of reference.

For each speaker, each word was taken and its segments listed under the appropriate R.P. phonemes. Each particular variant was listed separately so that under /ð/ for instance, there were columns for [ð], [d], [d̪], [z] etc. It was thus possible to calculate the proportion of each variant in relation to the R.P. phoneme as a whole for each speaker. We can use speaker (82) again for illustration. He has 32 tokens of [ð], 15 of [z], 4 of [d̪] and 4 of [d] under the corresponding R.P. phoneme /ð/. To calculate the percentage of [ð] in his output, we simply divide the tokens of [ð] by

the total number of tokens of all the variants of /ð/ and multiply by 100 to obtain a percentage (i.e. $\frac{32}{55}$ x 100 = 58.1%). The same formula was used in obtaining the percentage of any of the other variants.

The use of R.P. as a frame of reference is merely a methodological convenience as it is one of the best described accents of English. The choice of R.P. does not imply that we assume our speakers to use it as a frame of reference themselves.

Gimson (1970) and his *Pronouncing Dictionary* (1977) were used to check the pronunciation of the informants against that of R.P.

1.5.3. Statistical Calculations

The study of variation inevitably involves counting and other statistical calculations. The formula for working out percentages has already been explained above and here we shall deal with more complex statistical calculations used in the study.

The *mean* throughout this study refers to the arithmetic mean which is obtained by summing up all the figures involved and dividing the sum by their number. For example, when all the [ð] percentages of all Yoruba speakers have been worked out, the mean percentage of its occurrence among Yoruba speakers as a group is worked out by summing up the individual percentages of all

the speakers concerned and dividing by their number.

The *standard deviation* (SD) provides a check on the representativeness of the mean for the group as a whole. For example, if 6 Yoruba speakers have [ð] percentages of 100, this may raise the Yoruba mean of this variant in such a way as to suggest that the average Yoruba speaker has more of [ð] than is actually true, if, for instance, the actual distribution of the percentages among the other 9 speakers has a range of only 30 to 50. The standard deviation should indicate the degree to which those 6 speakers inflate the arithmetic mean. The smaller the standard deviation, the more representative the mean is of the group. We shall not go into the details of how the standard deviation is worked out since most calculators can now produce it at the touch of a button. The interested reader may refer to Amos et al (1965, p.44) or Anshen (1978, pp 16-17) for a step-by-step explanation of how it is worked out.

In the latter part of Chapter Five, a more complex and more rigorous statistical analysis is used. This is known as *multivariate analysis of variance (MANOVA)*. Bock (1975) and Chatfield and Collins (1980) give descriptions of the method.

The MANOVA was carried out using the SPSS package and the CDC computer at the University of Manchester Computer Centre by the staff of the Centre for Applied Statistics of the University of Lancaster mentioned in the preface. A technical note relating to this analysis is given as Appendix D.

1.6.0. Limitations

The study is limited to the phonology of Nigerian English and thus excludes lexis and syntax. It also focuses on the speech of members of the three major ethnic groups - Hausa, Igbo, and Yoruba to the exclusion of members of all other Nigerian ethnic groups. The number of speakers used in the study is also limited to forty-five which is rather small when viewed in relation to the estimated population of Nigeria (80 million). The study is also limited to the speech of only one Nigerian social group - the elite. Stylistic variation is also effectively excluded from the study since most informants were recorded in only one stylistic context - the formal. In spite of these limitations, however, the study is still rather wide-ranging though we could not have imposed further limitations on it without seriously detracting from its value.

Notes to Chapter 1

(1) Jones (1960, p.12) stated that Sierra Leonean English "generally differs from standard English speech in these respects - it employs only a limited number of the available sounds, it distorts the correct word stress in many words, and it to a very large extent *ignores variations of sentence stress*". (emphasis mine - M.J.)

(2) One of the alleged general features of West African English according to Strevens is

the absence of /s/-/z/ distinction (except in Freetown) and the absence of /dʒ/. Strevens was of course quick to add a proviso thus: "It is difficult to make generalizations about the distribution of consonants in the West African pronunciations since a few of these commonly absent in one area may be present in another area not many miles away, and vice versa." Such open-ended qualifications make it difficult to confirm or falsify Strevens' classification.

(3) *The Journal of the Nigeria English Studies Association (JNESA)* edited by Dr. Ebo Ubaha kwe of the Department of Teacher Education, University of Ibadan, Nigeria, is a good source of articles on Nigerian English and related issues.

(4) Our stand here is similar to that taken by Wells (1973) in relation to a similar problem in his study of Jamaicans in London. He writes (p. 116): "--- one could not say that the manual occupation respondents studied in this thesis really have or really lack the /t-θ/ opposition: with all the scored variables, in fact, any score other than zero or the maximum is indicative of an inconsistent, non-homogenous phonological/phonetic system".

(5) A more detailed review of the sociology of Nigeria is offered in Chapter Five under the heading "The Nature of Nigerian Society".

(6) This is Antera Duke's diary. Excerpts of it which have survived are published in D. F. Forde's *Efik Traders of Old Calabar*, Oxford University Press 1956.

(7) Cf. Coleman (1963, p. 113): "Until 1898 all education was under the direct control of missionaries. As late as 1942 they controlled 99 per cent of the schools, and more than 97 per cent of the students in Nigeria were enrolled in mission schools. By 1945 there were comparatively few literate Nigerians who had not received all or part of their education in mission schools."

(8) From Jordan, J.P. (1948): *Bishop Shanahan of Southern Nigeria*. Dublin, Clonmore and Reynolds, p. 82, first cited in Nwabara (1977) p. 64.

(9) From Graham (1966), p. 73. Although she does not say so, the teachers who were not Southern Nigerians would have been Sierra Leoneans and Ghanaians because Coleman (1963) reports that "In 1921 approximately 18 per cent of the English-speaking Africans in Nigeria were native foreigners (that is, educated Africans mainly from the Gold Coast [i.e. Ghana, M.J.] and Sierra Leone)", pp. 156-7.

(10) Cf. Ajayi (1965) p. 270: "And just as in Crowther's time Sierra Leone had supplied teachers and evangelists, so after him Lagos, Brass, Bonny Calabar [the last three not being Yoruba areas, M.J.] Abeokuta, and to some extent Ibadan and Ogbomoso began to supply agents to the new centres of missionary work both on the coast in Benin and Ijebu and in the interior in Ekiti, Arochuku and other parts of Iboland."

(11) There is no evidence that missionaries were refused permission outright by the colonial authorities to establish missions and schools in Moslem areas but there is no doubt that they were not allowed to do so inside the walled cities among the local people. It is no accident that such famous mission stations as that of the Sudan Interior Mission in Zaria are *outside* the walled city.

(12) This and the quotation from Hogben were first cited in Jibril (1976).

CHAPTER TWO

Consonant Systems in Nigerian English

2.0. Nigerian English has essentially the same phonemic consonant inventory as R.P.[1] but the incidence of some of the consonants, i.e. their distribution in the lexicon, is very different from that of R.P. This divergence between the two kinds of English is accounted for by the fact that in Nigerian English, many consonants are realized according to their orthographic form. It will be shown that English orthography is a strong point of convergence for all three accents of Nigerian English under study. It will also be shown that mother-tongue interference accounts for divergences between the three Nigerian accents in the kind of relationship that different consonants enter with one another and on the basis of which we set up a sub-system for each of them. We shall also illustrate some of the ranges of variation possible within each sub-system. An account of consonant assimilation in Nigerian English will also be given.

2.1. A Contrastive Review of the Consonant Systems of Hausa, Igbo and Yoruba in Relation to English

The analysis of R.P. which we take for granted throughout this study and against which we contrast the consonant systems of the three Nigerian languages in this section is that of Gimson (1970). In Figure 2.1. below we reproduce Gimson's consonant chart of English for easy comparison with the charts of Hausa, Igbo and Yoruba (Figs. 2.2., 2.3. and 2.4. respectively).

	bilabial	labio-dental	labio-velar	dental	alveolar	palato-alveolar	palatal	velar	glottal
Plosive	p b				t d			k g	
Affricate						tʃ dʒ			
Fricative		f v		θ ð	s z	ʃ ʒ			h
Nasal	m				n			ŋ	
Lateral					l				
Approximant			w		r		j		

Fig. 2.1. English Consonant Chart

	bilabial	labio-velar	alveolar	palato-alveolar	palatal	velar	glottal
Plosive	p b		t d			k g	ʔ
Implosive	ɓ		ɗ				
Ejective			s'			kʼ	
Labialized Plosive						k^w g^w	
Palatalized Plosive						k^j g^j	$ʔ^j$
Labialized Ejective						$kʼ^w$	
Palatalized Ejective						$kʼ^j$	
Affricate				tʃ dʒ			
Fricative			s z	ʃ			h
Nasal	m		n				
Tap			ɾ				
Lateral			l				
Approximant		w			j		

Fig. 2.2. Hausa Consonant Chart

	bi-labial	labio-dental	labio-velar	alveolar	palatal	velar	glottal
Simple unasp. plosives	p b			t d		k g	
Simple Aspir. plosives	p^h b^h			t^h d^h		k^h g^h	
Lab. unasp. plosives						k^w g^w	
lab. aspir. plosives						k^{hw} g^{hw}	
pal.unasp.pl.	p^j b^j			t^j d^j			
pal. aspir. plosives	p^{hj} b^{hj}			t^{hj} d^{hj}			
implosive			kp gb				
simple fric.		f v		s z		ɣ	h
nas. fricat.		$\tilde{f}$ $\tilde{v}$		$\tilde{s}$ $\tilde{z}$			$\tilde{h}$
lab.&nas.fric.							$\tilde{h}^w$
palat. fric.				s^j z^j			h^j
pal.&nas.fric.				$\tilde{s}^j$ $\tilde{z}^j$			$\tilde{h}^j$
nasal	m			n	ɲ	ŋ	
labial.nasal						$ŋ^w$	
lateral				l			
simple rolled				r			
nasal. rolled				$\tilde{r}$			
palat. rolled				r^j			
approximant			w		j		

Fig. 2.3. Igbo Consonant Chart

	bi-labial	labio-dental	labio-velar	alveo-lar	palato-alv.	palatal	velar	glottal
plosive	b		kp gb	t d			k g	
affricate					dʒ			
fricative		f		s	ʃ			h
nasal	m							
lateral				l				
tap				ɾ				
approximant			w			j		

Fig. 2.4. Yoruba Consonant Chart

2.1.1. The Consonant System of Hausa

As can be seen from Fig. 2.2. Hausa has thirty consonant phonemes. Of these, seventeen have cognates in English: /p/, /b/, /t/, /d/, /k/, /g/, /s/, /z/, /ʃ/, /h/, /tʃ/, /dʒ/, /m/, /n/, /l/, /j/, /w/. Hausa /ɾ/ is variably either a tap or a flap and is close enough to English /r/ - which is an approximant [ɹ] - to be used as an acceptable substitute. Hausa also has [ŋ] as a variant of /n/ "before velars and glottals ... and in final position" (Hoffmann and Schachter 1969, p. 76).

However, although Hausa orthography and most analyses of the language represent Hausa /P/ as 'f' /f/, we consider the phoneme to be a bilabial plosive. Hoffmann and Schachter (op.cit.) attempt to posit /f/ as the phoneme in question but both Kraft and Kraft (1973) and Nuttal (1961, p. 90) recognize that /f/ is only a convenient symbol but that [ɸ] is more indicative of what Hausas say when they pronounce the phoneme in question. Salim (1980, p. 259) correctly states that "the alternant used in the artificially explicit speech style (relatable in most cases to Hausa/English bilingual or pseudo-bilingual speakers) is [f]; the careful speech style alternant is [p] and the casual/fast speech alternant is [ɸ]". Evidence from the present study reinforces the conclusion that the phoneme is /p/ rather than /f/: compared to only one token of English /p/ being realized as [f], eleven of

the fifteen Hausa speakers realize English /f/ either as [p] or [ɸ] in proportions ranging from 7% to 82% of the total number of occurrences of English /f/. Thus more difficulty is experienced with English /f/ than /p/ which suggests that /f/ is more alien to the Hausa phonological system.

Of the other Hausa consonant phonemes, /k^w/, /g^w/, /k^j/ and /g^j/ occur in English but are regarded there as sequences of velar plosives and semi-vowels rather than complexes of single consonants. The implosives and ejectives of Hausa are not found in English but a glottal stop, which has phonemic status in Hausa, occurs phonetically in English to reinforce a vowel-initial syllable word-initially or in an accented syllable. Gimson (1970, p. 168) gives the example of [kəʊˈʔɒpəreɪt] 'cooperate' as one such case of glottal reinforcement of vowels in R.P.

Four of the consonant phonemes of English have no counterparts in Hausa: /f/, /v/, /θ/, /ð/ and /ʒ/ and, as we shall show, the alternative realizations of these phonemes in Hausa English constitute indexical features of this variety of English.

2.1.2. The Consonant System of Igbo

Igbo has the most versatile consonant system of the three Nigerian languages under study. The analysis that posits the largest number of consonants is that of Green and Igwe (1963) which lists fifty-five consonant phonemes and on which the chart in Fig. 2.3. is based. Carnochan (1948) posits fifty-two consonant phonemes in his study of a Lorji speaker (Lorji is a village near Owerri) and omits Green and Igwe's /f̄/, /z^{j}/ and /ž^{j}/. Williamson (1969) who based her description on Central Igbo (i.e. Owerri and Umuahia dialects) posits only thirty-four consonants, omitting all palatalized and labialized consonants because "these are better regarded as combinations" (1969, p. 86).

As can be observed from Fig. 2.3. Igbo multiplies the possibilities of contrast by using aspiration, nasalization, palatalization and labialization significantly.[2] Thus in the plosive series there is a four-way contrast between aspirated, unaspirated, voiced and voiceless and in some cases labialized and palatalized consonants as well. In the fricative series, there is similarly a contrast between voiced and voiceless, oral and nasalized and simple and palatalized consonants. However, Onitsha Igbo is reported not to make contrastive use of aspiration and palatalization (Williamson, 1969, p. 88).

All R.P. consonant phonemes - with the notable exception of the dental fricatives - have counterparts in Igbo. Igbo has phonemes corresponding to English /p/, /b/, /m/, /f/, /v/, /w/, /t/, /d/, /s/, /z/, /n/, /l/, /j/, /k/, /g/, /ŋ/, and /h/. Although Igbo is analyzed as having /t^j/, /d^j/ and /t^{hj}/ /d^{hj}/ (i.e. palatalized aspirated and unaspirated alveolar plosives) these are phonetically aspirated and unaspirated palato-alveolar affricates respectively (cf. Williamson (1969), Green and Igwe (1963)). These correspond, therefore, to English /tʃ/ and /dʒ/. Igbo /r/ is rolled but is an adequate substitute for English /r/. Igbo has [ʃ] and [ʒ] as variants of /s/ and /z/ before /ụ/ or /ụ/ (Williamson 1969, p. 87). Although Igbo has /ŋ/, its occurrence is restricted to pre-velar positions compared to R.P. /ŋ/ which is restricted to both pre-velar and final positions.

Thus only /θ/ and /ð/ have no comparable counterparts in Igbo. Consequently Igbo English does not have consonantal shibboleths by which it may be distinguished apart from the realization of /θ/ and /ð/ as alveolar or dental plosives which is common throughout Southern Nigeria.

Igbo and English differ in that the latter language does not make contrastive use of aspiration or nasalization and makes contrastive use of labialization and palatalization only if we consider c+w and c+j as single consonants rather than sequences of consonants. Igbo also has labio-velar implosives, a palatal nasal and a velar fricative which do not have counterparts in English.

2.1.3. The Consonant System of Yoruba

Yoruba has a much simpler consonant system than both Hausa and Igbo: its phonemic consonant inventory consists of only seventeen items. As can be observed from Fig. 2.4., fourteen of these have counterparts in English: /b/, /t/, /d/, /dʒ/, /k/, /g/, /m/, /f/, /s/, /ʃ/, /h/, /l/, /w/, and /j/. Yoruba /ɾ/ - which is a tap - is also an adequate substitute for English /ɹ/. However, Yoruba /dʒ/ is often a "voiced palatal plosive" rather than a voiced palato-alveolar affricate (cf. Bamgbose 1966 p. 6, 1969, p. 163). Also, Yoruba /j/ is often "a voiced palatal fricative" rather than a palatal approximant (Bambgose op.cit.). One of the Yoruba speakers in the corpus, speaker (51), has [jˆu:nɩk] 'unique' with a palatal fricative rather than an approximant.

The other two Yoruba consonants are similar to Igbo implosives but, although they too are represented phonemically as /kp/ and /gb/, they are doubly articulated plosives rather than implosives and have no counterparts in English.

The Yoruba syllabic nasal, /m/, has variants which assimilate to the place of articulation of a following consonant: [m] before bilabials, [ɱ] before /f/, [n] before alveolars, [ŋ] before velars and /h/ etc. (cf. Bamgbose 1969, p. 165). However, Bamgbose's claim that the variant of /m/ is [n] before /ʃ/ and /dʒ/ does not correspond

with our observation of the pronunciation of the Yoruba name *Funṣo* (where ṣ represents /ʃ/) by a Yoruba informant.[3] His pronunciation of the nasal in this word was [ŋ] rather than [n].

[n] also occurs in Yoruba as an allophone of /l/ before nasalized vowels (which Yoruba has, phonemically). Thus 'to go' is [lọ] with a lateral because the vowel is oral but 'to straighten' is [nǫ̀] because the vowel is phonemically nasalized (cf. Bamgbose (1969, p. 164). Both words have the same phonemic consonant, /l/.

Although Yoruba is analyzed as having a phonemic glottal fricative /h/, no satisfactory account of its distribution is available. There appear to be restrictions on its occurrence in certain as yet unspecified places because Yoruba speakers often delete English /h/ especially word-initially when the preceding word ends in a vowel. A search through Abraham's Yoruba Dictionary (1962) reveals that there are only a few words beginning with /h/ in Yoruba though there does not appear to be co-occurrence restrictions between it and any vowels. It may well be that when it occurs intervocalically in Yoruba, regardless of word-boundary, it is deleted and that this is then transferred to Yoruba English.

Seven English consonants have no counterparts in Yoruba. These are /p/, /v/, /θ/, /ð/, /z/, /tʃ/ and /ʒ/. Of these, /p/ does not present any problem to educated Yoruba speakers but the others are often replaced by other consonants which occur in Yoruba according to principles we shall attempt to enunciate in a later section of this chapter

In Table 2.1. below, we summarize the correspondences and divergences between English and the three Nigerian langua-

ges for easy reference.

English Cons.	Hausa	Igbo	Yoruba
p	yes	yes	no
b	yes	yes	yes
t	yes	yes	yes
d	yes	yes	yes
k	yes	yes	yes
g	yes	yes	yes
tʃ	yes	yes /t^j/= [tʃ]	no
dʒ	yes	yes /d^j/= [dʒ]	yes
f	no	yes	yes
v	no	yes	no
θ	no	no	no
ð	no	no	no
s	yes	yes	yes
z	yes	yes	no
ʃ	yes	yes, allo-phonically	yes
ʒ	no	yes, allo-phonically	no
h	yes	yes	yes, restricted
m	yes	yes	yes
n	yes	yes	yes, allo-phonically
ŋ	yes, allo-phonically	yes	yes, allo-phonically
l	yes	yes	yes
r	yes [ɾ]	yes [r]	yes [ɾ]
w	yes	yes	yes
j	yes	yes	yes

Table 2.1. Correspondences and divergences between English and the three Nigerian languages

2.2.0. The Consonant Systems of Nigerian English

Viewed as a group, the consonant systems of Nigerian English differ from R.P. in not having /ʒ/ and /ŋ/ and in having many of the other phonemes of English distributed according to the orthography. However, this is where the similarity between the three varieties of Nigerian English ends for each of them has its own specific sub-system. For reasons of economy of presentation, we shall list below all the points of convergence between the three accents of Nigerian English which we label 'the Nigerian English consonant system'. This list and subsequent lists of consonant phonemes are defined in relation to R.P. instead of listing all the words or groups of words in which each phoneme occurs.

2.2.1. The Nigerian English Consonant System

/p/

This phoneme corresponds to R.P. /p/.

/b/

This corresponds to R.P. /b/.

/t/

This corresponds to R.P. /t/ as well as to R.P. /d/ in the past tense morpheme 'ed' when affixed to a verb stem which in R.P. ends in a voiced consonant (such as 'cause' but which in Nigerian

English has a voiceless consonant as we shall see below (e.g. (18) [kɔst] 'caused').

/d/

This corresponds to R.P. /d/ as well as R.P. /t/ in the past tense morpheme 'ed' when affixed to a verb stem which in R.P. has a final voiceless consonant (such as 'release', 'increase') but which in Nigerian English has a voiced consonant as we shall show below (e.g. (3) [rɪlɪ:zd] 'released' and (9) [ɪŋkrɪ:zd] 'increased').

/k/

This corresponds to R.P. /k/.

/g/

This corresponds to R.P. /g/ and to English orthographic word-medial 'g' which is phonemically zero in R.P. as in 'singing'. Nigerian English /g/ also includes R.P. /k/ which is represented orthographically as 'g' as in 'strength' (cf. (83) [strɛŋgθ] .

/tʃ/

This corresponds to R.P. /tʃ/ as well as R.P. /tj/ in 'opportunity' (cf. (45) [ɔpɔtʃunɪtɪ]).

/dʒ/

This corresponds to R.P. /dʒ/, and in Hausa and some Igbo speakers, R.P. /ʒ/ as well.

/f/

This corresponds to R.P. /f/ as well as R.P. /v/ in 'of' which is orthographically represented as 'f'.

/v/

This corresponds to R.P. /v/.

/θ/

This corresponds to R.P. /θ/.

/ð/

This corresponds to R.P. /ð/.

/s/

This corresponds to R.P. /s/ and R.P. /z/ when spelt 's', especially the plural, third person or possessive marker when affixed to a word ending in a voiced consonant or vowel as in (8) [pɪlgɾɪms] and (1) [kʌms] 'comes'. Other words which have /z/ in R.P. and /s/ in Nigerian English are grammatical words such as 'his', 'has', 'as', 'is', where R.P. /z/ is spelt 's'.

Although as we shall show below Nigerian English tends to assign a /z/ to words which are spelt 's' between vowels even where some of these words actually have /s/ in R.P. on analogy with many which are so spelt and do have a /z/ (e.g. 'realise', 'organisation', 'resound'), many words which satisfy this description and have a /z/ in R.P. are nevertheless assigned /s/ in Nigerian English. These are words such as 'partisan', 'caused', 'because', 'cognisance' and 'these', all of which have been attested in the corpus.

In Nigerian English, words which alternate between /s/ and /z/ in R.P. according to their grammatical function (such as 'use' verb /ju:z/ noun /ju:s/ and house/houses /haʊs/, /haʊzɪz/) have one invariant form with either

/s/ or /z/. Thus 'use' has /z/ both as a noun and as verb while 'house/s' has /s/ both as singular and as plural.

/z/

This corresponds to R.P. /z/ when spelt 'z' or 's' between vowels. As has been mentioned above, there is a tendency to generalize the latter case - i.e. to assign a /z/ to any 's' between two vowels in Nigerian English so that the following words which have /s/ in R.P. have been attested in the corpus as having [z]: 'purchase', 'increase', 'uses' (noun, plural), 'purpose', 'released' and 'useless'.

Indeed even words which in R.P. have /s/ which is orthographically 'c' between two vowels are often assigned /z/ in Nigerian English - e.g. (1) [tʃɔɪz] 'choice' (influence of 'choose'?) and (75) [praɪzɪs] 'prices' (confusion with 'prizes'?).

Also, even where R.P. /s/ is orthographically 'ss' between vowels or 's' between a nasal and a vowel, it may be assigned to /z/ in Nigerian English as in (41) [kwanzju:md] 'consumed', (91) [kɔnza:v] 'conserve' and in 'assume' and its derivatives. This may be based on analogy with words which are similarly spelt and have a /z/ in R.P. such as 'possess' and its derivatives and 'transmit' and its derivatives.

/ʃ/

This corresponds to R.P. /ʃ/ and R.P. /tʃ/ in 'question', 'suggestion' and 'combustion' where Nigerian English assigns /ʃ/ on analogy with other English words which have /ʃ/ and are spelt 'tion' (but without an 's' preceding

this) such as 'education' and'information'.

In Yoruba English /ʃ/ also includes all of R.P. /ʒ/ as indeed it does in some kinds of Igbo English.

/h/

This corresponds to R.P. /h/ as well as orthographic 'h' which is 'silent' in R.P. as in 'vehicle'.

/m/

This corresponds to R.P. /m/.

/n/

This corresponds to R.P. /n/ and /ŋ/, the latter being merely a positionally conditioned variant of Nigerian English /n/. In all three varieties of Nigerian English,[ŋ] is found before velars and very often before the labio-dental fricatives /f/ and /v/ as well! Nigerians seem to avoid [ɱ] as a variant of /n/ before the labio-dentals probably because [ɱ] is felt to belong with /m/ and [ŋ] with /n/ since both English /m/ and /n/, unlike the syllabic nasal of Igbo and Yoruba which is realized according to the place of articulation of the following consonant, are regarded as distinct phonemes and kept separate. When [ŋ] is thus avoided, the target is [n] which is not achieved because while English [f] and [v] are endo-labial (ie produced with the inner part of the lower lip making contact with the lower part of the upper teeth), these sounds are exo-labial in those Nigerian languages which have them phonemically (ie they are articulated with the *outer* part of the lower lip moving inside the mouth and getting trapped under the upper teeth. When the articulatory organs are in position for an exo-labial sound, it is easier to produce a velar than an alveolar nasal since the former position is relatively free. The target [n] therefore

surfaces as [ŋ] which is more acceptable as a positional variant of /n/ in Nigerian English than [ŋ].

Although Bamgbose (1969,p. 169) reports that[ŋ] is the allophone of the Yoruba syllabic nasal /m/ before /f/, we find Yoruba speakers, along with Hausa and Igbo speakers, preferring [ŋ]to [ŋ] before[f]and [v] in Nigerian English. Examples from all three groups include (67) [kwaŋfɪdans] 'confidence', (56)[kɔŋfaɪnd] 'confined' and (18) [ɪŋvaɪɾɔmɛnt] 'environment'.

/l/

This corresponds to R.P. /l/. However, in Nigerian English all occurrences of /l/ tend to be of the clear variety, ie [l] rather than [ɬ].

/r/

This corresponds to R.P. /r/. Nigerian English /r/ is [ɾ] in Hausa English and Yoruba English but [r] in Igbo English. Our transcription, however, represents Nigerian English /r/ as [ɾ].

/w/

This corresponds to R.P. /w/. Howéver, R.P. sequences of /k/ +/w/ are often realized as [k] in Nigerian English as in (53) [i:kɔl] 'equal', (75)[kɔntɪtɪs] 'quantities' and (66) [kɔ:t] 'quote'.Both Hausa and Igbo have phonemic labialized velar plosives which are distinguished from the 'simple'plosives by the presence of a 'w' in the orthography. To the Nigerian who is thus accustomed to the representation of labialization overtly in the orthography, English words which are spelt qu would appear not to represent /kw/.

/j/

This corresponds to R.P. /j/. However, as in the case of /w/ above, R.P. sequences of c+/j/ may be realized as c in Nigerian English for the same reason as above in spite of the fact that in both Hausa and Igbo there are phonemic palatalized consonants. Examples include (10) [sɪt-ɐe:ʃn] 'situation', (51) [dɪspɐt] 'dispute' and (40) [ɪnstɪtu:ʃns] 'institutions'. However, among Hausa speakers labial consonants (/p/, /b/, /f/, /v/ and /m/) do not appear to be de-palatalized while no class of consonants appears to be exempted from de-palatalization in Igbo and Yoruba English.

As further evidence of the loss of distinction between the 'simple' and the palatalized labials in Igbo and Yoruba English we may cite the following sentence:

> Note taking was another *mute* point cited in the lecture.

where 'moot' is spelt 'mute' which reflects the homophony of the two words in this kind of English.[4]

2.2.2. The Hausa English Consonant Sub-System

Hausa English has the same consonant system as that posited for Nigerian English above. In addition, however, Hausa English exhibits the result of interference from Hausa in some of the areas of divergence between Hausa and English. This constitutes the Hausa English consonant sub-system.

As we have seen in 2.1.1. above, Hausa has no labio-dentals, only bilabials. Consequently, English /f/ and /v/ are often realized as [p] or [ɸ] and [b] respectively in Hausa English. So widespread is the difficulty of Hausa speakers with English /f/ and /v/ that only two of the fifteen Hausa speakers in the corpus do not substitute bilabials for them.

For Hausa English as represented by our corpus, the mean percentage of [p] and [ɸ] as realizations of English /f/ is 30.1% with a standard deviation of 29.2, though this was attested only in 11 of the 15 speakers.

In one case in the corpus, a speaker who shows other extreme features of Hausa interference in his English substitutes [f] for English /p/ - a case of hyper-correction. This is (68)'s [fɑ:tɪ]'party'. Further evidence of the overlap between /p/ and /f/ in Hausa English may be seen in the following pronunciation spelling of 'pilfering' as 'filfering' which appeared in a Northern newspaper:

> "He told the administrator, Mr P. E. Jakpa, that the Liner Train System would not only arrest petrol shortage in the state, but would also check *filfering* by unscrupulous tanker drivers" [5]

The substitution of [b] for English /v/ is even more common than that of [p] and [ɸ] for /f/, for it is attested in 13 of the 15 Hausa speakers. The mean percentage of the realization of /v/ as [b] among all Hausa speakers is 32.5 and the standard deviation is 27.6.

In Hausa English, therefore, we must recognize [p] and

[ɸ] as variants of /f/, and [b] as a variant of /v/. Since [p] and [b] also represent other phonemes in English, including Hausa English, there is necessarily an overlap between the two sets in this kind of English. We do not call this overlap 'neutralization' because it is not phonologically predictable but we shall deal with its sociolinguistic significance in Chapter Five.

The dental fricatives /θ/ and /ð/ have no counterparts in Hausa either and are often replaced by [s] and [z] respectively in Hausa English. In our corpus, English /θ/ has a mean percentage of realization as [s] of 7.3 with a standard deviation of 15.2 though only 3 speakers contribute to this mean. However, in some Hausa speakers who have been exposed to, and influenced by, Igbo or Yoruba English, [t] or [t̪] are also found as variants of /θ/.

Further evidence of the overlap between /θ/ and /s/ in Hausa English may be observed in the hyper-correct pronunciation of 'forces' as [fɔ:θɪs]by speaker (44).

However, [z] is more common as a substitute for /ð/ in Hausa English than [s] is for /θ/, for it is found in 11 of the 15 speakers in the Hausa sample. The sample mean is 11.1% though the standard deviation is very high - 14.5 which suggests that the proportions are unevenly distributed among the sample - some in fact have a proportion of 0% and some of 42%. But further evidence that /ð/ and /z/ overlap in Hausa English is adducible: speaker (82)'s pronunciation of 'closer' (for which the target is /klɔ:zə/) as [klɔ:ða].

As in the case of /θ/, but even more here than there,

some speakers also have [d] or [d̪] or both as Southern-influenced variants of /ð/ in Hausa English. For the 15 speakers in the Hausa sample the mean percentage of [d̪] as a variant of /ð/is 2.6 with a standard deviation of 3.6, though only 8 speakers contribute to this.

It may be noted here that Hausa English, following R.P. has /ð/ in 'with', 'without' and 'within' and, by analogical extension, in 'north', 'south' and 'both' as well. Examples of the latter case include (1) [bɔ:ð gʌvmənt] and (84) [nɔ:ð səʊð daɪkɔtɔmɛ̰] 'North-South dichotomy'.

Some Hausa speakers also have [ʍ] in some wh-words - e.g. (41)[ʍɛŋ], (83) [ʍɪtʃ] 'which' and (84) [ʍɪtʃ]. This is probably due to the influence of conservative R.P. where [ʍ] rather than [w] is used in such words. Although this is also found in some Igbo speakers, we ascribe it there to probable Irish and Scottish influence; in both cases there are historical grounds for ascribing [ʍ] to one group of native speakers rather than the other (see Chapter One).

English /ʒ/ is almost always [dʒ] in Hausa English. Examples include (9) [dɪvɪdʒɪnl] 'divisional' and (1) [prɛ:dʒəs] 'pressures' (where R.P. /ʃ/ is assigned to /ʒ/ and then realized as [dʒ]).

In Hausa, the word-final nasal is [ŋ] (cf. Hoffman and Schachter 1969, p. 76). This may be assimilated to the bilabial or alveolar place of articulation if the following word begins with a bilabial or alveolar consonant respectively. In Hausa English, following Hausa, the word-final nasal is [ŋ] and it may be assimilated to the bilabial and alveolar place of articulation only when

the following word begins with a bilabial or alveolar *stop*. Where the following consonant is a fricative, for instance, no assimilation occurs as in (1) [kaptɪŋ ʃe:kaɾɪ] 'Captain Shekari' and (9) [naɪtɪŋ sɑvɪntɪ] 'nineteen seventy'. Also, although all nasals, including /m/, surface as [ŋ] in word-final position in Hausa, this rule is restrained in Hausa English so that only one speaker, (41), applies it once: [zɑ̃ŋ] for 'them'.

In the Sokoto dialect, however, the word-final nasal is [n] and a Sokoto speaker applies this rule to English thus yielding [la:nɪn] 'learning' and [hævɪn it] among other examples. This is speaker (40), a Sokoto broadcaster.

In some dialects of Hausa, especially rural ones, /ʃ/ is regularly weakened to [h]. This rule has been found to apply in Hausa English in one speaker - (86) - who has [prɛzdɛnhɪəl] for 'presidential'.

Hausa has geminate consonants, one of which belongs to the coda of one syllable and the other to the onset of another - e.g. *Jummai* [dʒom$maɪ] 'female name'. In most cases, these geminate consonants can be shown to have arisen as a result of total regressive assimilation. Consider for example the following:

gloss	*current form*	*alternate form*	*related or historical form*
'wing'	pɪppɪkē	-	pɪkāpɪkaɪ (plural)
'mend'	gyatta	gyarta	-
'gown-his' (his gown)	rīgassa	rīgarsa	rīga+r+sa
'gown-her' (her gown)	rīgatta	rīgarta	rīga+r+ta
'trample upon'	tattaka	-	tāka (to step, to tread upon)

In these and many other cases, the underlying consonant (either synchronic or diachronic) is recoverable either in careful speech (cf. [r] in [gyarta]and [ri:garsa]) or by examining a related form of the word (cf. [k] in [pɪka:pɪkaɪ] plural, for which the historical and dialectal singular is /pɪkpɪkē/). This process has now virtually changed all sequences of consonants word-internally to [illegible] geminate sets in Hausa.

This rule is applied to Hausa English and yields forms which we could choose to treat as mere instances of assimilation of place, manner, voice or any combination of these. But such an analysis would miss the generalization that these are instances of total assimilation which are quite distinct from any other kinds of assimilation in Nigerian English and which derive directly from the same process which has been operating to produce geminate consonants in Hausa. Consider, for example, the following:

Example	*Sp.No.*	*Orth. form*	*Type of assimilation*
1. [kwaʃʃŋ]	(86)	'question'	regressive ass. of place [s] → [ʃ] before [ʃ]
2. [ɪð ðə]	(41)	'is the'	regr. assm. of place and voice [s] → [ð] before [ð]
3. [wɑr ɾa:ðə]	(83)	'would rather'	regress. assm. of manner [d] → [ɾ] before [ɾ]
4. [gʌmmɛnt]	(67)	'government'	regress. assm. of place and manner [v] → [m] before [m]
5. [prɛzzɛnʃɪəl]	(86)	'presidential'	progr. ass. of manner [d] → [z] after [z]

Thus Hausa English must be considered as having *one* rule which requires that word-medially or at word-boundary, all sequences of two consonants which belong

to adjacent syllables (apart from those in which the first consonant is a nasal) may be geminate. It is also interesting to note that it is the consonant at syllable coda that is usually assimilated to the place or manner of articulation of the consonant at syllable onset, both in Hausa and in Hausa English. This appears to confirm the claims of Foley (1977), Hooper (1976), and Donegan and Stampe (1979) that since assimilation is a lenition process and since the coda of a syllable is its weakest part, it is more likely to occur at syllable coda than at syllable onset. The only exception is example 5 above where the positionally weaker [z] is acoustically stronger than the positionally stronger [d] and thus assimilates it to its manner of articulation.

We may summarize the more salient features of the consonant sub-system of Hausa English as follows:

(i) /p/ may be realized as [f]

(ii) /f/ may be [p] or [ɸ]

(iii) /v/ may be [b]

(iv) /θ/ may be [s]

(v) /ð/ may be [z]

(vi) R.P. /ʒ/ is usually [dʒ]

2.2.3. Variation in the Hausa English Consonant Sub-System

The account of the consonant sub-system of Hausa English given above is over-generalized and takes no account of variation between different speakers and within individual speakers in the proximity of their phonological systems to Basic Hausa English - i.e. the type most affected by interference from Hausa - and R.P.

This deficiency can be made up for by comparing two speakers, one an American-educated university lecturer, (speaker (84)) and the other a lady broadcaster who went to a mission school where many of the teachers were from Southern Nigeria (speaker (1)). It will be shown that because of her training as a broadcaster, (1) approximates more to R.P. than (84) and that because (84) attended a Northern government-run primary school where most of the teachers were Hausa which (1) did not, he shows more features of Hausa interference than she does.

We have seen in our consideration of the Nigerian English consonant system above that R.P. morphemic /z/ (plural, third person and possessive marker) is generally /s/ in Nigerian English. Speaker (1), however, has 64% of all occurrences of R.P. morphemic /z/ as [z] while (84) has only 8%. Also, while (84) has [p] and [ɸ] as realizations of English /f/ 68% of the time, (1) has no [p] or [ɸ]

as realizations of /f/ at all. While (84) has [b] as a realization of English /v/ 41% of the time, (1) has none.

When we compare their realizations of the English dental fricatives the same pattern emerges. While neither of them has [s] as a realization of R.P. /θ/, (84) has [z] as a realization of R.P. /ð/ 5% of the time as against (1)'s 0%. However, while (84) has no plosives - alveolar or dental - as realizations of R.P. /θ/ and /ð/, (1), because she has been taught at school by Southern Nigerians, has [t] as a realization of /θ/ in a proportion of 33% and [d] as a realization of /ð/ in a proportion of 3%.

2.2.4. The Igbo English Consonant Sub-System

As has been mentioned earlier (see 2.1.2. above), Igbo English can hardly be said to have a separate consonant sub-system distinct from that set up for Nigerian English. This is because Igbo has such a versatile consonant system that /θ/ and /ð/ are the only English consonant phonemes which do not occur either phonemically or phonetically in the language. The Igbo English variable realization of these dental fricatives as alveolar or dental plosives is not distinctly Igbo, but is general in Southern Nigeria and all along the coast of West Africa.

However, Igbo speakers in the sample appear to

have a much lower proportion of [θ] as a realization of English /θ/ - their mean percentage of[θ] being 41.3 compared to Hausa speakers' 82.3 and Yoruba speakers' 79.1. The favoured divergent realization of English /θ/ among Igbo speakers is [t] which has a mean proportion of occurrence of 29.1%, though only 10 speakers contribute to the sum. The next favoured divergent realization is [t̪] which has been attested in the Igbo sample with a mean of 22% and a standard deviation of 23.9, but with only 8 speakers contributing.

[d] is also the most favoured realization of English /ð/ among the Igbo sample, its mean proportion of occurrence being 43%(with a standard deviation of 25.1), it being attested in all the 15 speakers. The next favoured form is [ð] which has a mean percentage of occurrence of 41.3 (with a standard deviation of 23.7 and with all 15 speakers contributing). [d̪]is the least favoured, for it has a mean occurrence of only 15.3% (with a standard deviation of 10.8) and is attested only in 12 of the 15 speakers.

Additional evidence that /ð/ and /d/ overlap in Igbo English may be adduced: (64) realizes 'wider' as[waɪðə] , an instance of hyper-correction. Evidence from pronunciation spelling that speakers (Igbos, Yorubas and others) who realize English /θ/ and /ð/ as alveolar plosives may confuse the two sets of consonants at a deeper level is observable in the following quotations:

1. The management wishes to bring to your notice that a Conciliator has been appointed by the Federal Commissioner for Labour who will negotiate with

parties in *orther* to bring about a settlement.

2. On the students of the Kwara State College of Technology, the official source said that majority of the Part One Ordinary and Higher Diploma students left the campus in November and according to the federal government directives, they became *authomatically* suspended.[6]

In the first sentence, 'order' is spelt 'orther' and in the second 'automatically' is spelt 'authomatically', both reflecting confusion between the dental fricatives and the alveolar plosives.

Igbo English, perhaps following Irish and Scottish English, has /θ/ in 'with' and 'within'. Only two sophisticated speakers (in this case broadcasters) have /ð/ in these words, the more common phoneme among other speakers being /θ/. For example, (56) has [wɪt̪] pre-pausally but [wɪddɾɔ:n] 'withdrawn'. It seems reasonable to conclude that in the second example /θ/ is the target, which would have surfaced as [t] or [t̪] if it were not assimilated to the voicing of the following [d].

Although Igbo has [ʒ] as an allophone of [z] before /ɪ/ and /ɨ/ (Williamson (1969)), Igbo English does not have /ʒ/ as a separate phoneme. In the corpus, R.P. /ʒ/ has been found to be realized variably as [ʒ], [ʃ] and [dʒ]. For example, speaker (64) has [meɪʒɔs] alongside [mɛʃɔ] for 'measures' and (47) has [lɛʃɔ]alongside [lɛdʒɔ] for 'leisure'. Thus even individual speakers are not certain as to whether to produce a voiced or a voiceless palato-alveolar fricative or a voiced palato-alveolar affricate where R.P. has /ʒ/.

Like Hausa English, Igbo English also has [w] in wh-

words, variably in some speakers and categorically in others. Igbo /m̃ʷ/ is of course phonetically [m̃] but although this may have enhanced the acquisition of English [ʍ] in wh-words, its source must be a native dialect which has it. It seems reasonable, in view of the historically attested presence of Scottish and Irish missionaries (especially the latter) in the Igbo area, to speculate that this may be a residue of their influence.

Igbo has five nasal phonemes - a bilabial, an alveolar, a palatal, a velar and a labialized velar (cf. Carnochan (1948, p. 241)). However, its syllabic nasal, which is structurally the closest to English nasals at syllable coda, is /m/ and is realized as [m] word-finally and is homorganic with the following consonant elsewhere. Thus while English /ŋ/ may occur in pre-velar, word-final and intervocalic positions, Igbo /n/ may not occur word-finally. However, the word-final nasal in Igbo English is not [m], contrary to what the Igbo situation would lead us to expect, but [n]. Examples of R.P. /ŋ/ realized as [n] in Igbo English include (64) [tɛkɪn pɪes] 'taking place', (79) [tɪtʃɪn hɔspɪtal] 'teaching hospital' and (62) [gɪvɪn mɔ:] 'giving more'. This word-final [n] often resists assimilation to the bilabial place of articulation, probably because /n/ and /m/ are felt to be 'different' in English. Also, only one speaker realizes a word-final /m/ as [n] - (91) who has [frɔn taɪm] 'from time' which when viewed along with the rarity of [ŋ] as a realization of /m/ in word-final position in Hausa English is strong supporting evidence for claims about

the relative strength of the bilabial place of articulation made in the literature (cf., for instance, Foley 1977).

2.2.5. Variation in the Igbo English Consonant Sub-System

In order to explore the nature of variation between speakers in the Igbo English consonant sub-system, we shall compare two speakers. Speaker (80) is a broadcaster and speaker (79) is a politician. While (80) has morphemic /z/ in a proportion of 12% of all its occurrence in his corpus, speaker (79) has only 2%. While (80) has [v] as a realization of the consonant sound in 'of' (where Nigerian English has /f/ and R.P. /v/) in a proportion of 17%, (79) has none, all his realizations of the sound in question being [f]. While (80) has [d] and [d̲] as realizations of English (ð) in proportions of 12% each, (79) has them in proportions of 69% and 19% respectively. However, both (80) and (79) have an equal proportion of [t] and [t̲] as realizations of English /θ/, (80) having 33% as [t] and (79) having 33% as [t̲].

But the over-all pattern that emerges is that (80) consistently approximates more to the R.P. realizations while (79) consistently approximates to a system which is closer to Igbo phonology.

2.2.6. The Yoruba English Consonant Sub-System

As we have seen in section 2.1.3. above, seven English consonant phonemes have no counterparts in Yoruba - /p/, /v/, /θ/, /ð/, /z/, /ʒ/ and /tʃ/. Of these, only /p/ does not present serious problems of articulation to Yoruba speakers. But in uneducated Yoruba speech, and in English loan words in Yoruba generally, English /p/ is usually replaced by [kp]. /v/ is often replaced, even in educated speech, by [f] though this has not been attested in the corpus. The alternation is sufficiently widespread among Yoruba speakers for it to be reflected in pronunciation spellings such as the following:

1. To *relief* the poor masses...
2. The novel 'Animal Farm' is a remarkable book which states exactly the way human beings *behalf* in their day to day activities [7]

where'relieve' and 'behave' are spelt 'relief' and'behalf' as a result of overlap between /f/ and /v/.

As in Igbo English, the variants of the dental fricatives in Yoruba English are alveolar or dental plosives. In the case of /θ/, the Yoruba sample has a mean realization of it as [t̪] of 12.3% (with a standard deviation of 18.5) though only 5 speakers contribute. Similarly, the sample has a mean of[t] as a variant of /θ/ of 7.8%, with a standard deviation of 11.1 and with 6 speakers contributing.

[d] occurs as a realization of /ð/ a mean of 36.6 of the time in the output of all the 15 speakers (the standard deviation being 28.6).

[d̪] occurs in the output of 14 of the speakers, but the sample mean is 15.2% and the standard deviation is very high at 14.3. Further evidence of the overlap between /ð/ and /d/ in Yoruba English may be observed in (51)'s realization of 'borders' as [bɔðəs] where /d/ is hypercorrected to [ð].

In Yoruba English, there is variation between speakers and within individual speakers in the assignment of /θ/ and /ð/ to 'with', 'within' and 'without'. The favoured phoneme in 'with' is /θ/ but 'within' and 'without' occur with both /θ/ and /ð/. Yoruba English, following R.P., also has /θ/ in 'north' and 'both', and by analogical extension, in 'northern' as well.

Yoruba has /s/ but not /z/ and Yoruba English often substitutes [s] for Nigerian English /z/ (which has a different distribution from that of R.P. /z/ as we have seen in section 2.2.1.). For example, speaker (19) has [sɔʃalaɪseːʃɔ̃n] 'socialization' and (58) has [prɛsɛnt] 'present' both of whom substitute [s] for Nigerian English /z/.

Yoruba English may assign an orthographic 'x' which represents /gz/ in both R.P. and Nigerian English to /ks/ as in (3) [ɪksɛkətɪvz] 'executives'. Whether Yoruba English also has /gz/ in such words and then devoices /z/ to [s] which in turn assimilates /g/ to its voicelessness remains speculative.

Yoruba has /dʒ/ but not /tʃ/ and Yoruba English often replaces Nigerian English /tʃ/ with [ʃ]. This has been attested in 6 of the 15 Yoruba speakers. In one of these speakers, [ʃ] occurs in all 4 tokens of the occurrence

of /tʃ/, i.e. in a proportion of 100%! This is speaker (51), a university lecturer. Examples from some of the speakers include (51) [fɔ:ʃɔnɛtlɪ] 'fortunately', (21) [ɾɪʃt] 'reached' and (18) [wɪʃ] 'which'. Speaker (58) also has [tʃ] where both Nigerian English and R.P. have /ʃ/ - in [kɾɔtʃɪa] 'crucial' (note final /l/ deletion and see Chapter Four) which is further evidence of the overlap between /ʃ/ and /tʃ/ in Yoruba English. This overlap is also reflected in pronunciation spellings such as the following:

> Alhaja ... and children *cheer* the joy with our beloved husband and father ...[8]

where 'share' is spelt 'cheer', reflecting overlap between /tʃ/ and /ʃ/ on the one hand and /ɛə/ and /ɪə/ on the other.

R.P. /ʒ/ is sometimes [dʒ] and sometimes /ʃ/ in Yoruba English: [dʒ] is found variably in 'usual' and its derivatives (e.g. (20) [ɔŋju:dʒɔalɪ] 'unusually') but [ʃ] is more widespread in its distribution. It is found in all nominal endings where /it/ is spelt 'sion' (e.g. (33) [tɛlɪvɪʃɔ̈n] 'television' and (66) [ɾɪvɪʃɔns] 'revisions') and elsewhere as in 'leisure' and 'measure'.

According to Bamgbose (1966, p. 8, 1969, p. 165) the Yoruba syllabic nasal /m/ is homorganic with the following consonant and [ŋ] before vowels. However, in Yoruba English we find that [n] is the variant of Nigerian English /n/ before vowels - e.g. (58) [tɔkɪn ɔf] 'talking of', and (65) [wɛstɪn ɛ lɔt] 'wasting a lot'.

Also, Nigerian English /n/ is [ŋ] in Yoruba English when it occurs before any consonant other than an alveolar

stop regardless of word-boundary - e.g. (19) [waŋ pɔsɔ̃n] 'one person', (27) [ɪŋdʒɛktɛd] 'injected' and (51) [ɪŋhabɪtɛd] 'inhabited'.

The ambiguous status of /h/ as a phoneme in Yoruba has already been mentioned (section 2.1.3. above). /h/ is often deleted in Yoruba English especially word-initially e.g. (21) [ɔstɪlɪtɪs].

We may summarize the important features of the Yoruba English consonant sub-system as follows:

(i) /v/ may be realized as [f]

(ii) /θ/ may be realized as [t̪] or [t]

(iii) /ð/ may be realized as [d̪] or [d]

(iv) /z/ may be realized as [s]

(v) /tʃ/ may be realized as [ʃ]

(vi) R.P. /ʒ/ is normally [ʃ]

(vii) /h/ may be deleted word-initially

2.2.7. Variation in the Yoruba English Consonant Sub-System

As in the case of Hausa and Igbo English, we shall explore variation between speakers in the Yoruba English consonant sub-system by comparing two speakers. Speaker (32) is a trained broadcaster-turned business executive and speaker (58) is a university lecturer.

Speaker (32) has a consonant system which is relatively close to R.P. while (58) has a system which shows considerable mother-tongue interference and orthographic influence. Thus while (32) has [v] in 'of' in a proportion of 30% of all occurrences of

the word in his corpus, (58) has none, all his realizations of the consonant being [f]. While (32) has 25% of R.P. morphemic /z/ as [z] (plural, third person or possessive marker), (58) has none, all his realizations of the morpheme being [s]. But while (58) has one token of /tʃ/ as [ʃ], (32) has none, all his /tʃ/ realizations being [tʃ].

Neither (58) nor (32) has any tokens of /h/-deletion. But while only 3% of all occurrences of R.P. /z/ when spelt 's' between two vowels are [z] in (58)'s output, (32) has [z] in a proportion of 34%.

Their realizations of the dental fricatives also reflect their varying degrees of approximation to the two systems. (32) has [θ] as a realization of /θ/ in a proportion of 100%, while (58) has [θ] 43% of the time and [t] and [t̪] 29% of the time each. (32) has [ð] as a realization of /ð/ 86% of the time and [d] and [d̪] 4% and 11% of the time respectively; (58) has [ð] only 32% of the time and [d] and [d̪] 57% and 5% of the time respectively.

2.2.8. The Nigerian English Continuum

We view the three consonant sub-systems as relating to one another in a continuum. As we have seen, all three accents of Nigerian English can be considered as having a common consonant system which diverges from R.P. most noticeably in its use of English orthography as a cue to phonemic assignment.

This is the unifying element of the continuum.

Each of the three kinds of Nigerian English has its own sub-system, though their divergence from one another is low-level and affects phonemic representations in only a few cases.

We have also shown some of the ranges of variation possible within each sub-system with some speakers having a system that is close to R.P. and others having one that is closer to the basic sub-system influenced by the mother-tongue.

The concept of a continuum will be more fully developed in Chapter Three where the more clear-cut nature of vowel systems enables this to be done.

2.3.0. Orthography and the Nigerian English Consonant System

It has been shown that many of the divergences between Nigerian English in the distribution of underlying representations in the lexicon can be traced to the influence of the orthography in the latter kind of English. Our approach has enabled us to separate mother-tongue interference from other external kinds of interference such as that from the orthography. Error analysts have usually lumped all these under mother-tongue interference, paying only casual attention to the role of the orthography in second language learning.

As our models of first and second language learning show (Chapter One), there are significant

differences between the two, especially in the Nigerian context. While the native English child learns his language by listening and mimicking and without the remotest idea as to how it is represented in writing, the Nigerian child often comes across many English words in writing before he has had a chance to hear them pronounced.

Even where the Nigerian learner of English is acquainted with the pronunciation of a word before he sees the written form of it (as in the early days of schooling, for instance) the pronunciation that he does receive is more often than not based on the orthography anyway, his teacher speaking English no differently from how it has been spoken in West Africa since early 19th century.

Orthography appears to have taken pride of place in the Nigerian, indeed West African, English system right from this period, when English began to be learnt formally in West Africa. Many of the first West Africans to learn English in the 19th century were adult freed slaves who studied under an over-worked British or other missionary for a few months or years. The emphasis at this time was on literacy, for the missionaries laid great store by the ability of their converts to read the gospel. Predictably, little time was devoted to such niceties as pronunciation. Moreover, many West Africans then as now started off by learning to read and write in their mother-tongue, for which phonetic orthographies are used. It was natural, therefore, for the learner to transfer the phonetic values of the alphabet to his learning of English since his first experience had led him to expect a perfect

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correlation between a sound and the letter representing it.

Where efficient teaching steps in to point out the inconsistencies of English orthography such pitfalls may be avoided by the learner. However, in present-day Nigerian English, phonological systems based on the orthography have become not only widespread but also stable. Where steps are not taken to counter the influence of the orthography, the second language learner is bound to evolve a rule of thumb which says: "When in doubt, trust the orthography."

2.4.0. Speculations on the Predictability of Mother-Tongue Interference

It is well-known that second and foreign language speakers of English substitute dental or alveolar plosives or alveolar fricatives for English dental fricatives if these do not occur in their language. But little is known about the principles, if any, which govern the choice of substitutes in foreign language learning. Hyman (1970) addressed himself to this problem - i.e. the principles governing foreign sound adaptation both in loan nativisation and second language learning. Hyman adduced evidence to show that the phonetic approximation theory was implausible: if all that influenced sound substitution was phonetics, then both French and Serbo-Croatian speakers would choose one and the same sound to replace English /θ/ which they do not,

Serbo-Croatians substituting [t] and the French [s]. Hyman therefore concludes that "foreign sound adaptation is mental in nature" and that it is influenced by the notion of *Sprachgefül* for which explanation must be sought in the phonology of the native language. Hyman also concludes that "the theory of phonemic approximation is equally invalid" and that sounds are perceived in terms of the native underlying forms.

Nemser (1971) who experimented with Hungarian speakers who had a limited knowledge of English found that there was a gap between "the perceptual and productive modalities in the interpretation of alien phonemes" which could not be accounted for by any theory (1971, p. 95). In other words his subjects heard English sounds differently from the way they reproduced them.

In our own consideration of mother-tongue interference in Nigerian English above, we have seen the divergence between Yoruba and Igbo speakers on the one hand and Hausa speakers on the other in substituting sounds for English /θ/ and /ð/. We shall adduce evidence to suggest that there are principles constraining and guiding the choice of a substitute in foreign sound adaptation.

The principles which govern foreign sound adaptation are partly phonetic and partly phonological. The phonetic element is the fact that in all cases, an attempt is first made to approximate the *place* of articulation in question but, and this is where the phonological element comes in, this may be over-ridden by the relative 'weakness' of the nearest place of articulation or the relative strength of some adjacent place of articulation.

We define weakness here in terms of the number of phonemic items found in a particular slot in the consonant chart of a language. The fewer the items, the weaker that place of articulation and the less is its potential for providing substitutes for foreign sounds. In the case of languages for which frequency counts of the individual phonemes are available, it is also possible to show that a frequently occurring sound (say one that occurs 30% of the time in any randomly selected utterance) is stronger than one which occurs only occasionally (say .01% of the time) even if the latter sound occupied more slots than the former in the consonant chart of the language.

A foreign voiced sound will be replaced by a voiceless one if the native language has the latter, unless that place of articulation is weak, in which case the next adjacent place of articulation takes precedence. Thus Yoruba, which has /f/ but not /v/ replaces English /v/ with [f] but Fulfulde, which has only /f/ but not /v/ replaces English /v/ with [b] (Arnott (1969), p. 69). In Yoruba, there is only /b/ but no /p/ and so the bilabial place of articulation is no stronger than the labio-dental, both having only one item each. In any case, precedence is given to the nearest place of articulation according to our principle above and so Yoruba replaces English /v/ with [f]. Since, according to our hypothesis, precedence is given to place of articulation in foreign sound substitution, it follows that both manner of articulation and voicing are liberally sacrificed.

In the case of Fulfulde, however, the labio-dental place of articulation which should have attracted English /v/

to become [f] is weak, in that it has /f/ only, compared to the bilabial place which has two members, /p/ and /b/.[9]

Where two homorganic sounds of the native language differ in manner of articulation, the potential substitute for a foreign sound will be the sound that is closer to the foreign sound in manner of articulation unless it is the weaker of the two native sounds. Thus both Yoruba and Igbo substitute [t] or [ṭ] for English /θ/ and [d] or [ḍ] for English /ð/ because in both languages, the nearest place of articulation to the dental is the alveolar; their choice of plosives rather than fricatives reflects the relative strength of alveolar plosives over fricatives in the two languages. In Yoruba, there are two alveolar plosives, /t/ and /d/ but only one alveolar fricative, /s/. In Igbo, there are four simple alveolar plosives /t/, /d/, /t^h/, /d^h/ as against two simple alveolar fricatives /s/ and /z/. In Hausa, however, the number of alveolar plosives and fricatives is the same - two in each case /t/ and /d/ and /s/ and /z/. Hausa substitutes [s] and [z] for English /θ/ and /ð/, the alveolar fricatives being the closest to the English dental fricatives both in place and manner of articulation features and there being no over-riding reason why some other sounds should take precedence over them, such as that which leads Igbo and Yoruba to reject them in favour of plosives.

To approximate to the place of articulation of a foreign sound means to substitute a sound articulated in the place (but differing in manner of articulation or voicing) if there is one. Failing that, the next available choice is to substitute a sound articulated at the next nearest

place of articulation to the foreign sound which occurs in the native language. These conditions may be over-ridden by the relative strength or weakness of particular sounds in the native language.

Thus Yoruba, which has /ʃ/ but not /tʃ/ replaces English /tʃ/ with [ʃ] because it is the closest sound to it in Yoruba and there is no phonological reason why another sound is preferable to it. Thus /tʃ/ retains its place of articulation and voicelessness but changes its manner of articulation. But in Ijọ, a Nigerian language, (Williamson (1969)) there is neither /ʃ/ nor /tʃ/ and so both English sounds are replaced by [s] in Ijo English. Both retain their voicelessness but move to the next available place of articulation. Similarly, as /dʒ/ does not occur in Ijo (except in the Kalabari dialect, cf. Williamson, op.cit.) the closest sound to English /dʒ/ in Ijo is /z/ and consequently [z] is a regular substitute for English /dʒ/ in Ijo English.

According to Kelly (1969), Urhobo (a Nigerian language) has neither /tʃ/ nor /dʒ/ but has both /ʃ/ and /ʒ/. Consequently, [ʃ] and [ʒ] are substituted for English /tʃ/ and /dʒ/ in Urhobo English. Again, this lends further support to our hypothesis, that the place of articulation is the first to be approximated in foreign sound substitution, followed by voicing or voicelessness and then manner of articulation in that order, unless there are over-riding (i.e. phonological) reasons why this should not be so. In the case of Urhobo above, fricatives which correspond in place of articulation and state of the glottis to the English palato-alveolar affricates, but

which differ from the English sounds in manner of articulation are substituted for the English sounds because they are the closest to them and there is no reason why any other consonant should take precedence over them.

2.5.0. Consonant Assimilation in Nigerian English

Consonant assimilation in Nigerian English is a phonological process of wide distribution which cannot àlways be traced to the influence of Nigerian languages. It is a natural process, in the sense of Donegan and Stampe (1979), i.e. a phonetic process which "cannot be explained by a system of rules based on native alternations" (1979, p. 132).

Consonant assimilation in Igbo and Yoruba is restricted to the syllabic nasal which is /m/ in both languages and which is homorganic with the following consonant. Both languages do not allow syllables which are more complex than CV (e.g. CVC, CCV etc.) but both allow a syllable composed solely of a nasal which may then precede another consonant either in the same or in a following word and be assimilated to the place of articulation of the consonant. The following examples illustrate this point:

Igbo /m/ (Carnochan 1948)

[m] word-finally e.g. [dúm̀] 'all'

[m] before bilabials e.g. [ó bhàárà yà m̀bhá]
'He rebuked him'

[n] before alveolars /m̀tì/ [ǹtì] 'cheek'

[ŋ] before velars /ḿkè/ [ŋ́kè] 'tattoo mark'

Yoruba /m/ (Bamgbọse 1966, 1969)

[m] before bilabials /mo ḿ bọ̀/ [moḿbọ̀] 'I am coming'

[ɱ] before labiodentals /ó ḿ fò/ [óɱfò] 'he is jumping'

[n] before alveolars /óḿ lọ/ [óńlọ] 'he is going'

[ŋ] before velars /óḿké/ [óŋ́ké] 'he is crying'

This shows that consonant assimilation is restricted in the two languages because their syllable structures do not allow any other consonants apart from syllabic nasals to be in a position to be assimilated and that were their syllable structures to be altered, or were their speakers given the opportunity to speak a language whose syllables allowed consonants to be in contact, the natural result would be assimilation. This is indeed the case, for Yoruba and Igbo speakers in the corpus exhibit cases of extensive consonant assimilation which have no parallels in their mother-tongues. This appears to confirm the claim of Donegan and Stampe (1979) that natural processes, of which assimilation is one, would occur in foreign language learning even if they were not found in the native language if conditions were conducive to them in the former.

Like the syllabic nasal of Igbo and Yoruba, the pre-consonantal nasal in Hausa can be analyzed as /m/ or /N/ which is homorganic with the following consonant. However, many of these homorganic variants have now become phonologized though they can still be shown to have derived from /m/ by examining related forms of the words

in which they have been phonologized as in the examples below:

[m] /hukūmā/ 'government'

[n] /hukuncT/ [hokɔntʃi$] 'judgement'

[m] /tumākT/ 'sheep'

[ŋ] /tunkɪyā/ [tɔŋkɪja:] 'ewe'

Both [n] and [ŋ] are represented as /n/ phonemically. It can be observed that both [n] and [ŋ] in the words for 'judgement' and 'ewe' respectively, derive from an /m/, though in some dialects (e.g. Kano) even in careful speech only [n] or [ŋ] (as the case may be) can be elicited in these words.

Hausa allows CVC syllables to occur, unlike Igbo and Yoruba and so the scope for consonant assimilation is much wider here than there. As we have shown in section 2.2.2. above, assimilation has now virtually reduced all but a few word-medial consonant sequences to geminate consonants in Hausa. The exceptions are consonant sequences the first of which is a nasal, a liquid or a sibilant as in /kàmbʊ́:/ [kàmbú:] 'bangle charm', /kárpt/ [kárpí:] 'strength' and /mázkt/ [mazkí:] 'oiliness'. In the case of nasals, they are assimilated to the place of articulation of the following consonant but retain their nasality. However, liquids and sibilants resist assimilation if the following consonant is not homorganic with them. The ability of all three kinds of consonant to survive gemination is no doubt due to their greater acoustic strength relative to other consonants.

In addition to the kinds of consonant assimilation

when they speak another language. Vowels of Set 1 are produced with an advanced tongue root, which appears to be the universally unmarked position of the tongue root since no accompanying change is observed either in the shape of the pharynx or in voice quality to a 'marked' state.

It is precisely because we are not accustomed to using voice quality to signal a distinction between vowels that the vowels of Igbo prove so difficult to recognize and imitate. Once we concede that voice quality is a legitimate distinguishing factor between two otherwise indistinguishable pairs of vowels, Igbo vowel distinctions become easier to hear. Moreover, we can ignore whatever other differences there may be between the pairs of Igbo vowels under consideration - such as tongue height - and simply set up a prosody of tense/lax or tense/not tense voice quality as a distinguishing feature between the two sets. For our transcription of Nigerian English, this would have the welcome effect of simplifying the number of vowel symbols to be used as we do not have to set up a separate set of vowels to represent the tense vowels of Igbo. Instead, the whole utterance where there is heard to be tension in the voice can be marked with a suitable diacritic. This is indeed what we have done.

It is obvious that an Igbo speaker learning English faces enormous difficulties since the parameters that are relevant in the production and perception of Igbo vowels are irrelevant in speaking and understanding English. To begin with, the three pairs of vowels in

Igbo which could have served as equivalents of a corresponding set of pairs in English (i.e. Igbo /ɪ/, /ɪ̣/; /ọ/, /o/; /ụ/, /u/ and English /i:/, /ɪ/; /ɒ/, /ɔ:/, /o/, /u:/) prove inadequate because that important cue - duration as a distinguishing feature - is lacking in the vowel system of Igbo.[3] In addition, Igbo has neither an open front nor an open back unrounded vowel so that the nearest vowel to English /a/ and /ɑ:/ is /a/.

Nor does Igbo have a central vowel of any kind, apart from the open /a/. This vowel could have been used as the regular exponent of both /ə/, /ʌ/ and /ə:/ if English had been taught to the early generations of Igbo speakers by a homogenous group of native speakers who spoke a non-rhotic variety of English. But it was not so taught. /ə:/ surfaces as [ɛ] or [e:] (which suggests Irish and Scottish influence) especially when it is orthographically 'ir', 'er' or 'ear'. But when there is an 'o' or 'u' in the orthography, /ə:/ surfaces as [ɔ] or [ɔ:]. /ə/ is realised as [a] only when it is orthographically 'a', or 'er' (word-finally). In other cases it is realised according to its orthographic representation. /ʌ/ is regularly realised as [ɔ] probably because in the nineteenth century when English began to be formally learnt in Southern Nigeria /ʌ/ was a back unrounded vowel[4] and since back vowels only occur rounded in Kwa languages, /ʌ/ was felt to be a variety of [ɔ].[5]

Of the English diphthongs, /aɪ/, /əʊ/ and /ɔɪ/ present little difficulty to Igbo speakers because they involve familiar vowels. But when they precede another vowel they may have their second element changed to a consonantal

glide or otherwise undergo modification to facilitate syllabification - for example (91) has [pa:wa] for /paɑə/. /əɑ/ is realised either as [ɔ] or [ɔ:] and /əɪ/ as [e:] or [ɛ]. Of the centring diphthongs, /ɛə/ seems to present the greatest difficulty to Igbo speakers, probably because it involves the co-occurrence of two vowels which are the direct opposite of each other in the vowel harmony system of Igbo: /e/ occurs with the lax set and /a/ with the tense set: /ɛə/ is re-interpreted as /e/+/a/. Very often /ɛə/ is realized as [ɛ:], i.e. a sustained open [ɛ] which does not even approach the central position of either [ə] or [a].

Unlike Hausa, Igbo and Yoruba allow a sequence of vowels to occur in two adjacent syllables. Consequently, vowel alternations such as assimilation and elision occur in both languages. In Igbo, according to Nwachukwu (1977) complete vowel assimilation, which is always regressive, occurs whenever two vowels occur next to each other at morpheme or word-boundary. However, Welmers (1973) reports that in most cases the vowel assimilation that does occur in such sequences is incomplete: "The quality of the first vowel merges very quickly into the quality of the second. Thus the second vowel is more prominent, but the first remains identifiable" (1973, p. 42). Vowel elision in Igbo occurs only in lexical coinages of "names or other concrete nouns" (Nwachukwu 1977, p. 109). Nwachukwu convincingly demonstrates that vowel assimilation must precede vowel elision, e.g. *Nwókē* name meaning 'male child' is derived from *nwà* 'child' + *óke* 'male' → *nwáokē* → *nwóokē* (regressive vowel assimilation) and

finally *nwókē* (vowel elision).

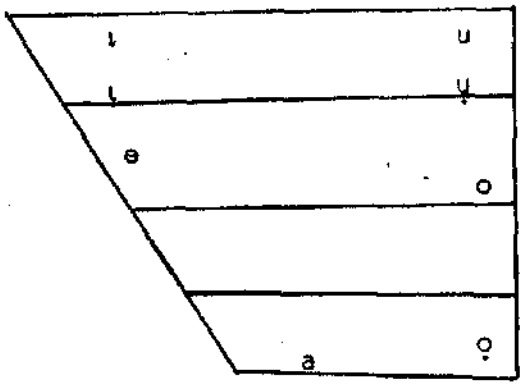


Fig. 3.2. Igbo Vowels

3.2.3. Yoruba

As has been stated earlier, Yoruba has a similar vowel system to that of Igbo, the two languages being related as close members of the Kwa branch of the Niger-Congo language/sub-family. Standard Yoruba, which is based on the North-Western dialect of the language, has a seven-vowel system consisting of /ɪ/, /e/, /ɛ/, /a/, /ɔ/, /o/ and /ʊ/. However, as Adetugbo (1977) has shown, this represents a simplification of a more complex vowel system which existed in Proto-Western Nigeria Yoruba and still survives in what Adetugbo calls 'Central Yoruba', i.e. that spoken in Ekiti, Akure, Effon and Ilesha. This older system has, in addition to the seven vowels of Standard Yoruba, two more vowels, /I/ and /ɷ/ and thus has an identical vowel system to that found in the Western dialects of Igbo.

But unlike Igbo, Yoruba has nasal vowels which contrast with oral ones. Standard Yoruba has three,

Central Yoruba:

Close Pharyngeal		Open Pharyngeal	
i	u	I	ʊ
e	o	ɛ	ɔ
(a)		a	

Thus the closer vowels belong to the 'close pharyngeal' set and the more open vowels belong to the 'open pharyngeal set'. The 'close pharyngeal' set corresponds to Set 1 of Igbo vowels (lax) and the 'open pharyngeal set' corresponds to Set 2 of Igbo vowels (tense). As in the Western dialects of Igbo, /a/ is almost neutral to the harmony system in Central Yoruba. According to Adetugbo (1977, p. 377) "As an initial vowel, it belongs to both subsets but as a final vowel, it always belongs only to the open pharyngeal subset". Below we set out the harmony sets of both Igbo (Western dialects) and Yoruba (Central Yoruba) for easy comparison:

	Western Dialects of Igbo		Central Dialects of Yoruba	
I	i	u	i	u
	e	o	e	o
	a		(a)	
II	ɨ	ụ	I	ʊ
	ẹ	ọ	ɛ	ɔ
	a		a	

Thus with the exception of the manner of representing these vowels in the two languages, these are, for all practical purposes, identical vowels.

However, because of the merger of /ɪ/ and /I/ as /ɪ/ in North West Yoruba and South East Yoruba and the coa-

lescence of /u/ and /o/ as /u/ in these dialects the full vowel harmony of Central Yoruba, and by inference, Proto Yoruba, partially collapsed in non-Central Yoruba dialects so that Ladefoged (1968) found only incomplete vowel harmony in Standard Yoruba consisting of the following sets:

Set 1		Set 2	
i	u	i	u
e	o	ɛ	ɔ
a		a	

where three of the five vowels in each set overlap. However, even this restricted kind of vowel harmony still ensures that "In all Yoruba dialects, /o/ and /ɔ/ do not co-occur in this frame [i.e. VCV - M.J.] nor do /e/ and /ɛ/" (Adetugbo 1977, p. 376). As in Igbo, loan-words are exempted from this restriction (cf. Bamgbose 1967, p. 273).

As in Igbo, the distinction between the pairs of Yoruba vowels (e.g. /e/ and /ɛ/) is one of quality rather than quantity. Set 1 (close pharyngeal) vowels are always closer and Set 2 (open pharyngeal) are always more open. Because of the disappearance of /I/ and /o/ from two major dialect areas of Yoruba, only the half open vowels need to be so distinguished in the speech of most Yorubas: /e/ and /ɛ/ and /ọ/ and /o/. These are by far easier to distinguish without a voice-quality cue than the closer pairs of /i/ and /I/ and /u/ and /o/. Indeed /I/ and /o/ appear to be on their way to coalescence as /ɪ/ and /u/ even in Central Yoruba as educated people from the dialect area respond to pressure from Standard Yoruba.[7]

As in the case of Igbo, these pairs of vowels cannot be adequately interchanged for the corresponding pairs of English vowels because of the absence of duration as a distinguishing feature in the case of the Yoruba pairs.

Yoruba vowels are basically short and all occurrences of long vowels in the language have been shown to be either due to phonetically conditioned vowel lengthening or due to the occurrence of two identical vowels in a sequence. Salami (1969) lists a number of cases of phonetically conditioned vowel lengthening in Yoruba among which are:

a) pre-pausally in a sentence or utterance, e.g. [ówà ḿbè:] 'he is there' and

b) when a high-toned syllable is preceded by a low-toned syllable, the former is lengthened and its tone raised, e.g. [obí:] [_/] 'parents'.

Siertsema (1959a) and Stevick (1965) have also shown that cases of vowels occurring long in Yoruba other than those which are phonetically conditioned are actually sequences of two vowels belonging to two different syllables. Siertsema (1959a) demonstrates that by tracing the etymologies of such words the long vowels can be shown to belong to two syllables. These are words such as [da: da:] < /dara dara/ 'good, well' where the deletion of /r/ in fast speech leads to the emergence of [a:] which is interpretable as /a/+/a/.As Salami convincingly shows, the tone is always a good indicator when a sequence of vowels coalesce into a long vowel. Stevick (1965) following Abraham (1962) finds that breath impetus is a good cue in cases where a vowel occurs long

as a result of the coalescence of two identical vowels because "whereas the glide is an uninterrupted sweep, --- vowel plus vowel has each vowel with its own stress and a dimunition of breath is made between each of the two vowels" (Abraham, 1962).

Similarly, cases of vowels which may appear to be diphthongs in Yoruba have been shown to be sequences of two independent vowels belonging to two separate syllables. Salami (1969, p. 189) shows that diphthong-like sequences such as ɛa, ɛɔ and ɔɛ can occur at word or morpheme boundary such as ègbé odò 'river bank' which may be phonetically [ègbéodò]. Salami reports that sometimes a glide is epenthesized to facilitate the transition from one vowel to the other.[8]

A number of alternations involving vowels in Yoruba have been attested, the most prominent of which are assimilation and elision. Vowel assimilation in Yoruba can be either progressive or regressive as has been shown by Bamgbose (1965). An example of regressive assimilation is *iléeṣẹ́* 'office' ← *ile* 'house' + *ṣẹ* 'work' and an example of progressive assimilation is *mɪ̀lọ* 'I didn't go' ← *mɪ* + *ò* + *lọ*. The overwhelming tendency is for vowel assimilation to be regressive in Yoruba.

Bamgbose (1965) also attempts to outline the principles governing vowel elision in Yoruba. He reports that elision takes place when the vowels of two words - the second of which is "either a pronoun or a noun" are in contact. When one of the vowels is elided, the two words are then contracted into one. The principles governing which vowel is elided appear to be very complex indeed

though a more sensitive analysis than that offered by Bamgbose is likely to discover that they are not in fact as complex as he indicates.

Yoruba speakers have similar problems to those of Igbo speakers in producing the vowels of English though there are differences between the two groups of speakers in matters of detail which will be fully documented in the section on their English vowel systems below.

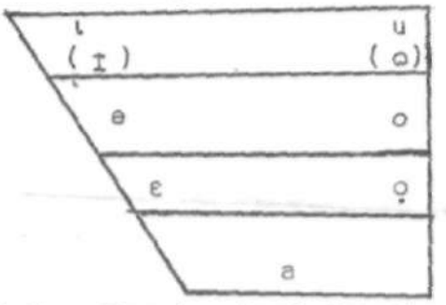


Fig. 3.3. Yoruba Oral Vowels. Vowels in parenthesis are found only in Central Yoruba

3.3.0. Vowel Systems in Nigerian English

Hausa English

There is a 'Basic' Hausa English vowel system as well as two variations on the Basic system, one in the direction of R.P. and the other in the direction of Igbo-Yoruba English. Most Hausa speakers in the corpus have a system similar to the Basic one, sophisticated speakers (especially Katsina-educated people and some broadcasters) have a system that is modified in the direction of R.P. and away from the mother-tongue while young Southern-influenced speakers have a system that is modified in the direction of Yoruba-Igbo English.

3.3.1. The Basic Hausa English Vowel System

The Basic Hausa English vowel system consists of the following vowels:

/i:/
/ɪ/
/e:/
/ɛ/
/æ/
/a:/
/ə/
/ʌ/
/ɔ/
/ɔ:/
/ʊ/
/u:/
/aɪ/
/ɔɪ/
/aʊ/

and, marginally, the following centring diphthongs: /ɪə/, /ɛə/ and /ʊə/.

Although the list of vowels in the Basic Hausa English system above is very similar to the R.P. list (lacking only R.P. /əʊ/, /ə:/ and having /a:/ in place of R.P. /ɑ:/) it will be seen that their distribution is very different here from R.P. The decision whether or not to include a vowel in a system in this study is based on its frequency of occurrence in a particular speaker or group of speakers as will be seen below. For reasons of

economy, we use R.P. as a frame of reference so that the distribution of each vowel is defined in terms of R.P. vowel territories. This is considered more economical than listing all the words in which a particular Nigerian English vowel occurs. However, the reference to R.P. does not imply that the Nigerian English speaker himself uses it as a point of departure. This should be seen as merely an analytical and descriptive expedient.

/i:/

This vowel corresponds to R.P. /i:/, R.P. /ɪə/ when it is spelt 'e' as in (9) [pi:rɪəd] 'period', in some speakers R.P. /ɪ/ when spelt 'ie' as in (1) [kʌmpəni:z] and R.P. /e/ in 'premier' (e.g. (86) [pri:mɪə]) on analogy with words beginning with 'pre' (e.g. 'predetermined'). R.P. /i:/ is shortened only an average of 10.5% times by Hausa speakers as a group and it thus forms the bulk of /i:/ in Hausa English.

/ɪ/

This phoneme corresponds to R.P. /ɪ/ and R.P. /i:/ when it is spelt 'e' in some speakers (e.g. (1) [ɪvnɪŋ] 'evening'). Word-finally, /ɪ/ is realised as [e̝], a raised half-close vowel which is one of the residues of R.P. influence in Hausa English.[9]

/ɛ/

This corresponds to R.P. /e/, R.P. /ɪ/ when it is spelt 'e' as in (1) [vɪzɪtɛd] 'visited' and (87) [kwalɛdʒ] 'college', R.P. /ə/ when it is spelt 'e' (but not 'er') as in (8) [prɛfərɛns] 'preference', R.P. /ɪə/ when it is spelt 'e' as in (74) [ɛrə]'era' and R.P. /eɪ/ especially

in closed syllables as in (44)[mɛk] - which accounts for 7.5% of the realization of R. P. /eɪ/ in the Hausa sample.

/æ/

This phoneme is based almost entirely on R.P. /æ/. Hausa English /æ/ is a raised one, the type heard in the speech of elderly or conservative R.P. speakers in present-day Britain. It derives directly from the tradition of English teaching at Katsina and is an important distinguishing characteristic of Hausa and Northern Nigerian English. In our sample, only the two lady broadcasters who attended non-government schools and who show a lot of Southern influence in their speech lack /æ/ - (1)and (9). For the Hausa sample as a whole, the mean percentage of realization of R.P. /æ/ as [æ] is 53.8 with a standard deviation of 27. When /æ/ fails to surface as [æ] it is realized as [a] which has a mean occurrence of 35.2% with a high standard deviation of 22.8. /æ/may be [æ] or [æ:].

However, when R.P. /ɑ:/ is spelt without an 'r' in words where it is followed by a nasal or a fricative, it may be interpreted as a member of /æ/ and realized accordingly, e.g. (41)[dɪmænd] 'demand'.

/ɔ/

This phoneme corresponds to R.P. /ɒ/ and R.P. /ə/ when spelt 'o' (but not 'or') as in (8)[kɔmɪtɛd] 'committed' and (67) [saɪkɔlɔdʒɪkal] 'psychological'. In addition, R.P. /əʊ/ is sometimes (ie 26.7% of all occurrences of /əʊ/) realized as [ɔ] especially in closed and final

syllables as in (41) [dɔnt] 'don't' and (83) [ɾe:dɪɔ] 'radio'.

/ɔ:/

This corresponds to R.P. /ɔ:/ which is shortened only a mean of 12.3% of the time and R.P. /ɐɷ/ which is realized as [ɔ:] an average of 57.1% of the time.

/a:/

This is based almost wholly on R.P. /ɑ:/ which, because of the absence of a back unrounded vowel in Hausa, surfaces as [a:] which happens to be a Hausa vowel. [ɑ:] occurs in only one sophisticated speaker in the Hausa sample. But as we have seen in our consideration of /æ/, /ɑ:/ is transferred to /æ/ when it is not spelt 'ar'. In addition, /a:/ may be shortened even when it is spelt 'ar' and occurs in an open syllable as in (44)[makɛt] 'market'. However, the majority of R.P. /ɑ:/ occurrences are realized as [a:] in Hausa English - that is 67.5% of the time compared to 18.1% as [a].

R.P. /ə:/ is also a member of the /ɐ:/ phoneme in Hausa English regardless of whether the spelling is 'er', 'ir', 'ear', 'ur' or 'or' as in (40) [pa:mənɛnt], 'permanent', (68) [fa:st] 'first' and (40) [wa:kəs]. Less commonly, this [a:] may be shortened to [a].

/ɷ/

This corresponds to R.P. /ɷ/, R.P. /ə/ when spelt 'u' as in (8) [ʌnfɔ:tʃɷnɛt] 'unfortunate' (on analogy with 'fortune' etc., but this does not occur in, for instance 'suggestion') and R.P. /əɷ/ in 'won't'.

/ʌ/

Hausa English /ʌ/ corresponds to R.P. /ʌ/ which has a mean percentage of realization as [ʌ] of 84 with a low standard deviation of 16.4 . However, /ʌ/ may sometimes be made more open than is acceptable in R.P. and it then surfaces as [a] as in (67) [dʒas] 'just', (37) [wan] 'one' and (68) [gammɛnt] 'government'. This occurred an average of 12.1% times with a standard deviation of 14.1 .

Hausa /a/ has what James and Bargery (1925) describe as "a distinctively ʌ-like quality" and what Salim (1977) calls a schwa-like quality. In reality there is no contradiction between the two descriptions because when [ʌ] occurs in unaccented syllables in English, there is little or no distinction between it and [ə] and the two vowels do not contrast in R.P. For this reason /ʌ/ and /ə/ overlap in Hausa English (as indeed they sometimes do in R.P.) so that some /ʌ/'s are realized as [ə] and vice versa, e.g. (82) [əp] 'up' and (84) [dɪskə̲bəd] 'discovered'.

/u:/

This corresponds to R.P. /u:/ which is shortened only an average of 7.6% times (with a standard deviation of 8.1 because 6 of the 15 speakers do not shorten /u:/ at all) and R.P. /oə/ when it is spelt 'u' as in (84) [di:bju:ɾɪɔkɾatatɪz] 'de-bureaucratize'.

/e:/

This corresponds to R.P. /eɪ/ which occurs as [e:] an average of 55.3% of the time in Hausa English ([eɪ] occurring 35.7% of the time and [ɛ] 7.5 % of the time),

some R.P. /ɪ/ which are spelt 'e' (interpreted as /e/ and then lengthened) as in (86) [spe:sɪfɪk] 'specific', some R.P. /ɪə/ when spelt 'e' as in (1) [kɾaɪte:ɾɪə] 'criteria', some R.P. /e/ when spelt 'ai' especially in broadcasters as in (9) [se:d], some R.P. /ə/ when spelt 'a' as in (67) [pə:tʃe:zɪŋ] 'purchasing', some R.P. /i:/ when spelt 'a' as in (87) [kɔle:dʒɪət] 'collegiate' (on analogy with 'colleague') and R.P. /ɛə/ when spelt 'a' as in (82) [ve:ɾɪəs]'various' and (41) [məle:ɾɪəl] 'malarial'.

/ə/

The schwa in Hausa English corresponds to R.P. /ə/, R.P. /ɒ/ when spelt 'a' as in (44) [wət], R.P. /eɪ/ in the word 'laissez faire' as in (44) [le:səfɛə] and when spelt 'a' as in (1) [apɛks] 'apex' where we assign [a] to /ə/ and R.P. /ɪə/ when spelt 'ir' as in (37) [æməɾət] 'emirate'. As we have noted in our consideration of /ʌ/, there is an overlap between /ʌ/, /ə/ and [a] in Hausa English: /ə/ surfaces as [ʌ] in (37) [dɪfɪkʌltɛ] 'difficulty', (41) [ʌpɔn] 'upon' and (40) [wɛlkʌm] 'welcome'. /ə/ also surfaces as a quite open vowel, [a], an average of 10.7% of the time. The realization of R.P. /ə/ as [ɔ] when it is represented by 'o' in some words accounts for a mean of 14.1% of all occurrences of /ə/, and its realization as [ɛ] when spelt 'e' accounts for a mean percentage of 2.9 of its occurrences.

The justification for setting up /ə/ as a phoneme in Hausa English lies in the fact that R.P. /ə/ surfaces as [ə] 53.6% of the time in Hausa English regardless of what its orthographic representation is. Thus Hausa English schwa lives up to the reputation of R.P. schwa as a con-

venient resting ground for all off-duty vowels!

/aɪ/, /aʊ/, /ɔɪ/

Each of these three closing diphthongs corresponds to its R.P. counterpart: . In addition R.P. /ɔ:/ when spelt 'o' may be interpreted as a member of /aʊ/ as in (68) [aʊtɔmatɨkəlɨ̯] 'automatically'. When these diphthongs occur word-finally, they are realized as in R.P. But when they occur in a closed syllable or before another vowel they may have their first element lengthened or have their second element changed to a glide or dropped altogether. We shall consider this in more detail in Chapter Four as the alternation is common to other varieties of Nigerian English as well.

/ɪə/, /ɛə/, /ʊə/

/ɪə/ corresponds to R.P. /ɪə/, R.P. /ə/ when spelt 'ia' as in (83) [ɛsɛnʃɪa:lɨ̯] and some words which have /eə/ in R.P. such as (9) [tʃɪəmən] 'chairman'.

/ɛə/ corresponds to R.P. /eə/ and includes some words which in R.P. have /ɪə/ such as (1) [stɛə] 'steer', (40) [səvɛə] 'severe' and (83) [klɛəlɨ̯] 'clearly'.

/ʊə/ corresponds to R.P. /ʊə/ when it is spelt 'ua' or 'our' but not 'u' or 'eu' (as in 'rural' and 'Europe').

Very often, the second element of these centring diphthongs is realized as a very open [a] and this is sometimes lengthened as in (83) [ɛsɛnʃɪa:lɨ̯] 'essentially' above. Indeed in some cases, epenthetic glides have been heard and transcribed in the corpus, as in (8) [wɛlpɛjə] 'welfare' and (82) [ɾɪjə:lɨ̯] 'really'. The lengthening of the first element alone is enough to distort the diph-

thongal quality of these vowels and when a glide is epenthesized between the two elements the vowel in question ceases to be a diphthong. For this reason, only marginal phonemic status is conferred on these diphthongs in Hausa English. However, because most realizations of these diphthongs are glides rather than vowel sequences it would be inadvisable to regard these diphthongs as vowel sequences on the basis of their forms in a minority of cases no matter how tempting this is. A compromise solution is to regard them as marginal in the system.[10]

In addition, there are other realizations of these diphthongs which are based on their spelling such as [ɒɛ] in (44) [ɪɲflɒɛns] 'influence' which *are* vowel sequences rather than diphthongs. This would seem, of course, to support the alternative analysis of setting /ɪə/, /ɛə/ and /ɒə/ up as vowel sequences which we have already rejected.

3.3.2. The Effect of Vowel Reduction in Hausa on Hausa English

The fact that /ɪ/ and /ʊ/ are reduced to [ɨ] and /e/ and /o/ to [ə] or [ɐ] when they occur in non-utterance final positions in Hausa is transferred to Hausa English. Indeed the operation of the process of vowel reduction in Hausa English appears to be more elaborate than that proposed for Hausa elsewhere (Jibril 1980). This alternation has been attested in varying degrees of

frequency in all Hausa speakers in our present sample.

Hausa English /ɪ/ may surface as [ɨ] when it occurs after a non-back consonant in a closed syllable or in an open syllable if there is no pause, e.g. (8) [əsɨstəns] 'assistance', (37) [ɾɨtʃest] 'richest', (67) [hɛvɨlɨ̰] 'heavily' and (74) [ə:dʒansɨs] 'agencies'.

Hausa English /ʊ/ occurring in the same frame as /ɪ/ above may surface as [ɨ] or [ʉ], e.g. (41) [ɛdɨke:tɛd] 'educated', (68) [pi:spɨl] 'peaceful', (86) [tɨde:] 'today' and (surfacing as [ʉ]) (82) [tʉ ɾaŋ] 'to run'.

Hausa English /ɛ/ may also surface as [a] or [ə] when it occurs after any consonant in a closed syllable as in (8) [ɪntandɪŋ] 'intending', (44) [dʒanaɾalɨ̰] 'generally', (67) [kwastʃɨŋ] 'question', (82) [ɪlakʃɨŋ]'election' and (surfacing as [ə]) (8) [səlɨŋ] 'selling', (41) [mən] 'when' and (83) [ɾəpɾəzɛnt] 'represent'.[11]

Hausa English /ɔ/ also surfaces as [a] or [ə] when it occurs in the same frame as /ɛ/ above. When the preceding consonant is a back one, it retains a residue of the labiality of /ɔ/. Examples involving non-back consonants are (68) [bɪlaŋgɪŋ] 'belonging', (8) [pɾəfɪt] 'profit', (1) [təlɛɾəns]'tolerance and (67) [fəlɔwɪŋ] 'following'; those involving back consonants which become labialized include (9) [kwalɪfaɪd] 'qualified', (44) [kwəmɪnɪst] 'communist' and (82) [kwanstʉ:ʃŋ] 'constitution'.

3.3.3. The Vowel System of Sophisticated Hausa English

As would be expected, there is no sharp dividing line between the 'Basic', the sophisticated and the Southern-influenced vowel systemsof Hausa English. All three systems are in a continuum but with some speakers inclining more towards one than the others.

We shall use two speakers to illustrate the differences between the Basic and the sophisticated vowel systems of Hausa English. Speaker number (86) will represent the Basic system; he is a university lecturer-turned politician, in his thirties who was educated in government schools in Northern Nigeria and then in the United States of America where he spent five years studying for a first, and subsequently, for a second degree. However, in spite of his high level of education and his residence in America, his vowel system has remained virtually the same as that of other Hausa speakers who have neither his education nor his experience of residence in an English-speaking country. Speaker number (37) will be used to illustrate the sophisticated system: he is a well-known politician who was educated at Katsina College (after it had moved to Zaria and Kaduna) and who is now in his early fifties. His education did not go beyond Katsina College - he obtained the Higher Elementary Teachers Certificate after his secondary

education both within the Katsina system. He has never studied or lived in an English-speaking country. The two speakers have been chosen in order to illustrate the potency of the Katsina factor and the irrelevance of *level* as opposed to *kind* of education in determining English accent in Nigeria.

(86) has a vowel system identical to the one proposed for Basic Hausa English. (37), on the other hand, has a vowel system that is closer to that of R.P. in the following respects:

(i) While (86) has /a:/ corresponding to R.P. /ɑ:/ and /ə:/, (37) has /ɑ:/ (86% of R.P. /ɑ:/ surfaces as [ɑ̀:] in his speech) and /ə:/ (rather marginally, since he realizes R.P. /ə:/ as [ə:] only 57% of the time).

(ii) While (86) realizes R.P. /əʊ/ as[ɔ:] 83% of the time, as [ɔ] 10% of the time and as [ɔʊ] 7% of the time, (37) realizes it as [əʊ] 33% of the time, [ɔ:] 33% of the time, [ɔʊ] 21% of the time and [ɔ] 12% of the time. In other words while only 7% of (86)'s realizations of R.P. /əʊ/ are diphthongal, 54% of (37)'s are; on the basis of this (37) can be viewed as having a separate /əʊ/ phoneme as (marginally) distinct from /ɔ:/ and /ɔ/.

(iii) While (86) has a proportion of [eɪ] in his realization of R.P. /eɪ/ of only 26% and that of [e:] of 74%, (37) has an [eɪ] -proportion of 62% and an [e:]-proportion of 32%; the implication is that whereas the phoneme must be considered as /e:/ in the case of

(86), it must be considered /eɪ/in the case of (37).

On the basis of these differences, therefore, (37) and other sophisticated Hausa speakers could be viewed as having an identical vowel inventory to that of R.P., i.e.:

iː

ɪ

ɛ (R.P. /e/)

æ

ʌ

ɑː

ɔ (R.P. /ɒ/)

ɔː

uː

ʊ

əː

ə

eɪ

(əʊ)

aɪ

aʊ

ɔɪ

ɪə

ɛə

ʊə

However, even if the inventory is identical, the system is different as vowels may still be realized in sophisticated Hausa English according to their orthography rather than according to their R.P. values. Also, the fact that even where the target vowel is as in R.P. it is rarely

achieved in sophisticated Hausa English and the fact that divergence follows the route of Basic Hausa English show that this is a variety of Hausa English rather than R.P.

In addition to differences in vowel inventory between the Basic and the Sophisticated varieties of Hausa English, there are consistent differences in degree of approximation to R.P. even in those vowels which are shared between the two. For example, whereas (86) has an [æ]-proportion of 73% in the realization of R.P. /æ/, (37) has a proportion of 82%; while (86) has an [ʌ]-proportion of 83%, (37) has one of 93%; while (86) has an [ə]-proportion of 51%, (37) has one of 75% and while (86) epenthesizes [j] in 23% of his realizations of /ɛə/, (37) has no glide epenthesis in any of the centring diphthongs, so that while these diphthongs are marginal in the vowel system of the one speaker they are central in that of the other.

3.3.4. The Vowel System of Southern-Influenced Hausa English

Southern-influenced Hausa English is spoken by Hausa people who went to school in the South or attended non-government (i.e. mission) schools in the North where most of the teaching is normally done by Southerners. The basically Southern accent thus acquired by such Hausa people is then modified by intensive exposure to Hausa English, in

the case of representative speakers in our sample as a result of receiving training as broadcasters at Northern broadcasting stations.

A second category of Southern-influenced Hausa English speakers is that of speakers who after acquiring a Basic Hausa English accent are then exposed to Southern influence either through later study in the South or through other pressures to identify with the South - such as that illustrated by speaker (68) who is a leading member of a Southern-based political party.

We shall use speaker (9) to illustrate the differences between the Basic and the Southern-influenced vowel systems of Hausa English. She is a young lady broadcaster in her late twenties who had all her primary school education in Lagos where she was taught by Yoruba teachers. She spent a total of 17 years in Lagos and speaks Yoruba fluently. However, she had her secondary school education and teacher-training in the North before taking up a career in broadcasting. Thus her basically Yoruba English vowel system has had to be modified in the direction of (Sophisticated) Hausa English. This process is still continuing for there is still a lot of residue from the underlying system in her speech. The main areas of difference between (9)'s vowel system and those of (86) and (37) are as follows:

(i) While (86) has a maintenance of vowel length index of 87% (being the average percentage of the extent to which R.P. /i:/, /u:/ and /ɔ:/ are not shortened, and R.P. /ɒ/ and /o/ not lengthened; see

Chapter Five) and (37) one of 91.6%, (9) has an index of 86% which, while not dramatically different from that of (86) is revealing in its details. Thus while (86) shortens /i:/ only 14% of the time and (37) not at all, (9) shortens /i:/ 37% of the time.

(ii) While 13 of the 15 speakers in the Hausa sample have [æ] in very high proportions in their realization of R.P. /æ/, (9) (and (1) who is similar in most respects) does not have [æ] at all. Instead, R.P. /æ/ is [a] 73% of the time and [a:] 27% of the time in her speech. This is consistent with the system to be proposed for Igbo-Yoruba English below.

(iii) (9) has an [ʌ]-proportion of 91% which is higher than (86)'s 83% and quite close to (37)'s 93% and which reflects (9)'s training as a broadcaster. However, whereas for (37) and (86), the route of divergence is towards [a] ((86) has [a] 27% of the time and (37) has [a] 7% of the time), divergence in (9) is towards the underlying Yoruba English counterpart of R.P. /ʌ/: she has [ɔ̈], a centralized back vowel with some lip-rounding, 6% of the time in her realization of R.P. /ʌ/ as compared to only 3% of [a].

(iv) While in both (37) and (86) R.P. /ə:/ has a fairly constant value which is independent of the orthography ([ə:] ~ [a:] in (37) and [a:] in (86)) this R.P. vowel has at least four different forms in (9) based on the orthography, which is again consistent with Igbo-Yoruba English. Thus (9) has [ɔ̈:] in [ɔkɔ̈:d] 'occurred' where R.P. /ə:/ is represented orthographically as 'urr', and [ɛ] where /ə:/ is orthographically

'ir'. In [θɛtɪnθ] 'thirteenth' and [ə:] where the orthographic form is 'er' in [dɪzə;tɛd] 'deserted'.

(v) Whereas in Basic Hausa English the alternative to R.P. /ɛə/ is a separation of the two elements into independent vowels through, among other devices, glide epenthesis, in (9) as indeed in Igbo and Yoruba English (especially Igbo English), the alternative is to monophthongize /ɛə/ to [ɛ:] as in (9) [ʃɛ:z] 'shares'.

On the basis of these differences between Southern-Influenced Hausa English and Basic Hausa English we propose the same vowel system as that of Basic Hausa English for this particular variety of Southern-Influenced Hausa English with two important modifications. These are:

(i) /æ/ is replaced by /a/ in Southern-influenced Hausa English and

(ii) /a:/ in Southern-influenced Hausa English does not correspond to all occurrences of /ə:/ but only those which are spelt 'er' or 'ar'; those spelt 'ir' are realized as [ɛ] and those spelt 'ur(r)' as [ɜ̈:].

The vowels of Southern-influenced Hausa English are therefore as follows:

/i:/	/o/
/ɪ/	/u:/
/e:/	/aɪ/
/ɛ/	/ɔɪ/
/a/	/ao/
/a:/	and marginally
/ə/	/ɪə/
/ʌ/ [ʌ] [ɔ]	/ɛə/
/ɔ/	/oə/
/ɒ/	

3.3.5. The Vowel System of Southern Nigerian English

Southern Nigerian English as here defined refers to the English accents of Igbo and Yoruba speakers. The two kinds of English are so similar that little purpose would be served by setting up a different vowel system for each of them. However, the differences between them are socioling-uistically significant and will be fully documented here.

Both languages belong to the Kwa branch of Greenberg's (1963) Niger-Congo language sub-family and are fairly closely related. Both have vowel systems which range from seven to nine vowels of very similar qualities. Indeed as has been shown earlier, each of the two languages has a dialect with a nine-vowel system which vowels are virtually identical. Speakers of both languages have had a century of sharing the experience of learning English from the same sources - Christian missionaries - often in the same schools and of exchanging local teachers.

The following vowel system is proposed for Southern Nigerian English (items in parenthesis being marginal in the system):

(i:)	a	o	ɪə
ɪ	(a:)	u:	ɛə
ɛ	ɔ	aɪ	ɔə
e:	(ɔ:)	aʊ	
		ɔɪ	

/iː/

This phoneme is marginal in Southern Nigerian English, especially in Yoruba English. R.P. /iː/ is shortened an average of 47.2% of the time by Yoruba speakers and 30% of the time by Igbo speakers. A break-down of the figures shows that 8 of the 15 speakers have proportions of /iː/-shortening ranging from 56-85% with a mean of 67.8% which rules out even marginal status for /iː/ in their system. Among Igbo speakers, however, only 4 have /iː/-shortening proportions which exceed 50% and the range is 50-62% with a mean of 54.5%, so that for the Igbo sample as a whole /iː/ is not marginal.

/iː/ corresponds to R.P. /iː/, R.P. /ɪə/ when spelt 'e' as in (47) [ɔltiːɾɪə] 'ulterior' and (27) [ɛkspiːɾiɛns]; R.P. /ɪ/ when spelt 'ie' as in (75) [sɪkstiːs] 'sixties' and (21) [ɔstɪlɪtiːs] 'hostilities'.

/ɪ/

This corresponds to R.P. /ɪ/, R.P. /iː/ when spelt 'e' as in (47) [skɪms] 'schemes', (28) [ɪmi̯dɪɛt] 'immediate', R.P. /ə/ when spelt 'e' as in (18) [tɛɾɪbɒ] 'terrible' and when spelt 'i' as in (10) [dɪfɪɾɛnt] 'different', R.P. /ɪə/ when spelt 'e' as in (45) [matɪɾɪəls] 'materials, (20) [ɛspɪ ɾɪɛnst]'experienced' and R.P. /ə/ in 'per cent' as in (64) [pɪ sɛnt] and (58) [pɪ sɛnt].

Word-finally in open syllables, /ɪ/ may be a raised half-close vowel in Igbo speakers and in Yoruba speakers who come from the Central Yoruba dialect area where /I/ contrasts with /i/. Examples from Igbo speakers include (5) [kʌntɾe̯] 'country', (79) [kɔmplɪtle̯] 'completely' and (63) [pɔssɛkɔ̈ndre̯]; and from Yoruba speakers we may

cite (21)'s [mɪɾəkɒlɔsɪɐ̯] 'miraculously', (51)'s[ɔnɪɐ̯] 'only' and (66)'s [ɾɪa:ɪɐ̯] 'really'.[12]

/ɛ/

/ɛ/ / corresponds to R.P. /e/, R.P. /ɪ/ when spelt 'a' or 'e' as in (63)[kɔlɛdʒ] 'college', (65)[advantɛdʒ] 'advantage', (18)[hɔplɛsnɛs] 'hopelessness' and (56) [prɛzdɛnt] 'president', R.P. /ə/ in the indefinite article 'a' (from the full form /eɪ/), R.P. /ɪə/ when spelt 'e' as in (33)[ɛɾa] 'era', R.P. /ə:/ when spelt 'er' or 'ir' as in (3)[vɛʃn] 'version', (68)[vɛsɒs] 'versus', (65)[tɛd] 'third' and (78)[θɛtɪ] 'thirty'; R.P. /ə/ in the word 'consequences' as in (62)[kɔnsɪkwɛnsɪs], R.P. /ɛə/ when spelt 'a' as in (79) [sɛktɛɾɪət] 'secretariat' and R.P. /ɪ: /when spelt 'e' as in (62) [vɛhɪklz]'vehicles'.In addition, R.P. /ɛə/ may be realized as [ɛ] - the proportion in Yoruba English is 26.3% and in Igbo English 23.1%.

/e: /

This corresponds to R.P. /eɪ/ and R.P./e/ when spelt 'ai' or'ea' as in (20) [se:d], (5) [ɾe:d]. R.P. /eɪ/ has a mean proportion of [e:] in the Yoruba corpus of 55.9% and 54.7% in the Igbo corpus. This is in addition to [eɪ] proportions of 17.2% and 23.3% for the Yoruba and Igbo samples respectively. The other proportions are accounted for by [ɛ] as indicated in our consideration of /ɛ/ above.

The overlap between /ɛ/ and /e:/ is also reflected in the surfacing of some vowels which we have assinged to Southern Nigerian English /ɛ/ as [e:] as in (27)

[pɔpole:s] 'populace' ‹R.P. /ə/, (58) [pe:sɔnɛl] 'personnel'‹ R.P. /ə:/.

/a/

As in many cases, R.P. appears to be unique in having /ɑ:/ in some words where the orthography has 'a' followed by a fricative consonant or a nasal (e.g. 'glass','staff' 'demand') where other accents of British English have /æ/ or its equivalent (see Gimson 1970, p.110 and Wells 1970, p.235).Southern Nigerian English /a/ corresponds to R.P. /æ/, R.P. /ɑ:/ when spelt 'a' and following a nasal or fricative, or when spelt 'ar' (in which [a] is a variant of /a:/), e.g. (66) [trɑnsfa] 'transfer', (18) [kɔntrɑst] 'contrast', (20) [rɪgad] 'regard', (64)[famas] 'farmers' and (75) [staf] 'staff'; R.P. /ə/when orthographically 'a', 'ar', 'er', as in (45) [prɛlɪmɪnarɪ]'preliminary', (3) [li:dəs] 'leaders' and (18) [wɛstan] 'western'.

R.P. /æ/ has a mean proportion of realization as [a] in the Yoruba corpus of 78.3% (compared to only 9.3% as [æ]) and in the Igbo corpus of 66.8% (compared to only 5.5% as [æ]). R.P. /ɑ:/ has a mean proportion as [a] in the Yoruba corpus of 48.6% and 36.5% in the Igbo corpus.

/a:/

This is also a marginal vowel in Southern Nigerian English. Its R.P. cognates are /ɑ:/ when spelt 'ar' especially in final or accented open syllables and, optionally, R.P. /ə:/ when spelt 'er' or 'ear' as in

(62) [dɪzə:ʃn]'desertion', (47) [ɹɪsə:tʃ]'research', (18) [sə:tɪn] 'certain', (21) [hə:] 'her' and (32)[ə:lɪə] 'earlier'. There is an alternative realization of this vowel as [a] as in (91) [an] 'earn' and (64) [savɪsɪs] 'services'.

R.P. /ɑ:/ has a mean proportion of realization as [a:] of 39.8% in the Yoruba corpus and 44.7% in the Igbo corpus. This is in addition to [a]-proportions as given in our consideration of /a/ above. [ɑ:] is found only in a few sophisticated speakers - 5 Yoruba speakers have a mean [ɑ:]-proportion of 34.8% and 3 Igbo speakers have a mean proportion of 58.3%. /a:/ is less marginal in Igbo English than in Yoruba English.

/ɔ/

/ɔ/ in Southern Nigerian English corresponds to R.P. /ɒ/, R.P. /ʌ/, R.P. /ə:/ when orthographically 'or', 'ur' or 'ir' (the latter only if preceded by a labial consonant) as in (68) [ɔban] 'urban', (24) [pɔpɔz] 'purpose', (47) [wɔkt] 'worked', (65) [wɔkəs] 'workers' and (21) and (10) [fɔst] 'first'; R.P. /ə/ when orthographically 'o', 'or', 'u', 'ure' 'our' etc. (as long as there is an 'o' or 'u' in the spelling) as in (3) [meɪdʒɔ]'major', (11)[dɛkɔɹeɪtɛd] 'decorated', (45)[fɔŋkʃənal] 'functional', (18)[ɛndɔdʒɪnɔs] 'endogenous', (21)[sɔdʒɛstɛd] 'suggested', (75)[əgɹɪkɔltʃɔ] 'agriculture', (19) [kɔltʃɔ] 'culture' and (79)[pɔpɔz] 'purpose'; R.P. /ɒ/in'to' and, optionally, R.P. /əʊ/.

R.P. /ʌ/ has a mean proportion of surfacing as [ɔ] or, in some sophisticated speakers, as [ɔ̈] of 66. 7% in the Yoruba corpus and 67.5%

in the Igbo corpus compared to a mean of [ʌ] among the Yoruba speakers of 30.2% and 27.1% among the Igbo speakers. The standard deviations in both cases are very high - 55.5 and 27.8 respectively, which reveals that even these modest mean proportions of [ʌ] are inflated by a few highly sophisticated speakers.

Further evidence of the merger of R.P. /ɒ/, /ʌ/ and to some extent /ɔ:/ as /ɔ/ in Southern Nigerian English may be observed in the following pronunciation spellings:

1. "Both Gidmon and Agwan are *fund* of smoking, frequenting hotels, beer bars and brothels"
2. His statement is wrong *georging* from the passage.

In the first sentence 'fond' is confused with 'fund' because both have [ɔ] in Southern Nigerian English and in the second sentence 'judge' and'George' are confused because both have [ɔ] in Southern Nigerian English.[13]

R.P. /əʊ/ has a mean proportion as [ɔ] of 59.6% in the 15 Yoruba speakers and 51.8% in the 15 Igbo speakers.

/ ɔ:/

/ɔ:/ is also set up as a marginal vowel in Southern Nigerian, and especially Yoruba, English. It corresponds mainly to R.P. /ɔ:/ which has a mean proportion of shortening and therefore merger with /ɔ/ of 49.7% in the Yoruba corpus and 25.5% in the Igbo corpus. A break-down of these figures shows that in 9 out of the 15 Yoruba speakers, /ɔ:/-shortening ranges between 50-75% with a mean of 64% and in the Igbo corpus between 50 and 62% with a mean of 56% in 3 of the 15 speakers. Thus as in the cases of /i:/ and /a:/, /ɔ:/ is marginal in Yoruba

English but fairly central in Igbo English.

R.P. /əʊ/ also variably corresponds to Southern Nigerian English /ɔ:/ - [ɔ:]-proportion is 33.4% among Yoruba speakers and 40.4% among Igbo speakers.

Items which have been assigned to Southern Nigerian English /ɔ/ may optionally surface as [ɔ:], e.g. (79) [nɔ:sɪŋ] 'nursing' ~ R.P. /ə:/ and (18) [wɔ:ld] 'world' also ~ R.P. /ə:/.

/o/

/o/ corresponds to R.P. /o/, R.P. /oə/ when orthographically 'u' or 'eu' as in (19) [ɾorəl] 'rural' and [joɾop] 'Europe', R.P. /əʊ/ in 'won't' and 'approach' as in (47) [won] 'won't'; R.P. /ə/ when orthographically 'u' as in (51) [fɔ:ʃonɛtlɪ] 'fortunately', (64) [vɛsos] 'versus', R.P. /ɪ/ when orthographically 'o' as in (27) [womɛn] 'women' and (45) [pɛsonɛl] 'personnel' and, optionally, R.P. /u:/ especially when orthographically 'u', 'ue' as in (47) [ɾolɪn] 'ruling' and (47) [ɾɛvɛnjo] 'revenue'.

/u:/

This corresponds to R.P. /u:/ which has a mean proportion of shortening of 22.5% and 24.1% in the Yoruba and Igbo corpora respectively, R.P. /o/ when orthographically 'oo' in hypercorrect speech as in (28) [nu:ks] 'nooks' and (64) [gu:ds] 'goods' and, optionally, R.P. /oə/ when orthographically 'u' as in [ɾu:ɾal]'rural'.

/aɪ/, /aʊ/, /ɔɪ/

These three closing diphthongs correspond to their R.P.

counterparts. In addition, /aʊ/ may include such spelling pronunciations as (91) [kaʊntɾɪ] 'country' ‹ R.P. /ʌ/ spelt 'ou' and (66) [laʊdɛbʊ] 'laudable ‹ R.P. /ɔ:/ spelt 'au'. As in Hausa English, these diphthongs are realized as in R.P. when they occur word-finally but when followed by another vowel or an arresting consonant or when word-medial they may be monophthongized or broken into two vowels belonging to two separate syllables. This alternation will be fully considered in Chapter Four.

/ɪə/, /ɛə/, /ʊə/

These three centring diphthongs are, as in Hausa English, accorded only marginal status here. This is because, as in Hausa English, the second elements may be lengthened or said so strongly as to give the impression of a separate and full vowel rather than a diphthongal termination. Thus /ɪə/ ranges from [ɪə], [ɪa]to [ɪa] and /ɛə/ ranges from [ɛə] to [ɛa] and /ʊə/ ranges from [ʊə] to [ʊa]and [ʊa:].However, instead of separating the two elements of /ɛə/ by glide epentesis, Southern Nigerian, especially Igbo English, prefers monophthongization to [ɛ:].

As in Hausa English, and even more so here than there, R.P. /ɪə/ and /ɛə/ overlap as many words which have /ɛə/ in R.P. are assigned /ɪə/ in Soutnern Nigerian English, e.g. (3) [tʃɪəmɛn] 'chairmen', (51) [wɪə] 'where', (75) [əwɪə] 'aware' and (47) [dɪə] 'their' which seems to be distinguished from 'there' - at least by this particular speaker who has [d̠ɛə]for 'there'.

In addition to these diphthongs, there are, as in Hausa

English and even more so here than there, a number of spelling pronunciations of words which in R.P. have one of these diphthongs but which in Southern Nigerian English consist of two separate vowels which reflect the spelling. These are [ɪɛ] as in (27) [ɪnɪʃɪɛtɪv] 'initiative', [ɪɔ] as in (91) [pɛtɾɔːlɪɔm] 'petroleum', [ɪo] as in (75) [pɪtɾɔːlɪom] 'petroleum' and [oɔ] as in (10) [kɔntɪːnoɔsɪɪ] 'continuously' and (80) [feɪlɔɔ] 'failure'.

3.3.6. Differences Between Igbo English and Yoruba English

There are two types of difference between Igbo English and Yoruba English: the first has to do with sporadic spelling pronunciations which are found in one or two speakers in one group but not in the other and to which we shall attach no significance whatsoever; the second type concerns more fundamental divergences which are of historical, sociolinguistic or linguistic significance.

Differences of the first type include a Yoruba speaker's assignment of /ɪ/ to /aɪ/ in 'liberated' ((27): [laɪbɾeːtɛd]), an Igbo speaker's assignment of /aɪ/ to /ɪ/ and /iː/ in 'ideology' ((10: [ɪdɪɔːlɔdʒɪ],[iːdɪɔːlɔdʒɪ]), an Igbo speaker's assignment of /aɪ/ to /ɛ/ in 'either' ((91) [ɛda]), a Yoruba speaker's assignment of /ɔ/ in 'rapprochement' to /o/ ((21): [ɾapɾoʃmɔ̃ː]) probably on analogy with 'approach' whose second vowel belongs

to /o/ or /u:/ as has been noted, an Igbo speaker's assignment of /eɪ/ to /a/ in 'acrage' ((45) [əkɾɛdʒ]) and a Yoruba speaker's assignment of /ə/ to /ɛ/ in 'capacity' ((28) [kɛpasɪtɪ]) probably on analogy with 'capable'. These are merely individual idiosyncracies.

But more fundamental are differences such as those observed in the statistics of /i:/, /ɔ:/ and /a:/ - shortening which show that while these vowels are marginal in Yoruba English, they are fairly central in Igbo English. It is not entirely clear why Igbo speakers should approximate consistently more closely to R.P. in the maintenance of vowel length in English since in both Igbo and Yoruba vowels are distinguished by quality rather than duration. Igbo, of course, has an advantage over (Standard) Yoruba in having two close front vowels /i/ and /ɪ/ which could be adapted to do duty for English /i:/ and /ɪ/. However, even where the two languages have two vowels each (ọ, o) or one vowel only each (a only but no a:), Igbo speakers still score much higher than Yoruba speakers.

Even more interesting are divergences between the two kinds of English which reflect the accent or dialect of the dominant group of missionaries which was the first to teach English in each area or which has had the most far-reaching effect and influence in each area. Thus in Yoruba English, we find that grammatical words beginning with /ə/ in R.P. and which are orthographically 'a'... are consistently realized with an [ɛ] thus: (3) [ɛgeɪnst] 'against', (58) [ɛgɛ̃ŋ] 'again', (27) [ɛge:n]'again',

(19), (33), (58) and (65) [ɛbaʊt] 'about' and (19) [ɛwe:] 'away'. Only in fairly sophisticated speakers have forms with [ə] being attested in the Yoruba corpus - such as (3), (18), (32) [əbaʊt] 'about' and (3), (18) [əgeɪnst] 'against'. Forms with [ɛ] have also been attested in 3 Igbo speakers: (47) [ɛge:n], (63) [ɛgɛn]'again' and (10) [ɛgɔ] 'ago'.

It can therefore be seen that the pronunciation of these words with [ɛ] is mainly a peculiarity of Yoruba English. We know that German missionaries were present in large numbers in the Yoruba country and that many of them gave many years of distinguished service in that part of Nigeria and, inevitably left some mark on the English spoken by their early students. We know also that in German English, R.P. /ə/ in such initial positions tends to be given the full value of [æ], which, in this kind of English, is a particularly close type which would sound like an open [ɛ] to a West African ear. Yoruba English [ɛ] in these words therefore appears to be a descendant of German English [æ̞].

It may be speculated here that Irish or Scottish influence can be similarly inferred in Igbo English. For example, the pronunciations of R.P. /ə:/ when it is orthographically 'ear' as [ɛ] as in (45) [lɛn] 'learn' and of R.P. /ə/ when it is orthographically 'er' word-finally as in (45) [mɔ:dɛn] 'modern' point to a rhotic dialect of English such as Irish English and Scots. Similarly, the monophthongization of /ɛə/ to [ɛ:] has been attested in six Igbo speakers as compared to only

one Yoruba speaker ((33) who has [mɛ:lɪ] ‘ R.P. /mɪəlɪ/ 'merely' where /ɪə/ is re-assigned to /ɛə/) and one Southern-educated Hausa speaker ((9) who has [ʃɛ:z] ‹ R.P. /ʃɛəz/ 'shares'), which appears to have originated from Irish or Scottish [ɛ:] as does [ɛ] in [lɛn] and [mɔ:dɛn] above. We know of course that the Irish were concentrated in the East, in the Igbo country and that the Church of Scotland mission at Calabar also expanded westwards into Iboland and provided many of the first indigenous teachers in that part of the country.

The hypothesis that this Igbo English pronunciation is a descendant of Irish or Scottish influence (probably more of the former than the latter) is reinforced by the common pronunciation of some wh-words (especially 'what', 'where', 'which', 'when' and 'where') with [ʍ] rather than [w] which is rare among Yoruba speakers and quite common, but deriving from a different origin, (conservative R.P.) among Hausa speakers.

The word 'were' also has a very interesting distribution pattern in Nigerian English. In Hausa English, it consists of two syllables, e.g. (1) [wəja], (8) [wəjə], (86) [wəja] which shows that it descends from the R.P. weak form /wə/ plus an additional syllable /ə/ or /a/ based on the 'orthographic syllable' 're' on analogy with 'where'. Thus /wəə/ attracts the normal epenthetic glide which breaks any sequence of two or more vowels in Hausa English.

In Yoruba English, 'were' appears to have descended from the R.P. strong form /wə:/ for it is variously [wa:] (as in (51), (33)) and [wa] (as in (21)). A soph-

isticated Yoruba speaker has /ə:/ - (33) [wə:].

In Igbo English 'were' appears to have descended from either Irish or Scottish English [ɛ:] or a form /wɛə/ common in the 19th century but now almost extinct in R.P., for 'were' is variously [wɛ](as in (45), (5)) or [wɛə] (as in (80)) in Igbo English.

3.3.7. A Comparison Between the Basic and the Sophisticated Vowel Systems of Southern Nigerian English

Basic Igbo English and Basic Yoruba English Compared

It has been established that Basic Igbo English and Basic Yoruba English have virtually the same vowel system. In this section we shall re-inforce that analysis by comparing the vowel systems of one Igbo and one Yoruba speaker which are identical. The two speakers have a Basic Southern Nigerian English vowel system.

Speaker (10) is a well-known Igbo public figure. He is in his mid-sixties. He went to school in Eastern Nigeria in the 1920's and 1930's and spent four years at Cambridge University in the 1940's from where he graduated M.A. He had both British and Igbo teachers in both his primary and secondary schools.

Speaker (21) is a Yoruba university lecturer in his mid thirties. He went to schools in Lagos and Ibadan, took a first degree from the University of Ife and a PhD from Cardiff after spending five

years in the United Kingdom.

Both (10) and (21) shorten R.P. /i:/ so often that they cannot be regarded as having a corresponding phoneme in their vowel system. (21) has an /i:/-shortening proportion of 74%, while (10) has one of 50%, thus confirming the trend for their two groups, i.e. with Yoruba speakers shortening more than Igbo speakers. Both speakers have /ɪ/ and /ɛ/. Both speakers have /a/ but no [æ] even as an occasional variant. For both speakers, R.P. /ʌ/ is /ɔ/ - (21) has [ɔ] 100% of the time but (10) has an [ʌ]-proportion of 5% and an [ɔ]/[ɔ̈]-proportion of 89%. For both speakers R.P. /ɑ:/ is /ä/ - (10) has an [a:]-proportion of 17% and (21) has an [a:]-proportion of 38% but their [a]-proportions are 83% and 62% respectively. For both speakers, R.P. /ɒ/ is /ɔ/, as indeed is R.P. /ɔ:/ for (10) has a shortening proportion of 62% and (21) has a shortening proportion of 68%. Both speakers have /ʊ/ and /u:/, shortening the latter vowel only in a small number of cases. For both speakers, R.P. /ə:/ is assigned to /a/, /ɛ/ or /ɔ/ on orthographic grounds and R.P. /ə/ is assigned to even more vowels on orthographic grounds.

For both speakers, R.P. /eɪ/ is /e:/ - (10) has an [e:]-proportion of 58% (and an [ɛ]-proportion of 42% with no [eɪ]-proportion at all) and (21) has an [e:]-proportion of 88% (and an [ɛ]-proportion of 12% but no [eɪ]). For both speakers R.P. /əʊ/ is a member of /ɔ/ - (10) has an [ɔ:]-proportion of 50% and an [ɔ]-proportion of 50% while (21) has an [ɔ:]-proportion of 18% and an [ɔ]-proportion of 82%. Both speakers have /aɪ/,

/aʊ/ and /ɔɪ/ and, marginally, /ɪə/, /ɛə/ and /ʊə/. For both (10) and (21), therefore, we may recall the following vowel system:

/ɪ/

/ɛ/

/e:/

/a/

/ɔ/

/ʊ/

/u:/

/aɪ/

/ɔɪ/

/aʊ/

{ɪə, ɛə, ʊə} marginal

This resembles a vowel system proposed by Christophersen (1954) for Nigerian English which consists of:

ɪ

ɛ

a

ɔ

u

aɪ

ɔɪ

au

{IA ' R.P. /ɪə/ and /eə/; UA ' R.P. /ʊə/} marginal[14]

The main differences between Christophersen's system and ours is that we have u: and e: - on sound statistical

grounds which he does not since his study was an impressionistic one based on "Nigerian English as it is commonly heard from the lips of many Africans in the south ..." (1954, p. 20).

Also, while Christophersen collapses /ɪə/ and /ɛə/ together because they "have become confused and merged" we are prepared to set them up as separate phonemes because the confusion is not random (it is mainly /ɛə/ that becomes /ɪə/ in Southern Nigerian English, rarely vice versa) and the merger is still incomplete (in words such as 'hair' /ɛə/ is still the only possible phoneme). But we are in agreement with Christophersen in according the centring diphthongs only a marginal status because of the common tendency to realize them as vowel sequences.

3.3.8. Sophisticated Igbo English and Sophisticated Yoruba English Compared

The vowel system of sophisticated Igbo and Yoruba speakers of English has the same relationship to Basic Southern Nigerian English and R.P. that Sophisticated Hausa English has to Basic Hausa English and R.P. Sophisticated Igbo and Yoruba English shows a much higher degree of approximation to R.P. than Basic Southern Nigerian English but it retains a link with the latter in that divergence from R.P. is in the direction of Basic Southern Nigerian English. We shall illustrate

some of the ranges of vowel system possible in Sophisticated Southern Nigerian English by comparing two speakers, one Igbo the other Yoruba.

Speaker (5) is an Igbo television newsreader of the Nigerian equivalent of the British 'nine o'clock news'. He is in his mid-thirties; because he did not respond to our questionnaire, no details of his education or training are available. However, it is known that to be a newsreader on the national network of the Nigerian Television Authority one has to have not only a 'good education' but also many years of intensive training in English pronunciation, including, in some cases, a period of apprenticeship with the B.B.C.

Speaker (28) is a leading Yoruba politician in his early fifties. He grew up in Kaduna in the North and had his primary education there. He had his secondary education in Ibadan and took an Arts degree from the University of Ibadan before studying Law in Britain.[15]

Both (5) and (28) have /i:/ and /ɪ/. (5) does not shorten /i:/ at all, but (28) shortens it 16% of the time. Both speakers have /ɛ/ and /eɪ/. (5) realizes R.P. /eɪ/ in the proportions [eɪ] 52%, [e:] 35% and [ɛ] 13% while (28) realizes R.P. /eɪ/ in the proportions [eɪ] 54%, [e:] 38% and [ɛ] 8%. For both speakers, R.P. /æ/ is /a/ though they both have some proportions of [æ], reflecting their sophistication: (5) has an [æ]-proportion of 26% and (28) of 18%. Both speakers distinguish /ɑ:/ from /a/: in (5) R.P. /ɑ:/ has a 100% realization as [ɑ:] but in (28) [ɑ:] has a proportion of 44% followed

by [ɑ:] which has 39% and [ɑ] which has 17%, so that while /ɑ:/ is central in (5)'s system, it is marginal in (28)'s, though even here the choice is between /ɑ:/ and /a:/.

Both speakers have /ʌ/ as distinct from /ɔ/. In (5), /ʌ/ has a proportion of 86% as [ʌ] compared to one of 5% as [ɔ] or [ɔ̈]; in (28) [ʌ] has a proportion of 80% compared with 20% as [ɔ] and [ɔ̈]. In both speakers, /ɔ/ is distinguished from /ɔ:/ and /o/ from /u:/. The proportion of /ɔ:/ shortening in (5) is 17% and 27% in (28). Both speakers have /ə/, though (28) has an [ə]-proportion of only 45% (and an [ɑ]-proportion of 8% which, if taken together give a total of 53%) compared to (5)'s 70% (and an ɐ-proportion of 3%). The remaining proportions of /ə/ are accounted for by re-assignment on orthographic grounds as in Basic Southern Nigerian English. Speaker (28) has an [ə:]proportion of 60% in his realization of R.P. /ə:/, compared to (5)'s 0% - all his realizations of /ə:/ being on orthographic grounds as in Basic Southern Nigerian English.

Both speakers have /aɪ/, /aʊ/, /ɔɪ/, /ɪə/, /ɛə/ and /ʊə/. However, (5) has an [ɛ:]-proportion of 17% in his realization of /ɛə/ in common with Basic Igbo English; (28) does not. Apart from this, the diphthongs are considerably less marginal in the systems of both speakers than they are in Basic Southern Nigerian English.

In the output of both speakers, R.P. /əʊ/ is reassigned to /ɔ:/ and /ɔ/, though (5) has a small proportion of [əʊ] as well. In (5), R.P. /aʊ/ is distributed in the proportions [əʊ] 20%, [ɔ:] 60% and [ɔ] 20%; in (28)

the proportions are [ɔ:] 67% and [ɔ] 33%.

On the basis of the foregoing discussion, therefore, the following vowel system is proposed for Sophisticated Southern Nigerian English:

i:	əʊ
ɪ	ɪə
ɛ	ɛə
a [ə] [æ]	ʊə
ʌ	
ə (marginal for (28))	
ə: ((28) only)	
ɑ:/ a: ((5)/(28))	
ɔ	
ɔ:	
ʊ	
u:	
eɪ	
aɪ	
ɔɪ	

We attach no significance to the variations between (5) and (28) since although each speaker differs from the other in the *identity* of vowels in his system, both speakers ultimately have the same *number* of vowels. For example, while (5) has no [ə:] at all, he has [ɑ:] in a proportion of 100% of /ɑ:/ and while (28) is more inclined to spelling pronunciation in his realizations of /ə/, he achieves a 60% proportion of [ə:] in his realization of /ə:/.[16]

3.3.9. Synthesis: The Nigerian English Continuum

At the beginning of this chapter it was stated that no single vowel system can accommodate all the possible systems which we have shown to be in use in Nigerian English. However, as can be seen by comparing the vowel systems of Sophisticated Southern Nigerian English and Sophisticated Hausa English which are both very close to R.P., one vowel system - essentially that of R.P. with a few modifications *is* possible for both groups of sophisticated speakers. But then each of the two groups of speakers for whom such a system is posited will diverge from R.P. - in those cases where they fail to achieve a 100% approximation score - in a different direction, the one towards Basic Southern Nigerian English and the other towards Basic Hausa English. Since a vowel system is not simply a vowel inventory but also a statement of the complex network of relationships into which the vowels enter with one another and with other vowels which have no phonemic status in the system and since such divergencies in different directions distort the common system so posited, there is little point in setting it up in the first instance.

Nevertheless there is an alternative and more useful way of viewing the complex interaction of all the different vowel systems we have listed. This is by viewing Nigerian English as a three-

point pyramid-shaped continuum. At the top of the continuum is R.P., exerting its prestigious pressure on sophisticated speakers and providing them with a model towards which to strive. Underlying the continuum are common factors which influence the two Basic systems, Hausa English and Southern Nigerian English, such as the orthography and common mother-tongue phonological rules such as those which, as we shall show in Chapter Four, govern the accommodation of diphthongs in both kinds of English. At the left end of the continuum there is Hausa English and at the right end of the continuum there is Southern Nigerian English. A Hausa speaker whose accent shows Southern influence can be placed somewhere in the middle of the horizontal space of the continuum. If, in addition, this speaker is also sophisticated, as in the case of (9), we move the point up in the direction of R.P. A speaker whose system is Basic Southern will have a point at the right end of the continuum but if he is a sophisticated Southerner he will have a point near the top of the continuum on the right hand side - and so on. This can be diagrammatically represented as below:

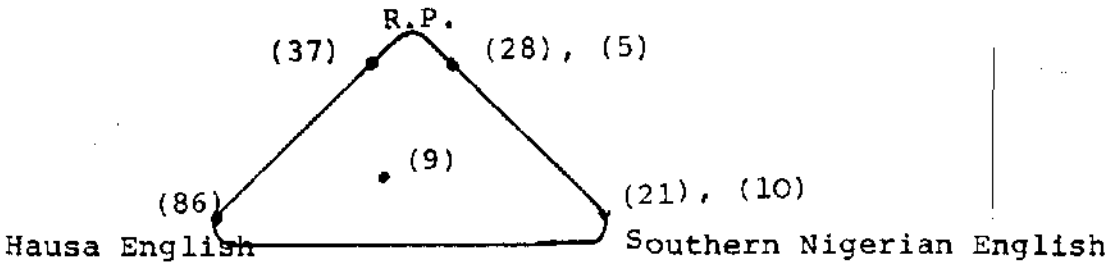


Fig. 3.4. A Model of the Nigerian English Continuum

It has been suggested elsewhere (Jibril 1979) that because the conditions which favoured the emergence of a distinctly Northern accent of English are fast disappearing, Northern English is now on its way to a merger with Southern English. Such conditions include the isolation of the English-speaking elite from their Southern compatriots and the presence of British, largely R.P.-speaking schoolmasters in the North in large numbers. One of the conditions now favouring this merger is the presence in large numbers of Southern Nigerian teachers and other skilled employees in the North to fill staffing gaps which arose out of the breaking up of the old Northern Region into ten states. It was observed in the study mentioned above that young school-going Northerners showed more Southern influence in their English than older Northerners. Our model of the continuum of Nigerian English is admirably suited to handle this right-ward shift on the horizontal axis. Observe, for instance, the point allocated to speaker number (9), which is near the middle of the horizontal axis to reflect Southern influence in her speech and somewhat high above the horizontal axis, about a third of the way to R.P. to reflect her sophistication as a broadcaster.

One other source of convergence for all the varieties of Nigerian English under consideration which may not be immediately noticeable because its details have been listed separately for each vowel system is the orthography of English. This is a common source of input to all accents of Nigerian English and it may be useful to

bring together all the points of agreement between all the accents in this area. These are as follows:

/i:/ includes R.P. /ɪə/ when spelt 'e' as in 'period', R.P. /ɪ/ when spelt 'ie' (especially in sophisticated speakers) as in 'companies'; in the former case of course most accents of British English have /ɪ/ rather than /ɪə/.

/ɪ/ includes R.P. /i:/ when spelt 'e' as in 'schemes'

/ɛ/ includes R.P. /ɪ/ when spelt 'e' or 'a' as in 'visited', 'college', 'advantage', R.P. /ə/ when spelt 'e' as in 'difference'

/a//æ/ includes R.P. /ɑ:/ when spelt 'as', 'af', 'ath', 'an', 'am' as in 'dance', 'pass', 'path' etc.; again R.P. is alone in having /ɑ:/ in these words, most British accents having /æ/ or its equivalent

/ɔ:/ includes what in R.P. is /əʊ/

/ə:/ includes R.P. /ə:/ (especially when orthographically 'ar', 'er' 'ear')

/ʊ/ includes R.P. /ə/ when spelt 'u' as in 'unfortunate'

/u:/ includes R.P. /ʊə/ when spelt 'u' or 'eu' as in 'rural', 'Europe'

/e:/ includes R.P. /ɛə/ when spelt 'a' as in 'various', 'area'

3.4.0. Phonological Alternations in the Continuum

3.4.1. Lengthening

It has been shown that even in those systems where pairs of long and short vowels are set up, these vowels are not consistently distinguished one from the other as they are in R.P. Some of these instances of 'neutralization' are predictable as consequences of certain phonological processes. Short vowels, for instance, may be lengthened as a result of hesitation or pause when they are word-final, as a result of accentuation, for rhetorical emphasis, as compensation for consonant deletion or as a result of 'juncture prominence'. Unless otherwise stated, these processes apply to all varieties of English in the Nigerian continuum.

3.4.2. Lengthening as a Result of Hesitation or Pause

Vowels in word-final syllables may be lengthened as a result of hesitation or pause as in (1) [ɛspɛʃəlɪ:] 'especially', (88) [tu:] 'to', (78) [di: ste:t] 'the... state', (11) [gɪltɪ:] 'guilty' and (21) [aŋʃɔ:s] 'anxious'. This occurs in Yoruba as reported by Salami (1969).

3.4.3. Accentuation

Vowels may also be lengthened when they occur in an accented syllable as in (5) [sɪ:vɪ] 'civil', (56) [kɔnsɔ:lt] 'consult' ([ɔ]→[ɔ:]), (83)[ɔfɪ:ʃəl] 'official' and (27) [pɔ:lɪsɪ] 'policy'. /ɛ/ in 'any', 'many' and 'very' is also susceptible to lengthening.

When the accent shifts from a syllable which is accented in R.P. to another syllable, this latter may be lengthened accordingly as in (19) [sɪmpa:t̲ɪ] 'sympathy' and (21) [rɛprɪzɛnte:tɪvs] 'representatives'.

3.4.4. Rhetorical Emphasis

In Igbo English, emphasis appears to be signalled by a reduction of tempo and the lengthening of all vowels (including the extra lengthening of long ones) as in (10) [ɔ:da:d] '*ordered*' and (45) [a:wa:] '*our*'. In R.P. this would be achieved only by the use of contrastive accentuation.

3.4.5. Compensatory Lengthening

Vowels may also be lengthened to compensate for the loss of a neighbouring consonant as in (83) [pre:zɛnʃɪəl] 'presidential' (where [z], after losing its vowel,helps to cause the deletion of [d] and takes its place leaving its own slot empty which is then filled by the lengthening of [ɛ]),

(10) [ɑʊɑ:se:vs] 'ourselves' ([ɪ] deleted and [ɛ] lengthened) and (28) [ɔŋju:ʒʊɑ:]'unusual' ([ɪ] deleted and [ɑ] lengthened).

3.4.6. Hypercorrect Lengthening

Lengthening is generally more likely to occur in fairly sophisticated speakers than in speakers with a 'Basic' system. Fairly sophisticated speakers have systems which are in transition between the Basic and the Sophisticated. As short vowels are the norm in Basic systems, speakers who are in the transitional stage tend to lengthen indiscriminately and sporadically since they are not yet in full control of the new distribution pattern. Examples are (64) [wɪ:tʃ] 'which', (1) [ʌ:ðə] 'other', (80) [kʌ:mɪŋ] 'coming' and (5) [dʒɑ:dʒ] 'judge'.

3.4.7. Juncture Prominence

'Juncture prominence' refers to a wide-spread phenomenon in Nigerian English, especially Southern Nigerian English, whereby the first of two words which occur together has its final syllable lengthened and its pitch raised. The first word always implies the occurrence of the second and the phenomenon itself is a 'juncture' one appearing to have its origins in what Bamgbose (1966) calls "the optional pause juncture" of Yoruba.

According to Bamgbose (1966, p. 10) the optional pause is not restricted to any grammatical structures

but "· occurs immediately after an item which grammatically presupposes a following item ... the final syllable of the first item is always lengthened."All three of Bamgbose's examples involve words which have a final high-toned syllable and it may be the case that in Yoruba this is a precondition for the operation of optional pause.

In Nigerian English structures ranging from adj + noun, adv + verb, noun + noun (in a genitive relationship) and verb + complement have been found to be involved in juncture prominence. We shall defer discussion of the pitch changes to Chapter Six.

Examples involving noun + noun (genitive) are (68) [ju:nɪti: fa:tɪ]'Unity Party' and (75) [pɔltri: sɪtɵe:ʃõn] 'poultry situation'. Examples involving adj + noun include (51) [sɪmɪla: prɔblɛm] 'similar problem', (65) [agrɪkɔltʃɔra:l sɛktɔ] 'agricultural sector' and (80) [blɔ:di: baɵndrɪ] 'bloody boundary'.

When the words whose final syllables are lengthened occur in isolation or utterance-finally, they always have a falling or low pitch and their vowels are not lengthened. Therefore, both the lengthening of the vowel and the raising of the pitch are due to the application of principles similar to those which govern the optional pause juncture in Yoruba. This feature of Nigerian English is widespread among Yorubas and Igbos and is now beginning to be used by Hausa speakers as well. As we shall show in Chapter Six, Yoruba appears to be the source of many of the melody and intonation rules of Nigerian English. This is no doubt due to the leading

role that Yorubas have been playing in Nigeria since the 19th century. They have the largest number of educated people and thus hold more positions of influence in most sectors of the economy than any other ethnic group. The most important of these sectors - as far as the spread of Yoruba influence in Nigerian English is concerned - is education.

3.4.8. Assimilation

Vowel assimilation does not have the widespread currency that consonant assimilation has in Nigerian English. There are only a few straightforward cases of front vowels becoming back under the influence of another vowel or back consonant and vice-versa. For example, /ɪ/ in 'will' has been attested as [ɔ] in both the Hausa and the Yoruba corpora. There is also a case of [ɛ] becoming [ɔ] in anticipation of another [ɔ] in the following syllable - (83)'s [dɪvɔlɔpɪŋ] 'developing'. There are also cases of /u:/ following palatalized consonants becoming [i:] under the influence of the palatalized consonant which then loses its palatality as in (41) [kwɔmi:nɪte] 'community'. This [i:] may be shortened as in (8) [dɔkɪmənts]'documents'.

3.4.9. Overlaps

Vowels in Nigerian English may sometimes be assigned to words where they do not regularly occur as a hypercorrection or as an indication that a previously merged set of R.P. phonemes is still in the process of being re-separated.

In sophisticated speakers - both Hausa and Southern Nigerian - the following overlaps have been attested: R.P. /ɑ:/ and /æ/, e.g. (80)[bæ:ɾɪŋ] R.P. /bɑ:rɪŋ/; R.P. /ɒ/ and /əʊ/, e.g. (8) [həʊlɪ] R.P. /hɒlɪ/; R.P. /æ/ and /ʌ/, e.g. (67) [tʌkɪd] R.P. /tækɪd/ and (28) [tɾʌks] R.P. /træks/; R.P. /e/ and /æ/, e.g.(41) [dʒænɔɪn] R.P. /dʒenɔɪn/ and (28) [sævɪntɪ] R.P. /sevɪntɪ/.

In Hausa English /ʌ/ and /æ/ overlap thus giving rise to (86)'s [pændəməntəl] R.P. /fʌndəmentl/, /e/ and /ʌ/ overlap because /e/ sometimes surfaces as [ə] or [a] due to vowel reduction and [ʌ] overlaps with both [ə] and [a] hence (8)'s [dɪɾʌkʃn] R.P. /dɪrekʃn/, /e/ and /æ/ also overlap in Hausa English as Hausa English /æ/ is a very close one.

In Southern Nigerian English, R.P. /ɒ/ and /ʌ/ overlap in sophisticated speakers who are still in the process of acquiring R.P. /ʌ/ hence (18)'s [dʌtə] 'doctor', (91)'s [gʌn] 'gone', (10)'s [ɪkʌnəmɪ] 'economy' and (9)'s (Southern-influenced Hausa speaker) [gʌt] 'got'. In these speakers [ɔ̈]

is a common form for both R.P. /ʌ/ and /ə/ and this leads to [ɔ̈] and [ɔ] overlapping as in (1)[strɔ̈ŋ] 'strong' (Southern-influenced Hausa speaker) and (64) [ɛkɔ̈nɔ̈mɪ] 'economy'.

Notes to Chapter Three

(1) According toWilliamson(1969) e and ɛ are contrastive in some Western Igbo dialects whereas they are allophones of /e/ in Central Igbo. According to Adetugbo (1977) the dialects of Ekiti, Akure, Effon and Ijesha have a nine-vowel system consisting of /I/ and /ʊ/ (which are in contrast with /ɪ/ and /u/) in addition to the seven vowels of Standard Yoruba. The only difference between Yoruba and Igbo vowels - as far as we can judge - is that there is an additional prosody of tense voice quality which characterizes the tense set of Igbo vowels which one does not find in Yoruba. More on this in the review of vowel systems below.

(2) For example, Abraham (1959b) p. 131: "AI and AU have the same value as in English ..." and (1959a) p. 1: "ị has the short slack sound heard in English 'fit' e.g. *rịga* 'preceded'. ... ī has the long close sound heard in English 'feet' e.g. *rīgā* 'gown'" etc.

(3) Our Igbo informant, Peter, lengthened final /u/ in /ukwu/ when he pronounced it after /ụkwụ/ because "You have to extend it a bit to make it different from /ụkwụ/." It appears that the occurrence of the minimal pair in succession prompted Peter to use the lengthening option and this does not mean that the lax vowels are

always longer. Indeed his pronunciation of /ɪmɪ/ as opposed to /ɫrɫ/ carried no such lengthening.

(4) Gimson (1970, p. 107) states that "Conservative R.P. speakers will often use a more retracted vowel, i.e. an unrounded and centralized type of ɔ[ɔ]".

(5) The point being made is valid for the whole of coastal West Africa where /ʌ/ is pronounced as [ɔ] and where most of the languages belong to Kwa. Indeed we must extend this explanation to the West Indies where English /ʌ/ is regularly [ɔ] in the various English-based Creoles spoken there (cf. for instance Cassidy, 1961 p. 433).

(6) According to Adetugbo (1977, p. 374) the three major dialect areas are as follows:

"1. Northwest Yoruba (NWY) comprising Abeokuta, Ibadan, Oyo, and Oshun areas;

2. Central Yoruba (CY) consisting of Ekiti, Akure, Effon and Ijesha dialects and

3. Southeast Yoruba (SEY) made up of Okitipupa, Ondo, Owo, Shagamu and parts of Ijebu dialects."

(7) Three Yoruba postgraduate students at Lancaster University from the dialect area (two from Ilesha, one from Ekiti) who claim to speak their local dialects admitted that they were actively discouraged from speaking their dialects at school and were severely beaten if they attempted to write in their dialect. Such was the zeal with which Standard Yoruba was encouraged that these three Yoruba speakers have lost /I/ and /o/!

(8) Afolayan (1968) erroneously posits the existence of both long vowels and diphthongs in Yoruba basing his analysis

on such surface realizations. For a fitting rebuttal, see Salami (1969).

(9) Gimson (1970, p. 101) reports that the realization of /ɪ/ in word-final position such as *visibility* in R.P. may often have "a tongue position lower than half-close" and he adds in a footnote that "/ɪ/ is not opposed to /e/ in final, open syllables, where such lowering is particularly apt to occur."

(10) Glide epenthesis occurs an average of 22% of the time in 5 speakers in the case of /ɪə/ and 17% in 5 speakers in the case of /ɛə/. Two speakers epenthesize in both but the other six epenthesize in only one of the two diphthongs.

(11) The /ə/ in 'question' appears to be treated along with 'zero vowels' as in 'education' which have an epenthetic [ɪ] inserted and which then becomes [ɨ] when vowel reduction applies.

Hausa English /ɪ/ occurring after /w/ may be assimilated to [o] (the sequence /w/+/ɪ/ of /e/ is not allowed in Hausa) and then reduced to [ʉ̞] as in (37) [wʉ̞ð] 'with'. /ɪ/ assimilation to [o] without reduction has also been attested, e.g. (8) [woð] 'with' and (83) [ʍot∫] 'which'. This has also been attested in Yoruba English, e.g. (19) [wol] 'will'.

(12) [e̞] here is viewed as having a different origin from Hausa English [e̞] because while in Hausa English there are other R.P. residual features which make the assignment of [e̞] to R.P. influence consistent, there are no corresponding features in the speech of those

Igbo and Yoruba speakers in whom [ɐ̟] has been attested. Furthermore, while Hausa does not have a vowel similar to [ɐ̟], both Igbo and Yoruba do. The Yoruba speakers in whom [ɐ̟] is attested are from the areas where /I/ is contrastive.

(13) The authors of the two sentences are anonymous but they certainly have a vowel system such as the one being described here whether they are Southern Nigerians or not. The first sentence was culled from a police notice which appeared in the *New Nigerian* of 12 December 1977 and was first cited in Jibril 1982; the second sentence was produced by a prospective undergraduate in an entrance examination essay to a Nigerian university and was first cited in Adekunle (1977).

(14) Christophersen (1954) does not present the marginal diphthongs as archiphonemes: this is merely our interpretation of his words which we quote: "The diphthongs [ɪə]and [ɛə] have become confused and merged, although the resultant sound seems to be a diphthong; [ɔə] too seems to get a diphthongal value". From Christophersen, P. (1954): "The Problem of Spoken English" in *Oversea Education*, Vol. XXVI No. 1, April 1954, pp. 20-25.

(15) These biographical details were culled from an official publication as (28) did not respond to our questionnaire. One would like to know what kind of school he attended in Kaduna, whether a government school or a mission school, what kind of subjects he

studied at Ibadan University (English? Phonetics?), how long he stayed in Britain and whether he has received any professional speech training.

(16) The choice of vowel does not appear to correlate with group membership either. For example, speaker (80), another Igbo broadcaster, achieves a 75% proportion of [ɘ:] in his realization of /ɘ:/ which (5) lacks completely; speaker (32), a Yoruba broadcaster-turned business executive has an [ɘ]-proportion of 73% in his realization of /ɘ/ compared to (28)'s 45%.

(17) Green and Igwe (1964, p. 1) divide the vowels of Igbo into four levels according to their height as follows:

level 1 : i u

level 2 : ɪ̣ ụ

level 3 : e o

level 4 : a ọ

Vowels of level 1 and 3 are referred to as vowels of the uneven levels or as the odd set and vowels of levels 2 and 4 are referred to as vowels of the even levels or the even set.

CHAPTER FOUR

The Syllable in Nigerian English

4.0. In this chapter, we examine the nature of divergence between the permissible structure of the syllable in R.P. and Nigerian English as well as some low-level deletion and epenthesis processes in Nigerian English which are best accounted for in terms of the syllable. At the end of the chapter, we also give an account of nasalization in Nigerian English. The analysis of consonant deletion in Nigerian English leads to a falsification of both Foley's and Hooper's consonant strength hierarchies.

4.1. A Contrastive Note on Syllable Structure in English, Hausa, Igbo and Yoruba

Nigerian languages generally have a much simpler syllable structure than that permitted in R.P. Both Igbo and Yoruba allow only syllables of types $C_{o}^{1}V$, N i.e. consisting of a vowel only, no more than one consonant and a vowel, or a syllabic nasal only. Hausa allows syllables of types CVC_{o}^{1} i.e. consisting of a consonant and a vowel only or a consonant, a vowel and no more than one consonant. English, on the other hand, allows syllables of types $C_{o}^{3}VC_{o}^{4}$, C_{1}^{C}, i.e. consisting of a vowel only, between one and three consonants initially followed by a vowel and between zero and four consonants after the vowel, or of a sequence of two consonants, the second of which is syllabic and is either a lateral or a nasal. The most obvious difference between the permissible structure of the syllable in English and

Nigerian languages is the absence of consonant clusters, both initial and final, in the latter. In addition, although both English and Nigerian languages (with the exception of Hausa, which has syllabic nasals only phonetically) have syllabic consonants, only the nasal is allowed to occur syllabic in Nigerian languages while English also allows the lateral so to occur. Furthermore, the syllabic lateral and nasal of R.P. are always preceded by another consonant which acts as the syllable onset (cf. 'little' /lɪtl̩/ and 'sudden' /sʌdn̩/) while the syllabic nasalsof Igbo and Yoruba are never preceded by a consonant tautosyllabically.

However, contrary to what these differences between R.P. and Nigerian languages might lead us to expect, Nigerian English conforms quite closely to the patterns of R.P. We do not, for instance, encounter a universal tendency to epenthesize vowels to resolve English consonant clusters in order to make them conform to the CV, CV pattern of Nigerian languages in Nigerian English. Such divergences as are found between the structure of the syllable in R.P. and in Nigerian English are mostly due to the influence of English orthography as we shall show below.

4.2.0. Divergence in Syllable Structure Between Nigerian English and R.P.

Like R.P., Nigerian English permits syllables of the type $C_{0}^{3}VC_{0}^{4}$, i.e. consisting of a vowel only, or of between one and three consonants initially, followed by a vowel, and additionally of between zero and four consonants finally. However, Nigerian English does not allow syllables of the type CC_{1}, i.e. a consonant followed by a syllabic consonant (which is either a lateral or a nasal) which are allowed in R.P. In addition, Nigerian English has one vowel (and therefore one syllable) less than R.P. in words such as 'tuition' (R.P. /tju:ɪʃn/ Nigerian English /tju:ʃɔn/ or /tju:ʃɪn/ depending on region). Nigerian English also syllabifies words which contain vowel sequences (which some analyses of R.P. posit as triphthongs) in R.P. differently so that 'power', for instance (which is /paʊə/ in R.P.) is /pa:wə/ or /pa:wa/ in Nigerian English. We shall elaborate on these three differences between the two types of English below.

4.2.1. The Adaptation of R.P. Syllabic Consonants in Nigerian English

Syllables which in R.P. have a syllabic lateral or nasal as their nucleus have a vowel instead in Nigerian English. In most cases, such vowels are based on the orthography. Only in sophisticated Nigerian speakers are R.P.-type syllabic consonants found.

Thus Nigerian English has /a/ or /ə/ (Southern Nigerian English and Hausa English respectively) where R.P. has a consonant and a syllabic nasal or lateral which are orthographically separated by 'a' or 'ia' as in 'judicial' e.g. (73) [dʒʊdɪʃal], 'final' e.g. (9) [faɪnəl]and 'political' e.g. (10) [pɔlɪtɪkal] .

Where the orthographic vowel is 'ia', Nigerian English may have /ɪə/ instead of /a/ or /ə/ as in (1) [faɪnanʃɪəl] 'financial', (20) [sɔ:ʃɪə] 'social' and (82) [prɛzdanʃɪal] 'presidential'.

Where the orthographic vowel is 'o' or 'io' - usually in words spelt -'sion' or 'tion' (such as 'extension' and 'education' respectively) Southern Nigerian English has /ɔ/ and Hausa English has /ɪ/, as in (19) [dɪprɛʃɔ̃n]'depression', (10) [kɔndɪʃɔns]'conditions' and (41) [me:dɨke:ʃɨŋ] 'medication' respectively.[1]

In some words where the orthographic vowel is 'e', Nigerian English has /ɪ/ - e.g. (24) [sɪtɪzɪns] 'citizens', (33) [awɛkɪn] 'awaken' and

(62) [sɛvɪntɪ] 'seventy'. However, in other words where 'e' is the orthographic vowel Nigerian English has /ɛ/. These are words such as 'recent', 'decent' and their derivatives, as in (18) [rɪsɛntlɪ] 'recently' and (10) [dɪsɛnt] 'decent'. In Hausa English, the vowel in such words may be /ə/ as in (82) [gɪvən] 'given' and (86) [ɪbən] 'even' which may be residues from an obsolete R.P. form.

However, while in all the cases listed above the influence of the orthography in determining the vowel used in Nigerian English where R.P. has a syllabic consonant can be clearly observed, there are other cases where the Nigerian English vowel appears to have come into being as a purely epenthetic vowel though its presence in the relevant words has now been phonologized in Nigerian English. It can be shown that such a vowel is epenthetic because its identity is predictable on widely attested (not to say universal) principles. The epenthetic vowel is either [ɪ] or [ʊ] which are the least open vowels and therefore the closest to the timbre of the target consonant cluster; [ʊ] is the epenthetic vowel where the consonant which precedes the syllabic nasal or lateral is either labial or back (in Chomsky and Halle's terms [+ grave]) and [ɪ] is inserted elsewhere.

The words in which these vowels are epenthesized are those which have an orthographic 'e' either after or between the two consonants, such as 'couple', 'middle', 'often' and 'sudden'. There is no correlation between the epenthetic vowel and this orthographic 'e', so other principles must be at work. Where the first consonant is

[+ grave], [ʊ] is inserted as in (77)[kɔpʊld] 'coupled', (18) [ɔfʊ̃n] 'often', (19) [tɛrɪbʊ]'terrible' and (51) [sɪŋgʊ] 'single'. Elsewhere, [ɪ] is epenthesized as in (32) [sʊ̈dɪnlɐ̯] 'suddenly'.

However, in Southern Nigerian English - which has a fair amount of labiality - the epenthetic vowel, even where the consonant preceding the R.P. syllabic lateral is [- grave], may nevertheless be [ʊ] as in [lɪtʊl] 'little' (not attested in the corpus). The labiality of the epenthetic vowel in this case may be due to the back vowel resonance of English dark [ɫ] which occurs in these environments.[2] In Hausa English [ɪ] is the epenthetic vowel where the first consonant is [- grave] as in (44) [mɪdɫɪ] 'middle'.

In all these cases, whether the Nigerian English vowel owes its existence to the orthography or to phonetic epenthesis, the result is that Nigerian English has vowels as the nuclei of syllables which in R.P. have syllabic consonants.

.2. The Syllabification of 'Power', 'Loyalty' etc. in Nigerian English

Words which in R.P. consist of a sequence of a diphthong plus a monophthong but are orthographically represented as two vowels and an intervening semi-vowel (w, j) or as 'ire' (as in 'entire') are syllabified as a long vowel plus a semi-vowel and a vowel. Thus 'power' has a labio-velar approximant in Nigerian English as indeed it does in the orthography, e.g.

(45) [pa:wa:], (21) [haɪpawad] 'high-powered' and (9) [manpa:wa] 'manpower'. Similarly, 'loyalty' is syllabified as /lɔ :$jəl$tɪ$/ in Nigerian English, as in (1) [lɔjəltɪ] 'loyalty'. 'Viewer' is also syllabified as /vI:wə/ as in (58) [vI:was] 'viewers'.

Words which are spelt 'ire' are syllabified as /a:$jə/ or /a:$ja/ in Nigerian English. Examples include (44) [ɪntaja] 'entire', (21)[ɪnspajad] 'inspired', and (32) [rɪkwajə] 'require'. While in the case of 'power', 'loyalty' and other words which have a semi-vowel in the spelling we can safely attribute the pattern of their syllabification in Nigerian English to the influence of the orthography, such an explanation would be untenable in the case of words spelt 'ire' where there is no semi-vowel. In this latter case, the semi-vowel must have originated as a phonetic liaison between [aɪ] and [a] or [ə] to facilitate transition from the diphthong to the monophthong, e.g. /ɪn$taɪ$a$/ > [ɪntaɪja] > [ɪntaja]. However, since these words are now commonly found only with the semi-vowels, these are their phonemic forms in Nigerian English.

4.2.3. Words with One Syllable less than R.P.

Some words which have a sequence of two vowels (usually a long vowel or diphthong and a monophthong) in R.P. have only one vowel in Nigerian English. In some cases, such as 'tuition', 'diagnosed' and 'gratuitous', the vowel which does not occur in

Nigerian English is orthographically present ('i' in 'tuition' and 'gratuitous' which corresponds to /ɪ/ in R.P., 'a' in 'diagnosed' which corresponds to /ə/ in R.P.) but in other cases there is no orthographic cue for the vowel, having developed in R.P. phonetically. These are cases involving /ə/ before /r/ in R.P. such as in 'environment' R.P. /ɪnvaɪərənmənt/ which occur without the medial schwa in Nigerian English.

Examples of such words where Nigerian English has one syllable less than R.P. are 'being' e.g. (45) [bi:ŋs] (human beings), 'tuition' e.g. (80) [tu:ʃn], 'gratuitous' e.g. (66) [grə:tju:tjəəs], 'environment' e.g. (18) [ɪŋvaɪrɔmɛnt] and 'diagnosed' e.g. (18) [daɪgnɔst].

These then are the main areas of divergence between Nigerian English and R.P. at the phonological level in syllable structure, syllabification and the incidence of syllables in the lexicon. However, at the phonetic level, there are greater divergences to which we now turn.

4.3.0. Phonetic Processes in the Nigerian English Syllable

Some of the low-level processes which occur in the syllable in Nigerian English which we shall consider below include epenthesis, diphthong reduction, vowel and consonant deletion and haplology. Some of these processes have been attested in R.P. and other native varieties of English but it appears that none

of them is found in the same degree as in Nigerian English. Consequently, we are provided with an opportunity to test the validity of some theoretical claims against data from Nigerian English.

4.3.1. Vowel Epenthesis in the Nigerian English Syllable

We stated earlier that there is no universal tendency to impose a CV - CV pattern on the syllable in Nigerian English and that generally, consonant clusters are efficiently handled in Nigerian English. However, while this is true of most of the speakers in the corpus (and indeed probably true of most Nigerian speakers of English), there are some speakers who do impose such a pattern on the English syllable even if only occasionally. This is evidently the result of interference from the mother-tongue since even in such speakers vowel epenthesis to resolve consonant clusters occurs variably.

As pointed out in section 4.2.1. above, it is possible to distinguish phonetically-motivated epenthesis from orthographically-induced epenthesis because in the former case, the epenthetic vowel is either [ɪ] or [ʊ], the two most close vowels which are auditorily the nearest to the timbre of the consonant cluster. The choice of one or the other is also based on clear phonetic principles: [ɪ] is epenthesized if the consonant before which it is inserted in the cluster is [- grave], or, if there is a vowel in the syllable, the vowel is not a back

one and [o] is inserted where there is a back vowel in the syllable or where the consonant which attracts the epenthetic vowel is [+ grave] or where the initial segment of the next syllable is rounded. Thus as Hooper (1976, p. 236) states, the epenthetic vowel copies its features "from a nearby segment; usually this V is identical to a nearby V, although in some cases surrounding C's have an effect."

Thus we find [ɪ] epenthesized by two Hausa speakers to resolve an initial cluster which has /ɪə/ as its nucleus and a medial cluster without a vowel but ending in a non-grave consonant respectively. These are (68) [kɪlɪa:lə̯] 'clearly' and (74) [arɛndʒɪmants] 'arrangements' respectively.

We also find [o] epenthesized by a Hausa and an Igbo speaker in the following examples: (74) [solɔ:ta:] 'slaughter' and [gorop] 'group' and (64) [bɪtowɪn] 'between'. In 'slaughter' and 'group', the surrounding [o] which forms the nucleus of the original syllable attracts [o] as the epenthetic vowel and in 'between' the following [w] attracts [o].

However, final consonants or consonant clusters also attract an epenthetic weak schwa, [ᵊ] especially in the speech of elderly Hausa and Igbo speakers. Again this supports Hooper's other principle that the "epenthetic V must always be the minimal V or ..." (Hooper, op.cit.). Examples include (37) [mʌstᵊ stɑ̃:t]'must start', (8) [hɛlpᵊ] 'help', (10) [dɪfɪrɛntᵊ kɔntrɪ:s] 'different countries' and (63) [bʌtᵊ aɪ] 'but I'.

It should be noted that no such examples of vowel epenthesis

have been attested from Yoruba speakers in the corpus. There appears to be nothing in the phonological facts of the three languages to explain why Yoruba speakers should not epenthesize where Hausa and Igbo speakers do.[3]

4.3.2. Diphthong Monophthongization and Splitting

The diphthongs /aɪ/ and /ao/ are sometimes monophthongized or split into two separate vowels in Nigerian English. This tends to occur especially in closed syllables where the sequence of a diphthong plus an arresting consonant becomes especially complex.

/aɪ/ may be monophthongized to [a:] or [a] word-medially even where it is in an open syllable in fast speech. Examples include (18) [ɪksa:tɛd] 'excited', (9) [ɪndɪdʒɪna:ze:ʃn] 'indigenization' and (21) [jonatɛd] 'united'.

Similarly /ao/ may be monophthongized to [a:] or [a] in Southern Nigerian English when it occurs in a closed syllable. It will be recalled that both Igbo and Yoruba have no diphthongs in their phonemic inventory, but Hausa has both /aɪ/ and /ao/. From an Igbo speaker, (91), we have [a:t] 'out' and from two Yoruba speakers we have (51) [dãn] 'down' and (19) [ɑrãnd] 'around'. In both Igbo and Yoruba, when two vowels occur in a sequence it is common for one to be totally assimilated to the other and then dropped alto-

gether - for example Yoruba /fẹ́ ọkọ/ 'get a husband' is phonetically [fọ́kọ],/ẹ/ having been assimilated to [ọ] and then elided, though its tone survives (cf. Bamgbose 1965, p.27). From Igbo we can cite the example of /ụ́zọ̀ àmáka/ 'road is good' which when juxtaposed in the proper name *Ụzamaka* become [ụ́zàamáka] where the first vowel is assimilated regressively and totally to [a] and then eventually elided in the final output [ụ́zàmáka]. It is possible that English diphthongs are sometimes perceived as vowel sequences by Igbo and Yoruba speakers, and that the change from [ao] to [a]or [ɑ]is processed in the same way as vowel assimilation and elision in both languages as we have shown above.[4]

Related to monophthongization is diphthong splitting. This has been attested in syllables where /ao/ occurs in a syllable closed by /n/. The first element of the diphthong is lengthened to [a:] and the second element is realized as a full and independent vowel in the same syllable as the following nasal. Examples include (41) [sərɑ:ondŋ] 'surrounding' and (91) [ta:ons] 'towns'. The two speakers are Hausa and Igbo respectively. Diphthongs do not occur phonemically in Igbo but in Hausa where they do occur, they cannot be in a closed syllable. Where they would have otherwise occurred in a closed syllable - as when a word ending in a diphthong takes on a consonantal suffix e.g. /kaɪ/ 'head' + /n/ 'genitive marker' - the diphthong is monophthongized so that what results is /kân/ rather than */kâɪn/. For both Hausa and Igbo speakers, therefore, syllables consisting of a diphthong plus an arresting consonant are equally

difficult and are similarly simplified by inserting a syllable boundary between the two elements of the diphthong.

Indeed, as has been recognized, similarity between a native and a target language may be just as much of a problem to the second language learner as differences. This is because there are usually distributional or other constraints on the shared item in each of the two languages which are almost always different from each other. Thus Hausa speakers, whose language has /aɪ/ and /ao/ which are similar to Nigerian English /aɪ/ and /ao/ exhibit more extreme forms of interference in adapting English diphthongs than Igbo and Yoruba speakers whose languages do not possess corresponding diphthongs.

As we have shown above, a diphthong cannot occur in a closed syllable in Hausa. We may add that where a vowel is suffixed to a word ending in a diphthong in Hausa, a semi-vowel ([j] or [w] according to the frontness or backness of surrounding vowels) is epenthesized and a syllable boundary is inserted between the first element of the diphthong and the semi-vowel. Thus /háo/ 'mount, ascend!' plus the nominalizing suffix /ā/ becomes /háwā/ 'mounting, ascension' and /dʒàrǐrì/ 'baby boy' plus the feminine suffix /á/ becomes /dʒàrǐrìjá/ 'baby girl'. This is transferred to Hausa English so that 'guidelines' and 'time' for instance, are realized as (8) [qaɪdla:jəns] and (74) [ta:jəm] respectively. The diphthong in a closed syllable is split, and an epenthetic glide introduced, which itself requires further vocalic support, thus

attracting [ə]-epenthesis. No such forms are found in the Igbo and Yoruba corpora.

Also, one Hausa speaker has been attested as extending the application of a Hausa rule beyond its limits in the language in his English. This is speaker (67) who has [tʷaɪlɪŋ]'toiling'. In Hausa, back consonants occurring after /o/ are labialized and /o/ is then unrounded to [a] and the process is so productive that synchronically (at least in the standard dialect) the sequence back consonant plus /o/ is no longer permissible, all such sequences having now become labialized back consonant plus /a/ - e.g. /kʷaɽ'/'coal' from English /kəʊl/. At an earlier stage of the language, this process - of transferring the labiality of a rounded vowel to a preceding back consonant - appears to have affected the diphthong /oɪ/ as well, for there are back consonant plus /aɪ/ sequences in the Standard dialect which are found as disyllabic in some Eastern dialects. Thus Standard /ƙʷaɗ'/ 'egg' is /ƙɔ:jɗ'/ in the Eastern dialects, which suggests that Standard /aɪ/ in such words descends from historical /o:jɪ̄/ which contracted to /oɪ/ and then transferred the labiality of its first element to the preceding back consonant. However, this process appears to affect back consonants only. But (67)'s [tʷaɪlɪŋ] which transfers the labiality of [ɔɪ] to the consonant and unrounds [ɔɪ] to [aɪ] must be seen as a case of extensive interference since the mother-tongue rule is applied in the second language to a case where it does not apply even in the mother-tongue.

4.3.3. Syncope in Nigerian English

Medial vowels may be deleted in Nigerian English on two grounds: when there is a hiatus of a diphthong or a long vowel and a monophthong, the latter may be deleted and in hypercorrect speech, vowels which are /ɪ/ or /ə/ in R.P. may be deleted when they occur in a syllable before or after the accented syllable.

When a diphthong or a long vowel and a monophthong form a hiatus, the weaker of the two, the monophthong may be deleted as in (86) [gɔ:n] 'going', (20) [sɔsaɪtə] 'society' and (91) [*praɪrɪtɪ*] 'priority'. In 'going' the Nigerian English vowels are /ɔ:/ and /ɪ/ and /ɪ/ is deleted; in 'societal' the relevant Nigerian English vowels are /aɪ/ and /ɛ/ and the latter is deleted; in 'priority' the relevant vowels are /aɪ/ and /ɔ/, the latter being deleted.

The second category of syncopated vowels are those which occur in syllables immediately adjacent to accented ones. In R.P., /ə/ in a syllable following the accented syllable and in some word final syllables is often optional, so that 'boundary' for instance may be either /baʊndərɪ/ or /baʊndrɪ/ and 'Tibetan' may be either /tɪˈbetən/ or /tɪˈbetn/. In Nigerian English this process is extended by analogy in hyper-correct speech to cases where the vowel is obligatory in R.P. Examples of /ɪ/ deleted in a post-accented syllable

where no such option is available in R.P. include (5)[kæptl̩] 'capital' and (20) [ɪntɛnstɪ] 'intensity'. Examples of /ə/ deleted in post-accented syllables include (27) [sɛpɹɛt] 'separate' (adj.) and (47) [gɔvmɛnt] 'government'.

Indeed this tendency is extended in Nigerian English to /ɪ/ and /ə/ in pre-accented syllables for which there is no precedent in R.P. Examples include (82) [pɹɛzdɛnʃɪal] 'presidential' and (21) [ɪndkeːʃn] 'indication' - where /ɪ/ in pre-accented syllables is deleted. /ə/ is also deleted in the same environment as in (1) [ɔpɹeːʃns] 'operations' and (9) [fɛdɹeːʃn] 'federation' (the latter, perhaps by analogy with 'federal' where /ə/ is optional after /d/). It is not clear whether in fact the forms with syncopated vowels are sufficiently stable in Nigerian English to be regarded as the lexical representation of these words in this kind of English.

4.3.4. Haplology in Nigerian English

Haplology refers to the loss of syllables in the neighbourhood of similar syllables. It is a natural simplification process which has universal currency. In Nigerian English, it is widely attested and it affects syllables regardless of the inherent deletion-resistance capacity of their consonants. In some cases the "haplologized" forms are the only ones attested, which suggests that they have become phonologized in Nigerian English.

It is usually the first of two similar syllables which is deleted when haplology occurs. Thus /tɪ/ is deleted in (24) [aɪdɛntɪ] 'identity' where the more careful form would be /aɪdɛntɪtɪ/, and /sɛ/ is deleted in (10) [nɛ:sɪɾɪlɪ] 'necessarily' where the target is /nɛsɛsɪɾɪlɪ/, and /tɪ/ is deleted in both (28) [ɪnstu:ʃn] 'institution' and (82) [kʷanstu:ʃn] 'constitution' where the targets are /ɪnstɪtu:ʃn/ and /kɔnstɪtu:ʃn/ respectively. In the word 'secretary' and its derivatives, a form with only one /ɾɪ/ syllable has become established in Nigerian English even in careful speech. Thus (9) has [sɛktɾɪ] 'secretary' and (79) has [sɛktɛɾɪəts]'secretariats' with only the second /ɾɪ/ syllable which is typical of all the attested forms of the word in the corpus. This must have developed from an earlier /sɛkɾɪtɾɪ/.

Although haplology refers to the loss of syllables, we may extend our consideration of it here to cases where only part of a syllable - a consonant - is lost in the neighbourhood of a similar consonant. This process is motivated by the same tendency to simplify which leads to haplology proper. We find that labials and fricatives, to which we shall assign high strength values in the following section, are deleted only when they occur immediately before other labials or fricatives (as the case may be) or where complete haplology fails to occur and only the consonant is deleted.

As an illustration of the latter case, where conditions for haplology are met but the vowel of the first syllable survives deletion, we may cite (33) [dɪ i:pɑ] 'the people' (we shall consider /l/-deletion in the next

section) and (82) [pɔabl̩] 'probably', where, among other things, /p/ and /b/ delete when they occur in syllables preceding other bilabials.

As an illustration of the deletion of labials and fricatives when they precede other labials or fricatives we may cite (62) [gʌ:mɛnt] 'government' where /v/ is deleted before /m/, (68) [ɔ wɔtʃ] 'of which' where Nigerian English /f/ in 'of' is deleted before /w/ and (65) [kwɛʃɔn] 'question' where /ᵊ/ is deleted before Nigerian English /ʃ/ in 'question'. Although there is a difference between these cases and those considered in the preceding paragraph in that the consonants in this case are at a weaker position (syllable coda) compared to those considered earlier which are in syllable onset, the similarity of the two processes lies in the fact that regardless of positional strength in the syllable, labials and fricatives in Nigerian English are deleted only in the neighbourhood of similar consonants. We shall return to this in the following section.

4.3.5. Consonant Deletion in Nigerian English and Phonological Theory

Consonants are deleted in Nigerian English either as a result of fast speech or to simplify a consonant cluster in which case the fittest consonants survive and the weakest succumb. We view the syllable (with Hooper 1976) as being composed of consonants on its margins and a vowel at its nucleus.

We also agree with Hooper (1976, p.199) and Donegan and Stampe (1979, p.142) that syllable-initial position is stronger than syllable-final position.It seems reasonable to infer also that in a syllable-initial consonant cluster, the first is in a stronger position than the second, and the second in a stronger position than the third and that in a final cluster a similar hierarchy holds with the strongest consonant being the one immediately following the nucleus and the weakest being the very last consonant in the cluster.[5] The distribution of positional strength within the syllable as proposed above may be represented thus:

$$
\begin{array}{c}
\$ \\
\text{CCCVCCCC} \\
\leftarrow\ \ \leftarrow \\
321\ \ 4321
\end{array}
$$

The higher the number under a consonant, the stronger the consonant in that position but the hierarchy does not hold across the nucleus.

Since syllable-initial positin is inherently the strongest, we should expect consonants in that position to be deleted least often, which indeed is the case in Nigerian English. The only cases of initial consonant deletion are from a fast-speaking Igbo in the corpus who has (64) [próosiŋ] 'producing' and [dɪsŋʃɔn] 'distinction'.

In the second example both the consonant and the vowel (/tɪ/) are deleted, though the nasal survives and keeps the family tree (of the syllable) alive! All other cases have been shown to be the result of haplology.

However, /l/ and /r/ have been found to delete when they occur at the second of two slots syllable-initially in fast speech. Thus (91) has [bak makɛt] 'black market' and (40) has [peɪdʒə] 'pleasure' both of which delete /l/. Examples of deleted /r/ include (66) [pɔ:mɪst] 'promised' and (82) [fɛdəl] 'federal' (the latter being syllabified as /fe $dɾal$/). The vowel-like resonance of these liquids no doubt facilitates their deletion in these positions where they precede vowels.

Since coda position is weaker than onset position, it follows that we should expect more consonants to be deleted in the former than in the latter position, which is indeed the case in Nigerian English. We find /n/ deleted at coda as a result of interference from Yoruba (and also for other reasons, in Igbo speakers, for instance). We also find /l/ deleted post-vocalically when it occurs as the only consonant at coda or as the first of a cluster. We also find the non-labial plosives /t, d, k, g/ deleted when they occur at coda either alone or as part of a cluster, as long as there is no pause.

Most of the instances of /n/-deletion in the corpus are from Yoruba speakers whose language has phonemic nasalized vowels which are orthographically represented as vowel plus 'n' so that /fɔ̃/ 'for' is orthographically 'fun', for instance. It appears that Yoruba orthography interferes with Yoruba English in that English vowel plus nasal

sequences are often realized as nasalized vowels only. Thus (18) has [ɪŋvaĩrõmɛnt] 'environment, (19) has [kã ɪ:zɪlɪ] 'can easily' and (58) has [dwĩdlĩ] 'dwindling'. In all these cases, the nasal is effaced and its nasality transferred to the preceding vowel. However, this need not necessarily be the result of interference from Yoruba or its orthography. Hooper (1976, p. 241) observes that "A condition on deletion of the nasal C is the transfer of the one distinctive feature, nasality, to the preceding V: VN → $\tilde{V}$N. Once this process is accomplished the nasal C carries no distinctive information of its own. It is entirely redundant and thus subject to deletion." If this explanation is correct, then Yoruba speakers would delete the nasal and transfer its nasality to the preceding vowel in English even if Yoruba did not have phonemic nasalized vowels.

Indeed we find that three of the fifteen Igbo speakers also delete /n/ and transfer its nasality to the preceding vowel even though Igbo has no phonemic nasalized vowels. Examples include (45) [əsaĩmɛnt] 'assignment' and (75) [ənaõs] 'announced'. However, compared to 8 Yoruba speakers only 3 Igbo speakers delete /n/ (the sample means are Y.1.2 and Ig. 0.26). No examples of nasal effacement have been found in the Hausa corpus. We shall return to a discussion of nasalization in Nigerian English in the final section of this chapter.

Post-vocalic /l/ is unstable in Nigerian English. In Hausa English it is found deleted only before labials as in (8) [twɛpᵊ] 'twelve' and (40) [ɪnvɔvd] 'involved', but in Southern Nigerian English it may be deleted

whether it is the only consonant at syllable coda (as in (65) [əgɾɪkɔ:tʃɔ] 'agriculture', and (73) [dʒɔdɪʃə] 'judicial') or part of a cluster which includes labials (as in (18) [sɛf] 'self' and (45) [ɾɛm] 'realm'. There is of course the possibility of interference from the spelling in cases where /l/ occurs before 'm' or 'f' in the orthography, where it may be perceived as being 'silent' on analogy with words where it *is* 'silent' such as 'half', 'calf' and 'calm'.

In any case, even in R.P., postvocalic (i.e. 'dark') /l/ is often deleted. Gimson (1970, p. 238) reports that "[ɫ] is apt to be lost when preceded by /ɔ:/, which has a resonance similar to that of [ɫ], e.g. *always* /ˈɔ:wɪz/, *already* /ˌɔ:redɪ/ ... (cf. established loss of [ɫ] in *walk*, *talk*, etc.)".

But the consonants that are by far the least able to resist deletion at syllable coda in Nigerian English are the non-labial plosives /t, d, k, g/. It is difficult to decide whether velars are better able to resist deletion than alveolars or vice-versa since a frequency count shows that more alveolars delete than velars, which probably reflects the higher frequency of occurrence of alveolars than velars in English. But within each pair, the voiceless appears to be less resilient than the voiced.

/t/ may be deleted when it occurs postvocalically and syllable-finally as long as there is no pause (as in (87) [əbsɔlɔlɪ] 'absolutely') or word-finally if there is no pause (as in (20) [ə taɪms] 'at times', (64) [ɪ kɔd] 'it could' and (33) [bə aɪ] 'but I') and when it occurs as

a member of a coda cluster involving a nasal or a fricative as well (as in (21) [ɪntɾɛs], (75) [gʌvmɛn] 'government' and (9) [lɑ:dʒɛs] 'largest').

/d/ may also be deleted in similar environments - e.g. (19) [kə sɔfə] 'could suffer', (65) [wə bɪ] 'would be', (5) [ɪkstʃɛndʒ] 'exchanged', (84) [ʌndəstən] 'understand' and (82) [tʃaɪl] 'child'.

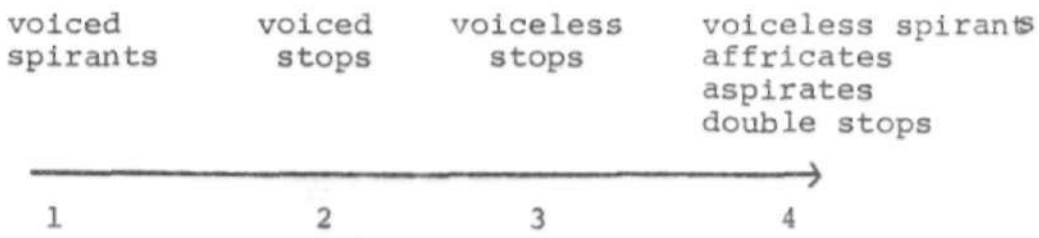
/k/ may also be deleted syllable-finally when it is the only consonant at coda word-medially, and when it is one of a cluster which includes a fricative or a nasal. Examples are (18) [dʌtə] 'doctor', (20) [ɛʃɔəlɪ] 'actually', (67) [sɪstɪ] 'sixty' and (87) [sɪŋ] 'think'. Support for the position that velars are weaker than alveolars comes from (51) [kɔŋflɪt] where the positionally stronger /k/ deletes before the positionally weaker /t/.

The only tokens of /g/-deletion in the corpus - 3 in all - come from one speaker , (21). Considering that Gimson (1970, p. 219) quoting Fry (1947) reports that while /k/ occurs with a frequency of 3.09% in English, /g/ occurs with a frequency of only 1.05%, the rarity of /g/-deletion in our corpus merely reflects the low frequency of occurrence of /g/ in English rather than resistance to deletion. One of the examples attested from (21) is [kɔɛzɪstɛns] 'coexistence'.

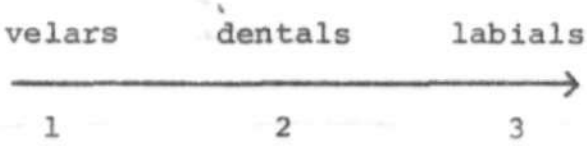
The deletion of plosives - especially alveolars - when they are part of a coda consonant cluster has long been reported in R.P. and other native varieties of English. Gimson (1970, p. 238), for instance, reports that in present-day English "simplification of clusters continues to take place, especially involving the loss of

the alveolars /t, d/ when medial in a cluster of three consonants" and that "retention of the alveolar plosives" in words such as 'windmill', 'exactly', 'kindness' and 'restless' "is characteristic of careful speech". Gimson reports further (p. 297) that even where the alveolar plosive is word-final, it may be elided in rapid speech if the next word has an initial consonant and gives examples which include 'last chance' and 'just one'. That this is not confined to alveolars is unwittingly pointed out by Gimson (op.cit.), who while concerned to show examples of /t/-deletion is confronted by phrases such as 'risked prison' and 'asked them' and so adds, in parenthesis "In the sequence /-skt/, /k/ rather than /t/ is often elided, e.g. 'risked prison' ...". The point is that the deletion of non-labial plosives is a common phenomenon found in both native varieties and second language varieties of English such as Nigerian English and is governed by the same principles in both contexts. To these principles we must now turn.

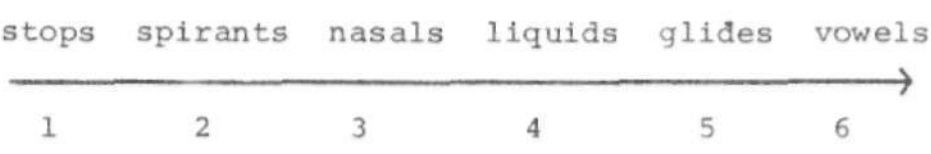
Foley (1977) based his so-called universal strength scales for consonants on the evidence of the historical development of consonants in Indo-European languages. His β parameter, for instance, assigns strength values to different types of consonant on the basis of the known direction of lenition. Thus voiced spirants are known to develop from a weakening of intervocalic voiceless spirants or voiced stops but double stops are known to be among the most resistant to phonological lenition. Accordingly, Foley's β parameter assigns the following values to the consonants indicated:



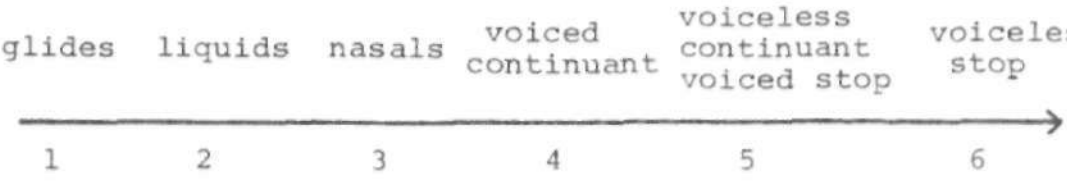
Foley has other strength scales, such as his α scale which reflects the relative strength of consonants (as defined by their ability to resist phonological lenition) according to their place of articulation. In Romance, α has the following values:



where labials are particularly strong in lenition-resistance. But neither these two scales nor indeed Foley's p parameter which appears to be based on the degree of sonority of consonants (and vowels) can account for consonant deletion in Nigerian English. His p parameter is reproduced below:



Similarly, Hooper (1976) after sensibly observing that "... all attempts to establish consonantal strength hierarchies on a single phonetic parameter have been less than successful" (p. 198) nevertheless proceeds to offer a universal strength scale of her own! This assigns values to consonants as below

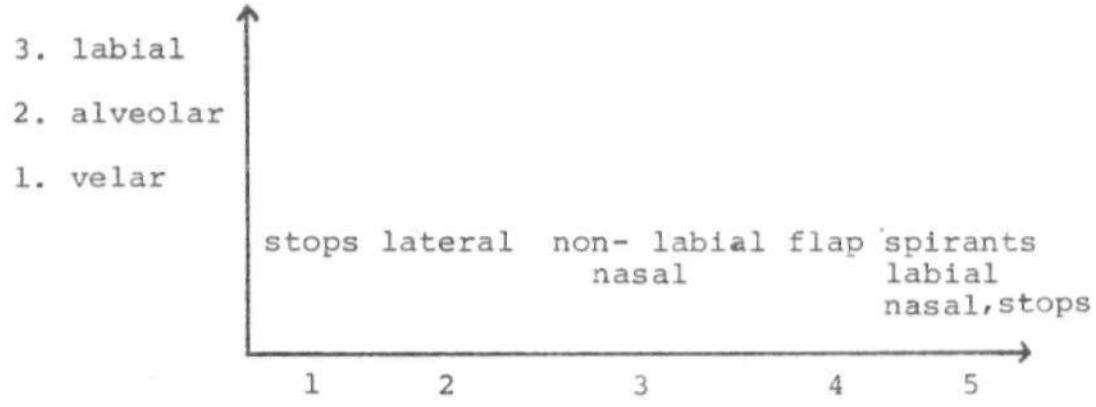


which is also based on phonological evidence concerning lenition in many languages. It is remarkable that the consonants that appear to be the least resistant to deletion in both Nigerian English and R.P. (voiceless stops) have the highest strength value in Hooper's hierarchy. But like Foley, Hooper states that her strength scale is "universal but not absolute" and that if any language were so idiosyncratic as to violate her scale, she "would expect that phonetic explanations for such violations can be found" (1976, p. 205).

It is a futile exercise to attempt to construct universal strength hierarchies for consonants even where historical or phonological evidence is available. To begin with, any number of languages may turn up with violations of such scales and the inventor is then forced to dismiss them as idiosyncratic. But, more importantly, different acoustic and articulatory properties of consonants endow them with different strength values relative to one another and different phonological processes are more inclined to take advantage of one weakness rather than another. Thus voiceless stops, which are acoustically the weakest consonants, turn out to be phonologically stronger than fricatives, for instance, in that the latter represent weakened versions of the former in many cases. Thus a scale based on the acoustic salience of consonants would downgrade stops but another based on phonological evidence would downgrade fricatives. Similarly, a labial, even if a stop, tends to survive deletion, probably because of the articulatory action which involves the lips. Thus a strength scale based on only the manner of

articulation of consonants would miss this important articulatory property of labials.

The evidence from Nigerian English suggests that stops are the least resistant to deletion, followed by the lateral, followed by the nasal /n/, followed by the flap /ɾ/, and that spirants are the most resistant to deletion. On the place of articulation axis, we may place velars (rather tentatively, as our evidence is not conclusive) as the least able to resist deletion, followed by alveolars and then the labials which are the most resistant to deletion. We may assign numerical values to consonants on both parameters and it is to be understood that the value of each consonant is the sum of its values on the two parameters and that the higher such a sum is, the more able it is to resist deletion.



Such a scale accounts for the order in which consonants are deleted in Nigerian English. It appears that capacity to resist deletion is a function of the articulatory and acoustic properties of consonants and only a scale which recognises the subtle interplay of these properties can account for it. It is, however, futile to christen such a scale 'universal' for the reasons earlier advanced.

4.4. Vowel Nasalization in Nigerian English

Of the three accents of Nigerian English under study, Yoruba English has the most nasality. This is not at all surprising since Yoruba alone of the three languages has phonemic nasalized vowels (ranging in number between three and five, depending on the dialect - see Chapter Three) which are in contrast with one another and their oral counterparts. Also, as has been shown in the preceding section, Yoruba speakers delete post-vocalic /n/ more often than any other group and the nasality of such deleted segments is thenpassed on to the preceding vowel. Vowel nasalization in Yoruba English, therefore, derives virtually from proximity to a nasal. Out of 143 tokens of vowel nasalization in the Yoruba corpus, only one - that produced by (28) (a sophisticated speaker) in [kɑ̃:tɛd] 'carted' - does not derive from an adjacent nasal. The other cases - such as (3) [ɪnɔ̃gɔrl] 'inaugural', (51) [ɪ̃-klə̃ɪd] 'inclined' and (66) [ɔ̃nɑ̃:nd] 'unearned' - all result from a neighbouring nasal and nasality in such cases is an important indexical feature of Yoruba English.

Igbo English comes next to Yoruba English in the frequency of cases of nasality. Igbo, however, does not have phonemic nasalized vowels, though there are ten nasalized fricatives which are in contrast with oral ones (f̃, s̃, s̃ʲ, ṽ, z̃, z̃ʲ, m̃, m̃ʲ, m̃ʷ, p̃). Of these consonants /m̃w/ occurs only nasalized in Igbo and since Igbo English has [ʍ] in some wh-words, it

is regularly realized as nasalized. However, out of 33 cases of vowel nasalization in the Igbo English corpus, only 4 are not due to proximity to a nasal and significantly, the 4 exceptions are from the two most sophisticated speakers - (5) and (80) who produce /ɑ:/ nasalized as in (5) [lɑ̃:st] and (80) [lɑ̃:st] 'last'.

Hausa English has the least nasality of all three accents and most of the instances attested in the corpus are not due to nasal proximity but are features of sophisticated speech in the production of some vowels. Out of 20 cases of vowel nasalization in Hausa English, only 5 are due to nasal proximity - e.g. (41) [zɑ̃ŋ] 'them' and (37) [mænpɑ̃:wə] 'manpower'. The majority of cases occur as a prosodic accompaniment to /ɑ:/ as in (37) [stɑ̃:t] 'start', (44) [ɑ̃:tʃ] 'arch' or the diphthongs /aɪ/ and /aʊ/ as in (44) [hɑ̃ʊ̃] 'how' and [sɑ̃plaĩ] 'supply'.

Thus while in Yoruba English nasality is principally a mother-tongue interference feature, in Hausa English it is mainly a feature of sophisticated speech which seeks to imitate a native English model of pronunciation. Hausa itself is a language that has little nasality.[6]

Notes to Chapter Four

(1) Note that Hausa /ɪ/ is reduced to [ɨ] when it occurs after a front consonant either in a closed syllable or word-medially (e.g. /bɪrkɪ̄/ 'brake' > [bɨrkɨ:]) which rule is often transferred to Hausa English, hence (41)'s [me:dɨke:ʃɨŋ].

(2) Gimson (1977, p. xx) reports that "a dark /l/ (with a back

vowel resonance)[occurs] finally, before a consonant and as a syllabic sound e.g. in'feel, help, middle'." However, all occurrences of /l/ in Nigerian English tend to be of the'clear'variety.

(3) It is possible of course,that there is an extra-phonological reason why Yoruba speakers should not epenthesize. Impressionistically, Yoruba appears to be spoken faster than both Hausa and Igbo, and the articulatory setting, especially in the production of consonants, is very lax indeed in Yoruba. This leads to consonants being indistictly articulated or elided altogether in fast speech. These factors would seem to favour consonant cluster simplification by consonant elision rather than vowel epenthesis. There appears to be some support for this hypothesis :Yoruba speakers as a group appear to delete post-vocalic /l/ more often than Igbo and Hausa speakers. The mean tokens are 4.8 times among Yoruba speakers compared to 0.8 times and 0.5 times among Igbo and Hausa speakers respectively.

(4) Note that [ã] regularly occurs as the realization of Yoruba nasalized /ã/ and that (19)'s use of[ã] in [ɑrãnd] is explainable on this ground.

(5) Hooper(1976, p. 230) appears to be making a similar proposal when she writes that the " strength scale values for the various C positions should descend from syllable-initial position inward toward the nucleus and also descend from syllable-final position inward toward the nucleus". This is if we interpret her second 'descend' to be a misprint for 'ascend'. This is the only meaningful interpretation in the context of Hooper's persistent

emphasis throughout pp 199-201 on the relative weakness of syllable-final position.

(6) The North-Western dialects of Katsina and Sokoto have a nasalized labialized glottal fricative [hʷ̃] where Standard Hausa has[p] or[ɸ] . When [hʷ̃] is pronouced, the vowel following it is heavily nasalized but that is as far as nasality appears to go in Hausa.

CHAPTER FIVE

Explorations in the Sociolinguistics of English as a Second Language

5.0. Studies of the co-variation of linguistic and social phenomena have usually focused on relatively small geographical areas, usually a large urban area (e.g. New York city by Labov (1966)) and large-scale surveys of whole countries are relatively rare (but cf. Edwards (1975) who studied sociolinguistic variation in the Guyanese context). In societies where a great deal is already known about the linguistic and sociolinguistic settings a survey may be less useful than an intensive study of a small geographical area but in a country such as Nigeria where English is an important second language and where very little is known about the interaction between social and linguistic phenomena, a survey may be more appropriate.

Throughout the present study we have attempted to relate language to its social context by qualifying and quantifying our statements about phonological alternations and systems with reference to the social characteristics of speakers. In this chapter, we elevate this incidental expedient to a central focus of our attention.

5.1.0. *The Nature of Nigerian Society*

It is now generally recognized that linguistic and social phenomena co-vary but it has not been sufficiently emphasized that the nature of social organization determines what sociological attributes co-vary

with language. In industrialized societies - or at least in those industrialized societies where quantitative sociolinguistic studies have been carried out - the most important co-variant of language has been shown to be socio-economic class (Labov (1966), Trudgill (1974) for instance). This is not because of any inherent power of socio-economic class but because in these particular societies it happens to be the most important focal point of social organization.

In Nigeria, as indeed in other African and developing countries, sociologists generally agree that Western-type social classes have not yet crystallized (see for instance Plotnicov (1970), p. 269). Instead, African sociologists identify a dual system of social status in such societies, a traditional and a modern, neither of which stratifies society into rigid classes in the Marxist sense of landed and landless groups (see Lloyd (1966), p. 56). The traditional system of social status may be viewed as dividing society into two broad groups, the aristocrats and their senior clients as 'important people' and those who have no connection with the aristocracy and are thus 'common people'. Such a pattern of social stratification has been reported for Bornu (in North-Eastern Nigeria) by Cohen (1970). According to Cohen's report,

stratification is reflected in a number of patterns of behaviour, including dress and language and that 'common people', no matter how wealthy or otherwise successful still regard themselves as subordinate to 'important people'.[1]

Another, and more elaborate system of social stratification has been reported for traditional Hausa society by Smith (1959) who identifies three or four 'classes'. The upper 'class' consists of chiefs and higher officials (this can be expanded to include muslim priests and wealthier merchants), the middle 'class' consists of most farmers, traders and other craftsmen and the lower class consists of musicians, butchers, house-servants and menial clients, porters and the poorer farmers.[2]

The modern system of social status, on the other hand, recognizes three broad categories. Plotnicov (1970) conceptualizes stratification in terms of a pyramid consisting of the residual mass at the base and the elite at the top, with the space in between occupied by the 'incipient middle class' or the 'sub-elite' who are continuously being recruited into the elite. Indeed Plotnicov's model incorporates both the traditional and the modern systems of social status by allowing for two routes to the top of the pyramid, one representing the traditional and the other the modern as in Figure 5.1.

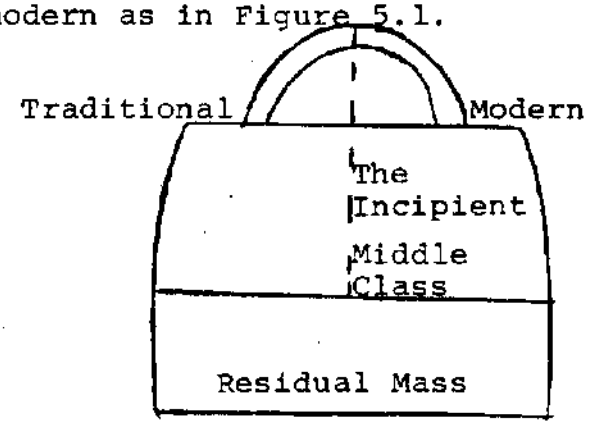


Figure 5.1. The Dual System of Social Status in Nigeria (from Plotnicov 1970, p. 295).

Based on this model, therefore, we recognize two broad categories of social stratification in Nigeria, the elite and the masses. The elite may be traditional or modern but what matters is the relationship of its members to the masses, which is identical. Although the model does not make this clear, it is quite common for an elite member to belong to both the traditional and the modern elites - e.g. a senior civil servant, politician or professional who is also the son of a chief.[3]

If we concentrate only on the modern system of social status, as indeed we must since we are concerned with that most important attribute of the modern elite, the English language, we find that again there are two broad categories, the elite and the masses. In between, as in Plotnicov's model, there is the sub-elite. On this basis, formal Western education or knowledge of the English language - the two appear to be interchangeable - is the major distinguishing factor between the masses - most of whom know no English and the elite (and sub-elite) almost all of whom know some English. This division also holds in relation to economic status. The masses provide the farmers and artisans who are outside the formal sector of the economy (i.e. not in paid employment) and who often regard themselves as less fortunate than the educated people who are in the formal sector of the economy and who are guaranteed a secure income. However, an uneducated person may acquire wealth and even be in a position to employ members of the elite. In such a case the wealthy person may be viewed as belonging to the 'ambiguous elite' (Plotnicov's term).

We define the modern elite in terms of their position and power in contemporary Nigerian society. They are the people who rule the country and run the economy, politicians, professionals, technocrats, officers in the security forces, controllers and disseminators of information and so on. We do not propose any specific level of education as a prerequisite for elite status - any level of education, including the primary level, is sufficient to qualify a person for a place in the area occupied by the sub-elite, from which, through a process of incorporation, any member may be recruited into the elite proper.

African sociologists have not proposed a finer hierarchy of prestige of status between the various occupational groups which make up the elite. Thus unlike sociolinguists working on industrialized societies, we have no ready-made sociological index along which to rank speakers according to the prestige of their occupations or their socio-economic status. For this reason, we are unable to attempt a correlation between phonological variation and occupation in this study.

The present study has been restricted to the elite proper as our Table 5.1 shows below. The consequence of this restriction is that we cannot compare linguistic variation between the elite and the sub-elite. But it has to be borne in mind that we shall be concentrating on the single most important focal point of social organization at the horizontal level - ethnicity - and it would have complicated the study further still if we had insisted on including the sub-elite in it.

OCCUPATION	NO.
newspaper journalist	2
broadcaster	10
politician	13*
university lecturer	17
lawyer	1
pharmacist	1
industrialist	1
Total	45

Table 5.1. Stratification of sample by occupation

*Note that 3 of the politicians are, by training, university lecturers, 1 a lawyer, 1 a medical doctor.

However, the concept of 'elite' is only helpful in understanding the hierarchical organization of Nigerian society. A far more potent factor - both as an emotional rallying point and as a determinant of social behaviour - is ethnicity. We may therefore revise our model of social organization to include a vertical as well as a horizontal axis, the one representing the elite versus the masses and the other representing different ethnic groups. As Mazrui (1980) observes, ethnicity is a more important point of convergence for Africans than socio-economic class or religion. In politics, too, in spite of a vague awareness on the part of the masses of their disadvantaged position in relation to the elite, they are still more inclined to vote as Hausas or Igbos than as 'masses'.

But nowhere is the potency of ethnicity as a point of convergence in Nigeria reflected as in language. Specifically, the most consistent and reliable co-variant of English - especially spoken English - in Nigeria is ethnicity. There are a number of obvious reasons for this. First, since each ethnic group speaks a different language each group brings with it a different articulatory setting

and different sets of phonological habits to the learning of English which together characterize each group's accent collectively. Second, as members of each group normally learn English in their areas and from fellow-members of the same ethnic group, each new learner's accent is thus determined in advance. Third, the psychological need to preserve each group's separate identity is reflected in the preservation of differences in spoken English.



Figure 5.2. A Revised Model of Social Organization in Nigeria Showing both the Horizontal and the Vertical Levels

5.2. English and Ethnicity

We have accorded ethnicity a prominent place in this study by choosing our 45 speakers in equal numbers from the three major ethnic groups in Nigeria - Hausa, Igbo and Yoruba. This was not merely a convenient choice but a recognition of the primacy of ethnicity as the most important and most consistent co-variant of spoken English in Nigeria. As Bamgbose (1971) reports, many Nigerians are able to identify a speaker's ethnic group as soon as he speaks a few words of English. The most important cues which listeners use

in identifying members of each ethnic group are precisely those features of language which linguists find most difficult to describe, let alone quantify. These are features of articulatory setting which determines voice quality and also rhythmic and intonation features.[4]

But segmental shibboleths are also important as indexical features of ethnicity. Since these are more easily describable and quantifiable, we shall restrict our consideration of the co-variation of English and ethnicity to them, though we shall return to rhythm and intonation in Chapter Six.

5.2.1. Variable (ð)

The dental fricatives /ð/ and /θ/ are known to be highly variable and indexical in many parts of the world where English is spoken either as a first or second language (see for instance Labov 1966). In Nigeria, (ð) varies according to region rather than ethnicity: when it is not pronounced as [ð], it is usually [d] or [d̪] in the South (i.e. among Igbos and Yorubas) and [z] in the North (i.e. among Hausas). Table 5.2. below gives the average percentages of each of the three indexical variants of (ð) and their distribution:

Variable (ð)

		[d] %	[ḍ] %	[z] %
Hausa	mean	3.3	2.6	11.1
	S.D.	5.4	3.6	14.5
	n	15	15	15
Igbo	mean	43	15.3	0.4
	SD.	26	10.8	0.96
	n	15	15	15
Yoruba	mean	36.6	15.2	0.3
	S.D.	28.6	14.3	1.3
	n	15	15	15

Table 5.2 The distribution of [d] ,[ḍ] and [z] among the three ethnic groups.S.D. stands for 'standard deviation' and n. stands for the number of speakers in each group.

As can be observed from Table 5.2, Yoruba and Igbo speakers use [d] and [ḍ] quite often while Hausa speakers use [z] more frequently than the other two variants. But as can also be seen, the picture is not one of discrete groups who use only one set and never the other. Hausa speakers do use [d] and [ḍ] either because they have been influenced by Southern Nigerian English (e.g. speakers (68) and (9)) or because of phonetic conditioning (as in 'let the people' where (ð) may be [d] or [ḍ]). Similarly, Igbo and Yoruba speakers use [z] as a result of phonetic conditioning (as in 'finance this' where (ð) assimilates regressively to the alveolar place of articulation of the preceding[s]). The importance of the figures lies in the fact that they swow that the variants do attach themselves to one group rather than another.

5.2.2. *Variable (θ)*

The distribution of the three indexical variants of (θ) among the three ethnic groups is similar to that of the variants of (ð) above: [t] and [t̪] are indexical of Igbo and Yoruba speakers while [s] is indexical of Hausa speakers. Indeed no Yoruba or Igbo speaker has [s] as a variant of (θ) as can be seen from Table 5.3. below.

		[t] %	[t̪] %	[s] %
Hausa	mean	4.9	1.3	7.3
	S.D.	10.5	5.2	15.2
	n.	15	15	15
Igbo	mean	29.1	22	---
	S.D.	30.9	23.9	---
	n.	15	15	---
Yoruba	mean	7.8	12.3	---
	S.D.	11.1	18.5	---
	n.	15	15	---

Table 5.3 The distribution of the indexical variants of (θ) among the three ethnic groups.

As in the case of (ð), Hausa speakers use more of the alveolar fricative variant of (θ) than the dental and alveolar plosive variants. In contrast, Igbo and Yoruba speakers do not use [s] at all as a variant of (θ). It is also worth noting that Igbo speakers use more of [t] and [t̪] as variants of (θ) than do Yoruba speakers.

5.2.3. *Variable (ʌ)*

The third variable which indicates region rather than ethnicity per se is (ʌ). In the North, it is either [ʌ] or [a] and in the South it is normally[ɔ] which may be modified to [ɔ̈] by sophisticated speakers, though in a few cases and in a restricted number of words (e.g. 'one') it may be [a]. Some sophisticated Southern speakers also haye [ʌ]. Table 5.4. below shows the distribution of all the variants of (ʌ) among the three ethnic groups.

		[ʌ] %	[a] %	[ɔ]/[ɔ̈]%
Hausa	mean	84	12.1	o.4
	S.D.	16.4	14.1	1.6
	n.	15	15	15
Igbo	mean	27.1	1.2	67.5
	S.D.	27.3	3	29.8
	n.	15	15	15
Yoruba	mean	30.2	1	66.7
	S.D.	35.5	2.7	34.6
	n.	15	15	15

Table 5.4. The distribution of the variants of (ʌ) among the three ethnic groups

It can be seen that the overwhelming tendency among both Igbo and Yoruba speakers is to pronounce (ʌ) as [ɔ] or [ɔ̈] which are found only in a small proportion in the Hausa group. On the other hand,

the overwhelming tendency among Hausa speakers is towards [ʌ] which is less widespread and less frequent among Igbo and Yoruba speakers. Similarly, [ə] is more of a Hausa than an Igbo or Yoruba variant of (ʌ) both in its frequency and distribution.

The three variables we have considered so far - (ð), (θ) and (ʌ) are indicators of region (i.e. they indicate whether a speaker is Northern or Southern) rather than ethnicity since the indicators are the same for Yoruba and Igbo speakers. Also - and this is important - there are cases of overlap and it is rare to find a variant which occurs only among one group of speakers to the exclusion of any other. However, the ethnic indicators proper - some consonantal and vocalic shibboleths which we shall consider presently - tend to be co-extensive with particular groups and rarely does any shibboleth occur in more than one ethnic group's output.

5.2.4. Hausa shibboleths

The most consistent and reliable indicators of Hausa ethnic identity are the two labio-dental fricatives (f) and (v). As has been explained elsewhere (see Chapter Two), Hausa has only /P/ which may vary between [P], [ɸ] and - among sophisticated bilinguals - [f], but the phoneme is certainly not /f/ even though the orthography represents it as f. Similarly Hausa does not have /v/, only /b/. Consequently almost all Hausa speakers in the sample have proportions of the bilabial variants of these

labio-dental fricatives ranging from 5 to 100%. Since this alternation is not found among other groups, we give below the individual scores of Hausa speakers of the bilabial variants of (f) and (v). Note that for (v), the variants are [b], [p] and [Φ], the last two being derived from Nigerian English /f/ in 'of' which in R.P. is /v/.

	(f)	(v)
Speaker No.	[p],[Φ]%	[b],[p],[Φ]%
86	82	70
74	80	100
84	68	41
68	48	53
82	42	41
87	38	29
8	36	46
41	22	19
37	17	29
67	11	25
40	7	5
83	-	5
44	-	24

Table 5.5. The Distribution of the Bilabial Variants of (f) and (v) among Hausa Speakers

As can be observed from Table 5.5. above, all but 2 of the 15 Hausa speakers have some proportion of the bilabial variants of (f) and (v). It appears that (v)'s bilabial variants are more difficult to resist than (f)'s because while all the speakers who have [p] and [Φ] as variants of (f) also have [b] etc. as variants of (v), two speakers ((83) and (44)) have only [b] etc. as variants of (v) but not [p] etc. as variants of (f).

The two speakers who do not have these Hausa variants of (f) and (v) are speakers (1) and (9), the two lady broadcasters who went to a mission primary school in the North and a Lagos primary school respectively. They show, instead, Southern influences in their speech and are the only Hausa speakers for whom R.P. /æ/ is never [æ] but [a]. It would seem, therefore, that both the possession of the bilabial variants of (f) and (v) and the predominance of [æ] as an exponent of R.P. /æ/ are covariables as indicators of Hausa ethnicity and attendance of a Northern government primary school.

5.2.5. Yoruba Shibboleths

There are four consonantal shibboleths of Yoruba English - [ʃ] for (tʃ), [ø] for initial (h), [s] for (z) (even when spelt 'z') and [f] for (v). As has been stated in Chapter Two, Yoruba does not have tʃ, z, v in its phonemic system and so Yorubas tend to substitute the nearest equivalents of these in English. The case of h and why it is deleted word-initially in Yoruba English is less straightforward, but again see Chapter Two. However, in this section we shall be examining only two of these variables, (tʃ) and (h) because [f] has not been attested as a variant of (v) in the corpus and because the overlap between [s] and [z] is a general characteristic of Nigerian English; the only cases where definite

Yoruba influence can be established are those where (z) is actually spelt 'z' which are very few in the corpus.

Variable (tʃ) is found as [ʃ] in 6 of the 15 Yoruba speakers and (h) as [ø] in 4 of the 15 speakers. In one speaker, (51), (tʃ) occurs all the time as [ʃ]. However, the narrow distribution of these variants of (tʃ) and (h) among Yoruba speakers reflects their relative success in avoiding these more obvious shibboleths in comparison to Hausa speakers.

	(tʃ)	(h)
Sp. No.	[ʃ]tokens	[ø]tokens
51	4	1
18	1	
19	1	1
21	1	7
58	1	
66	1	
33	-	1

Table 5.6. The distribution of [tʃ]and [ø] as variants of (tʃ) and (h) among Yoruba speakers. Figures reflect actual tokens rather than percentages.

Table 5.6. shows that 3 of the 4 speakers who have [ø] as a variant of (h) also have [ʃ] as a variant of (tʃ) and only 1 speaker, (33) has [ø] but not [ʃ].

5.2.6. Igbo Shibboleths

The nature of Igbo English shibboleths is different from that of shibboleths in Hausa and Yoruba English in two respects. First, because of the relative versatility of the consonantal system of Igbo, Igbo English does not have a consonantal shibboleth by which it may be identified. Secondly, the two vocalic variables we shall consider (which are the closest segmental features to shibboleths in Igbo English) are also shared, though to a lesser extent, by Yoruba English.

The first vocalic variable is (ɛə) which in 6 out of the 15 Igbo speakers occurs in varying proportions as [ɛ:]. But this occurs also in the speech of 3 of the 15 Yoruba speakers.

The second variable is (ɩ) in 'the' which occurs in varying proportions as [ɛ] among 12 of the 15 Yoruba speakers. Again, there is an overlap with Yoruba English because three of the 15 Yoruba speakers also have [ɛ] as variants of (ɩ). Tables 5.7 and 5.8 present the scores of both groups of speakers in both variables.

Igbo Speakers		Yoruba Speakers	
Speaker No.	Variable (ɪ) [ɛ]%	Speaker No.	Variable (ɪ) [ɛ]%
10	59	20	12
64	26	24	11
78	17	28	26
45	12		
63	11		
75	11		
47	9		
62	7		
91	3		

Table 5.7. A comparison of the distribution of [ɛ] as a variant of (ɪ) in 'the' among Igbo and Yoruba speakers.

Igbo		Yoruba	
Speaker No.	Variable (ɛə) [ɛ:]%	Speaker No.	Variable (ɛə) [ɛ:]%
62	56	58	100
47	50	18	14
80	46	32	11
64	33		
56	33		
5	17		

Table 5.8. The distribution of [ɛ:] as a variant of (ɛə) among Igbo and Yoruba speakers

In spite of the overlap between Igbo and Yoruba speakers in these two vocalic variables, the tendency, both in the scope of their distribution and their frequency, is for the variants [ɛ] and [ɛ:] to depict an Igbo rather than a Yoruba speaker. To conclude this section, we restate what we said at the beginning, that the most important and consistent indicators of ethnic identity in the spoken English of Nigerians are precisely those non-segmen-

tal features of rhythm, intonation and voice quality for which descriptive and quantitative tools are still in an embryonic stage of development.

5.3.0. The Prestige Norm: Some Qualifications

In the preceding chapters we have referred to some speakers as 'sophisticated' without exactly defining what linguistic sophistication means. In this section, we attempt to qualify the prestige norm on the basis of which we determine the linguistic sophistication of speakers.

The position of English as a second language in Nigeria and the fact that the elite have not yet consolidated themselves well enough to provide a local standard combine to create a situation in which there is considerable confusion and ambivalence about the standard that Nigerians should aspire to. In syntax and lexis the position is fairly straightforward: the standard is that of the English grammar books and deviances which have now become acceptable in Britain may still be frowned at in Nigeria. Indeed the flavour of Nigerian English - both in syntax and lexis is decidedly literary and over-correct."[5]

However, this concern with correctness in syntax and lexis is not matched by a similar concern in phonology. Nigerians would have a very poor impression of a person's education if he made the most trivial grammatical mistake in his speech or

writing but would not object at all if his phonology is virtually that of his mother-tongue. In other words, while grammatical errors are objected to, it is taken for granted that it is only natural for one to speak English with one's mother-tongue accent.

Many highly placed people - politicians, university lecturers and technocrats for instance - speak English with a heavy mother-tongue accent and are not thereby felt to be deficient or inferior to others who may speak with an accent that approximates to a native model. Labov's model assumes that the prestige norm is that used by speakers who are at the top of the social (or socio-economic) hierarchy and hence the variables are ordered linearly and assigned values in accordance with their proximity to the prestige norm. It is obvious that such an assumption - which does capture an important sociolinguistic relationship in America and (cf. Trudgill (1974)) some parts of Britain would be misleading if applied to Nigeria. Even in Britain Milroy (1980) has found that working-class speakers in Belfast do not adjust in the direction of R.P. in formal contexts, which calls its status as a prestige norm into question.

But while Nigerians are quite happy with a mother-tongue -based accent of English, they are also quite prepared to admire a Nigerian accent which approximates to a native model subject to two conditions: (i) that it be 'natural' and not sound affected and (ii) that the stylistic and communicative context in which it is used be appropriate. Thus Odejide (1979) who investigated

the attitudes of some undergraduates of the University of Ibadan "who had registered for Oral Communication Skills in the department of Language Arts" to various English accents found that 93.3% of them rated a 'near-British accent' of Nigerian English most acceptable, though only 53.3% of them thought it should be used as a model in educational institutions. Odejide's respondents rated L'-based English even lower than Ghanaian, East African and West Indian Englishes and she herself realizes that their high rating of a near-British accent and low rating of an L'-based accent reflect their status as undergraduates who would eventually teach English in schools.[6]

Another survey which shows that a 'near-native' accent is admired under certain conditions is that carried out in conjunction with this study. One of the items on the sociolinguistic questionnaire sent out to prospective informants at the data-gathering stage of this study is "Name a well-known Nigerian (newsreader, politician etc.) whose English accent approximates to your ideal." Of the five people who were named more than once by the sample, four are broadcasters and the fifth is a most eloquent politician - suggesting that the sample's preference is for the nearest Nigerian accent to native models (that of broadcasters, whose accent as an ethnically heterogenous group is more homogenous and closer to native models than that of any other professional group). The inclusion of the politician in question may have been due to a confusion between eloquence and accent, for while he is a gifted orator, his accent is by no means as near-native as that of broadcasters.[7] Nor was the se-

lection of an 'ideal speaker' by the respondents necessarily influenced by ethnic affinity: of the 24 analysable responses, 13 respondents share the same mother-tongue with the personalities they admire and 11 do not.

However, Obanya et al. (1979) who played tape recordings of several accents to schoolteachers and pupils found that the accent of a native speaker (an official of the British Council in Ibadan, Nigeria) was rated highest followed by the accent of a Nigerian post-graduate student of the same mother-tongue background as most of the respondents. The least acceptable accent turned out to be that of a Nigerian professor of English which was near-native. Teachers of language tended to accept this near-native accent more readily than other teachers, even though their own rating of its acceptability was third, it being less acceptable than the accent of the post-graduate student (which they rated first) and the accent of the native speaker (which they rated second). We suggest that this near-native accent violated the first condition set out earlier - naturalness - by sounding 'affected' and artificial, hence its rejection. Obanya et al. would certainly have elicited a different response if they had used the accent of one of the National Network (of the Nigeria Television Authority) newsreaders instead.

Nigerians expect broadcasters to speak with a near-native accent and indeed admire them for it. But there are various situations where the use of such an accent would evoke angry hostility. For example, a Nigerian who speaks with a near-native accent in an informal, or

face-to-face communicative context may evoke hostility from his addressee because the latter may interpret that to be an attempt to 'put him in his place' by reminding him that he has not had the privilege of studying abroad or of studying in one of the few 'international' or 'capital' schools in Nigeria. But in a formal situation - say when a speaker is addressing a gathering - the use of a near-native accent which does not sound affected would evoke admiration since everyone knows only too well how difficult it is to 'speak so well'. This is the appropriateness condition we spoke of earlier.[8]

Banjo (1971a, 1971b) proposes that the model of Nigerian English to be used in teaching must be that used by 'those in position of influence and respect' (quoting Fries, (1949)) i.e. the Nigerian elite. But as we shall show, the elite are not homogenous in their speech and Banjo seems to be aware of this for he further suggests that the model chosen must be internationally intelligible. In other words the model should be the accent(s) of sophisticated elite speakers of Nigerian English rather than speakers of a mother-tongue-based accent. However, as we have shown, this sophisticated accent is prestigious and acceptable only in a limited number of contexts and thus violates Banjo's other condition - social acceptability. A compromise solution would seem to be the adoption of the bi-dialectalism approach as suggested (by Trudgill (1975)) for British schools where children who speak a stigmatized dialect may be taught standard English for use on certain occasions. In Nigeria this would mean the teaching of a 'sophisticated' accent of English in schools

for use on appropriate occasions.

Having thus qualified the constraints under which a prestige norm operates in Nigerian English, we may now proceed to examine the relationship between linguistic sophistication (as defined in terms of proximity to R.P.) and social variables in Nigerian English.

5.4.0. *Style and the Comparability of Distances from R.P.*

Labov (1966) has shown that style affects phonological variation in that the prestige variant occurs more frequently as the style rises in formality. Labov's hierarchical ordering of styles in terms of formality places minimal pairs, word-lists and reading (of a connected passage) at the top as most formal and formal conversation (such as that usually elicited in linguistic and other interviews) next in informality followed by casual speech.

Labov's 'channel cues' - ie his techniques of eliciting particular styles from his informants - have been criticised as not being fool-proof because a speaker's style keeps varying no matter what the interviewer does.[9]

In the present study, we are unable to explore the relationship between style and phonological variation because we have, with two exceptions, only one particular 'style' per speaker - i.e. because our informants were recorded direct from television, we have not had the chance of eliciting different styles from them.

While such a comparison would have been valuable, what is more important, now that we have limited ourselves to one 'style' per speaker, is that the individual bits of speech from all speakers be stylistically homogeneous since if they diverge widely in levels of formality (assuming, for the time being that that does affect the choice of variant or the frequency of a particular variant) that could distort the comparability of our speakers' distances from R.P. . In Table 5.9. below, we show the distribution of all 45 speakers according to the nature of discourse they were engaged in at the time they were recorded, or their role in it. As can be observed, the first 4 columns which add up to 39 speakers involve formal, unscripted conversation - speakers interviewing, being interviewed, or engaged in a discussion or debate. The last three columns which have 9 speakers involve reading from a prepared script - a news bulletin, a commentary on a documentary film and reading from other kinds of script.

Type of/ Role in Discourse	Inter-viewing	Being Inter-viewed	Dis-cuss-ion	Debate	Read-ing News	Read-ing Comme-ntary	Other Read-ing
Speaker Numbers	80	27	33	58	1		
	78	32	18	44	9		
	77	37	19	10	5	62	21
	40	41	20	45	3		28
		47	65	91	11		8
		56	66	24			
		75	64	67			
		63	83	74			
		79	84	68			
		51	87				
			73				
			82				
			86				
Total	4	10	13	9	5	1	3

Table 5.9. showing the breakdown of speakers according to the type of discourse they were engaged in at the time of their recording

If we accept that all unscripted conversation should be regarded as being on the same broad stylistic level- that of formal dialogue- then we have only the divergence between formal dialogue and reading to account for. Since most of the broadcasters were recorded while reading and since, as we shall show, they tend to be closer to R.P. than other speakers, how are we sure that their relative proximity to R.P. is not determined by their reading style?

We return now to the two speakers we noted as exceptions (in that we have recordings of them in more than one style each) in order to illustrate, albeit inconclusively, that reading does not necessarily 'raise' the level of formality or attention paid to phonological variables in a context where English is a second language. Speakers (45) and (66) were recorded while taking part in a political debate (where (45) represented his political party) and a discussion on a new budget respectively. But while engaged in the

dialogues, both (45) and (66) had occasion to quote a paragraph or two from a written document, in the case of (45) his party's manifesto and in the case of (66) the text of the budget speech. Both portions of each speaker's corpus were then examined, and computations made of the percentages of the following variants of three of the variables on the basis of which our speakers' proximity to R.P. is measured: [d̪],[ḍ] and [ð] as variants of (ð); [ɔ], [ʌ] as variants of (ʌ), and [ɔ], [ə] as variants of (ə). The results of these computations are as in Table 5.10 below:

		Variable (ð)			Variable (ʌ)		Variable (ə)	
(45)	Style	[d]%	d̪%	[ð]%	[ɔ]%	[ʌ]%	[ɔ]%	[ə]%
	Discussion	43	-	14	18	7	11	7
	Reading	36	-	7	59	4	22	10
(66)	Discussion	45	17	15	56	6	20	14
	Reading	22.5	0	0	33	6	6	0

Table 5.10. The effect of reading style on variables (ð), (ʌ) and (ə) in 2 speakers

As can be observed, there is a tendency for the approximation to R.P. score to fall when a speaker switches over to a reading style. Note, for instance, that in speaker (45) there is proportionately more [ð] in his 'discussion style' than in his reading style (i.e. taking the ratio to be 14 : 43 and 7 : 36 respectively) and this is also true of his [ə] in the two styles (7 : 11 and 10 : 22 respectively). The case of variable (ʌ) is more of a matter of chance, since (45) appears to have [ʌ] only in the word 'government' which occurs three times in his corpus, twice in 'discussion' and once in 'reading'. In the case of (66), a clear reversion to his more basic accent can be observed

in his reading style scores in variable (ð) for, while he has 17% and 15% of [d̠] and [ð] respectively in his discussion, he has only [d] in his reading. In variable (ʌ), (66)'s [ʌ] is divided equally between the two styles, though it appears to be proportionately larger in his reading style. In reality, as in the case of (45) above, this is merely accidental because (66) has only two tokens of [ʌ], one in each style: [wʌns] 'once' and [əmʌ̃ŋ] 'among'. But a fall in the score in reading style can be observed in his [ə] score, which is 14% in his 'discussion style' and 0% in his 'reading style'.

We recognize that the data presented in Table 5.11 are insufficient to form a basis for concluding that Nigerians revert to a more 'basic' accent in their reading style. This is at best a tentative speculation for which, nonetheless, there is an excellent explanation. In societies where English is a first language (such as Britain and America) it is quite natural for speakers to equate 'reading' with formality and to pay more attention to their speech when reading, thus approximating more to the prestige norm than in conversation as has been found by Labov (1966) and Trudgill (1974). But even in Britain, Milroy (1980) has found that Belfast speakers tend to "approximate to the strong linguistic norms" with which they are familiar, rather than to a prestige norm, when reading aloud (1980, p. 106). Where English is a second language, the speaker who would otherwise concentrate on paying attention to his speech in conversation would find that he has to concentrate more on the reading and less on attempting to approximate his phonological

variables to any but the most basic norm which comes naturally to him as in the Belfast case reported by Milroy (1980).

The comparability of our informants' scores is, therefore, not distorted by the fact that 9 of them were engaged in reading when they were recorded - or at least not distorted in their favour. Since 6 of these speakers are trained broadcasters, we must assume that they would score higher than other speakers who share the same social attributes with them, whatever style they happen to be using at the time of their recording.

It appears that the most sophisticated style of speech could be elicited from a Nigerian when he is addressing a native speaker of English or someone who initiates dialogue in a near-native accent. The style of speech used in formal conversation - such as that forming the bulk of our corpus - appears to be next in having the potential of eliciting a sophisticated accent, followed by reading style and then the style of casual, everyday conversation. The relationship between style and phonological variation in Nigerian English appears, therefore, to be quite different from what obtains in communities where English is spoken as a first language.

5.5.0. *Measuring Proximity to R.P.*

As we have shown in the preceding chapters, the Nigerian English continuum can be represented in the shape of a pyramid with R.P. at its top. In the rest of this chapter, we attempt to identify the speakers who are consistently closer to R.P. in our sample and to find out what social attribute, if any, characterizes them as a group.

In order to measure the proximity of our speakers to R.P., nine sensitive variables were chosen. These are (ʌ), (ɑ:), (ə:), (eɪ), (ə), (əʊ), (θ), (ð) and (ɨ). The first six are vocalic variables which our analysis in Chapter Three has shown to be realized as other vowels in the 'basic' phonological systems of our continuum. R.P. /ʌ/, for instance, is /ɔ/ in Southern Nigerian English and, in a small proportion, /a/ in Hausa English. R.P. /ɑ:/ is /a:/ / /a/ in Southern Nigerian English and /a:/ in Hausa English. R.P. /ə:/ is /ɛ/ or /ɔ/ in Southern Nigerian English (depending on orthography) and /a:/ in Hausa English. R.P. /eɪ/ is /e:/ in both Southern Nigerian and Hausa English. R.P. /ə/ is realized as /ɛ/, /ɔ/, /a/ or other vowels (depending on the orthography) in Southern Nigerian English, and, to some extent in Hausa English as well. R.P. /əʊ/ is distributed between /ɔ/ and /ɔ:/ in both Southern Nigerian and Hausa English. Since these R.P. vowels have stable and predictable counterparts in Nigerian English, speakers who consistently use more of the R.P. variants must be judged closer

to R.P. than other speakers.

The next two variables are the R.P. dental fricatives which we have shown to have variants in Nigerian English in Chapter Two and in Tables 5.2 and 5.3. above. R.P. /θ/ is often [t] or [t̪] in Southern Nigerian English and [s] in Hausa English. Speakers who *are* closer to R.P. should use more of the dental fricatives than their Nigerian English variants.

The ninth variable is the maintenance of vowel length variable which we symbolize as ·(ː). We have shown (Chapter Three) that some R.P. long vowels have counterparts which are at best only marginal in Nigerian English since they are shortened in a considerable proportion of their occurrence. Conversely, we have shown how some vowels which are short in R.P. are lengthened, especially in hypercorrect speech, in Nigerian English. The maintenance of vowel length variable, therefore, measures the degree to which R.P. /iː/, /ɔː/ and /uː/ are not shortened and R.P. /ɒ/ and /ʊ/ are not lengthened. Each speaker's score is arrived at by expressing the sum of long and short vowels realized as in R.P. over the total number of occurrence of these vowels.Since the maintenance of vowel length distinctions is essential for an R.P.-like rhythm, speakers who *are* closer to R.P. should make these distinctions more often than other speakers.

The problem then arises of how to combine these variables so as to assess the closeness of a speaker, or a group of speakers, to R.P. It is possible that some variables may be highly correlated, in which case a simple sum of all the variables would give

too much weight to these highly correlated variables.

An allowance for the correlation between variables may be made within the the framework of multivariate analysis of variance if we can assume that the individual variable scores are normally distributed, and that the set of scores on all variables is multivariate normal. Normality of individual variables is a reasonable assumption since the score for each variable is the sum of the R.P. variants over all the occurrences of that variable in each speaker's speech sample.The variable is binary (O, 1; R.P., non-R.P.).Statistically, we are approximating a binomial distribution by a normal distribution.

We decided that it was reasonable to treat the maintenance of vowel length distictions in all five vowels as one variable since, impressionestically, this feature of English rhythm is one, rather than several, units. But even if we had separated them out into five variables the result would have been similar since if they were highly correlated less weight would be given to them in the calculation of distance from R.P. within the framework of multivariate analysis.

The (common) estimated correlation matrix of all the nine variables is shown in Table 5.11 with standard deviations (when the scores of all three ethnic groups are taken together) down the diagonal. The corralations vary from .22 to .83, with variable 7, (θ), having notably lower correlations than the others. This may be due to its relative infrequency in English.Fry (1947)

reports that it occurs some 0.37% of the time in any randomly selected English text.According to Fry's report, it is the second least frequent sound in the language. The correlation between (θ) and (ð) is only .41, so there is a case for treating them as separate variables.

However, the overall picture that emerges from Table 5.11 is that most of the variables are moderately correlated with one another. This is not surprising since if all the variables are equally sensitive indicators of proximity to R.P., they should all converge in picking out those speakers, or groups of speakers, who are close to R.P. The *Mahalanobis distance* (used in calculating distance from R.P.) automatically gives less weight to highly correlated variables (see Appendix D.).

Table 5.11. Correlation matrix of the nine variables

1	(.28)								
2	.56	(.27)							
3	.63	.58	(.23)						
4	.65	.79	.61	(.24)					
5	.67	.83	.71	.72	(.20)				
6	.55	.60	.45	.79	.66	(.17)			
7	.34	.25	.26	.22	.41	.26	(.26)		
8	.59	.78	.65	.66	.79	.50	.41	(.41)	
9	.49	.62	.61	.56	.63	.45	.26	.68	(0.8)
	1	2	3	4	5	6	7	8	9

Standard deviations (in percent/100) in parentheses.
For key to variables see Table 5.12 below.

5.5.1. *Ethnicity and Proximity to R.P.*

A major preliminary question is whether the variable scores depend on the ethnic group to which the speaker belongs. If no real differences existed between ethnic groups, then all would be equally distant from R.P. This question was examined by MANOVA. Of the 45 speakers in the sample, 4 had to be excluded because of lack of data (63, 73, 74, & 77). The analysis was therefore based on a sample of 41. Since the sample is highly selected (non-random), conclusions about the three ethnic groups must be tentative; because of the sample's small size, we cannot examine in detail all the explanatory variables which might be relevant to ethnic differences if these are real.

Table 5.12. shows the mean percentage of R.P. variants of each of the nine variables for each of the three ethnic groups. When the scores of all three ethnic groups are combined, the standard deviations are those shown in parentheses down the diagonal of Table 5.11. Variable 9 has a smaller standard deviation than the others because the mean scores are closer to 100%.

Hausa speakers have higher means in six of the variables: (ʌ), (eɪ), (ə), (əʊ), (ð) and (t). Yoruba speakers have higher means in two : (ə:) and (θ) while Igbo speakers have a higher mean in only one variable - (ɑ:).

The significance of the differnces between the means of the three ethnic groups was investigated using MANOVA. The results of these investigations are given in Table 5.13.

They show that highly significant, and substantial, differences exist between the three groups on the nine variables both when the variables are treated separately and when they are treated collectively. Five variables ((ʌ), (ə), (θ), (ð) and (ɨ)) show substantial differences between groups. Three variables ((ɑ:), (ɜ:) and (əʊ)) show no differnces between the three ethnic groups. This indicates that these R.P. vowels which Nigerians find difficult to pronounce are found only in a few highly sophisticated speakers in each of the three groups with no real differences between them. It will be recalled that our model of the Nigerian English continuum captures this fact by showing the horizontal space near the top of the continuum to be very narrow indeed.

The distances between each pair of ethnic groups, and between each group and R.P., are shown in Table 5.14. These distances are subject to sampling variability, so small differnces between them should not be over-interpreted.

The Yoruba group appears to be the closest to R.P., followed by the Igbo group; the Hausa group appears to be the furthest from R.P. This result - which is at variance with the trend shown by the group means on individual variables in Table 5.12 - may seem surprising. It is due to the high correlations between many of the variables which were therefore weighted less in the calculation of the *Mahalanobis distance*. Also, in reality it is only Hausa females who are further away from R.P. than Yoruba and Igbo speakers, but when the

distances of the two sexes are combined the results of Table 5.14 are produced. This should be interpreted in conjunction with Table 5.16 where the sexes are disaggregated.

Percentage of R.P. variants

ITEM	ETHNIC GROUP YORUBA	HAUSA	IGBO
1 (ʌ)	30.2	83.6	30.5
2 (ɑ:)	11.6	6.1	14.5
3 (ə:)	18.6	9.7	9.0
4 (eɪ)	18.2	37.5	17.5
5 (ə)	30.4	54.6	30.4
6 (əʊ)	6.0	9.5	6.8
7 (θ)	82.7	81.0	41.9
8 (ð)	46.5	84.3	46.3
9 (:)	74.4	90.9	81.2

Table 5.12 Ethnic group means of nine variables

ITEM	Univariate F (2,38)	P .
1 (ʌ)	16.21	< .001
2 (ɑ:)	.33	.72
3 (ə:)	.75	.48
4 (eɪ)	3.10	.05
5 (ə)	6.64	.003
6 (əʊ)	.17	.85
7 (θ)	10.00	< .001
8 (ð)	11.02	< .001
9 (:)	14.08	< .001

Multivariate tests:	Test	Approximate F	P
(all 9 items)	Hotelling	5.58	< .001
	Wilks	5.41	< .001

Table 5.13 Multivariate analysis of variance-ethnic group differences

	R.P.	Yoruba	Hausa	Igbo
R.P.	-			
Yoruba	6.3	-		
Hausa	7.6	3.5	-	
Igbo	6.4	2.4	3.2	-

Table 5.14 Mahalanobis distance d_M between ethnic groups and R.P.

5.5.2. *Education and Proximity to R.P.*

In order to test the effect of education on proximity to R.P., speakers in each of the three ethnic groups were divided into four categories according to their level of education and each category's distance from R.P. was then calculated. Educational level 1 is the category to which we assign speakers who have had a secondary education and additional professional training as broadcasters, teachers etc. Educational level 2 is assigned to speakers who hold a first degree; level 3 is for speakers who have a higher degree while university professors are assigned to level 4. This categorization is not arbitrary as it corresponds to, among other things, the different salary levels in the public service. The inclusion of university professorship as an educational level is based on the assumption that if formal education does indeed affect the proximity of speakers to R.P., then the informal education which the professor accumulates in the years of his tutelage should also affect his proximity to R.P.

The result of the investigation of the effect of education on proximity to R.P. is shown in Table 5.15. It shows that for all three ethnic groups the distance

from R.P. increases between levels 1 and 2, ie. that speakers who have a secondary education and professional training are closer to R.P. than speakers who have a first degree or indeed other higher levels of education.

Again, because the sample sizes are small, only a cautious interpretation is possible. Nevertheless, the explanation is fairly straightforward: speakers who are here assigned educational level 1 are either broadcasters or (in the case of the Hausa sample only) old boys of Katsina College. These are the speakers who have received conscious and intensive speech training designed to bring their accents closer to R.P. It is not surprising, therefore, that *they* should turn out to *be* closer to R.P. than other speakers.

The number of speakers in each cell in Table 5.15 is given in parentheses. The only Yoruba speaker under level 1 is a broadcater and so is the only Igbo speaker under that column. Of the 7 Hausa speakers under the same column, 3 are broadcasters and 2 are Katsina old boys.

	EDUCATIONAL LEVEL			
GROUP	1	2	3	4
Yoruba	9.5 (1)	12.3 (1)	12.6 (10)	13.2 (2)
Hausa	10.0 (7)	12.4 (1)	12.4 (6)	- (0)
Igbo	7.6 (1)	12.4 (1)	12.1 (6)	- (0)

Table 5.15 Distances between subgroups and R.P.: Education by ethnic group

Education Key: 1- secondary and professional training
2- first degree
3- higher degree
4- university chair

5.5.3. *Sex and Proximity to R.P.*

Superficially, sex appears to have some effect on a speaker's proximity to R.P. for, as Table 5.16 shows, female speakers in the Yoruba and Igbo samples are closer to R.P. than males. But a closer analysis of Table 5.16 reveals that 2 out of the 4 Yoruba females are broadcasters as indeed is the only Igbo female.

It is not clear why Hausa females should be further away from R.P. than Hausa males. The male speakers in all three groups, however, are about equally distant from R.P.

	SEX	
GROUP	MALE	FEMALE
Yoruba	7.4 (11)	6.0 (4)
Hausa	7.5 (12)	9.0 (2)
Igbo	7.4 (11)	5.7 (1)

Table 5.16 Distances between subgroups and R.P.: Sex by Ethnic group

5.5.4. *Speech Training and Proximity to R.P.*

In order to assess the effect of conscious speech training on our speakers' proximity to R.P., they were divided into four categories : 0, which characterizes speakers who do not belong to any of the categories to be listed below; 1, which characterizes speakers who have lived or studied in a native English-speaking country; 2 which characterizes speakers who are trained broadcasters and 3 which refers to speakers who were born and educated in a native English country

(in practice to the one speaker in the Yoruba cell) and to Katsina old boys. The distances of speakers in each of these categories from R.P. were then calculated and these are shown in Table 5.17

There is no difference between speakers who have not lived in an English-speaking country and those who have (ie. between speakers in categories 0 and 1). In all three ethnic groups these appear to be equally distant from R.P. But there is a differnce between broadcasters and people who have lived in a native English country, with broadcasters being somewhat closer to R.P. However, this is true only of the Hausa and Igbo samples. In the Yoruba sample, broadcasters turn out to be somewhat further away from R.P. than people who have lived in an English-speaking country.

However, between broadcasters and Katsina-trained speakers or speakers who were born and educated in a native English country there is a remarkable difference in spite of the small sample sizes. Speakers in the latter category are closer to R.P. than all other speakers.

	EXPOSURE			
GROUP	0	1	2	3
Yoruba	28.6 (2)	28.3 (10)	29.5(2)	8.3 (1)
Hausa	32.8 (3)	33.5 (6)	31.9(3)	18.7(2)
Igbo	29.8 (2)	29.3 (6)	23.0(4)	- (0)

Table 5.17 Distances between subgroups and R.P.: Speech training/Exposure to native models by ethnic group

Key: 0- none of the following
1 - lived/studied in U.K./U.S.A. etc.
3 - broadcaster
4- born in U.K./Katsina-trained

5.6.0. *Conclusion*

It is not possible to draw any firm conclusions on the basis of the foregoing analysis of the interaction between proximity to R.P. on the one hand and ethnicity, education, sex and speech training on the other,. This is because the sample sizes are very small . Also, there are gaps in our knowledge of the biographical details of some of our speakers. For example, the precise educational qualifications of 5 of our speakers are not known, resulting in their omission from the analysis in the relevant section. In measuring distances from R.P., the scale of the distance is changed in several cases, often substantially, because variation which was previously treated as 'within group' or'random' is now attributed to another cross-classifying factor. This has resulted in much smaller variances within group and hence larger distances between groups. The sample as a whole is 'unbalanced' because there are associations between the cross-classifying variables themselves. A cautious conclusion would be that speech training does affect proximity to R.P., and that when this is allowed for, differences between ethnic groups are quite small. Larger and more representative samples would be necessary for firmer conclusions.

This tentative conclusion is supported by the findings of Atoye (1981) who investigated the frequency of non-R.P. segmental sounds in the speech of 50 Yoruba immigrants in England. Atoye found that "none of the effects of length of sojourn in England and level of education

reached significance at five per cent. In contrast, the effect of phonological instruction achieved significance at the same level".

5.6.1. The Individual Nature of Variation

It is quite easy to think that sociolinguistic variation can only be accounted for when people are viewed as members of different groups rather than as individuals. It is also quite easy to exaggerate the cohesion and homogeneity of groups and to explain away individual variation as insignificant. But in the final analysis, variation remains a property of the individual speaker. Every speaker is unique and such similarity as may appear to characterize groups of speakers emerges only because the shared items have been carefully chosen because of their indexical function. But if we look at the total output of each individual, we gain a different impression. True, individuals do cluster into groups, but each individual belongs to a different group each time we focus on a different variable; no two individuals would be found to belong, in the same 'proportion', to the same number of groups. We are thus in full agreement with Bickerton (1971) when he says (p. 488): "One can always produce discrete figures by drawing non-linguistic boundaries, averaging performance within those boundaries, and then comparing the averages; if one takes individuals, irrespective of group or class membership, and ranks them along a continuum, one gets a very different picture".

Language is like a biographical and psychological archive, each bit reflecting the individual's psychological state, ethnicity, status or other attribute. Since each individual will vary from all other individuals in these respects, so will all the bits of language vary both in their incidence and frequency. Take a speaker such as (68), for instance. He is a Hausa politician who joined a Yoruba-based political party. Some bits of his English show him as a Hausa man who has had his education in his locality and who cannot even avoid the more obvious shibboleths of Hausa English. His [b]% in variable (v) is 53, his [p], [Φ]% in variable (f) is 48 and his [z] and [s]% in variables (ð) and (θ) are 5 and 40 respectively. But alongside these features of Hausa English, he has two tokens of [h] -dropping, the only non-Yoruba in the sample to have this Yoruba English feature. He also has a [d]/[ḍ]% of 22 and a [t]/[ṭ]% of 40. For the sample group as a whole these features are mutually exclusive but for (68), each set reflects an aspect of his individual personality, the one reflecting his ethnicity and the other reflecting his political solidarity.

It is thus impossible to account for all individual variation since for each speaker, several factors are always at work. Our tables and analyses may have indicated group patterns, but they cannot reveal why two individuals, with apparently the same social attributes are still different from each other.

Two speakers with the same level of education and the same number of years of residence in Britain or America (such as speakers (44) and (84)) may still be very different from each other because while we can measure the 'exposure variable' (however imperfectly) we cannot measure the 'motivation and imitative capacity variables' (Spencer's terms, 1971, p. 25). Even if these were the same for the two speakers, we can still not decide for them whether the speech event is appropriate for a show of 'status' - i.e. for choosing a sophisticated accent to show that he has studied abroad for instance - or 'solidarity' - i.e. for choosing a more 'basic' accent to show his ethnic or Nigerian identity. To the extent that these factors are difficult to identify and quantify, the present state of sociolinguistics is a mere scratch on a very deep surface.

Notes to Chapter Five

(1) Cohen's claim that "Upper class persons say *muśko* instead of *muko* for 'hand', or *gabagaa* rather than *gaba'a* for 'a roll of cloth'" (1970, p. 254, f.n. 19) has been contradicted by a native of Bornu (personal communication) who thinks that Cohen confused the careful speech of aristocrats when addressing him as a foreigner with their normal everyday speech. My Bornu informant believes that the supposedly common people's forms cited by Cohen above are the casual forms of *all* speakers and the supposedly 'upper class' forms are the careful and

fuller forms used by all speakers in the appropriate stylistic or communicative context.

(2) In practice there is little difference between Cohen's two-point classification and Smith's four-point one. What Smith has done is to further stratify the category of 'common people' according to their wealth or the stigma attached to their profession. But as in Bornu, people who are not connected to the traditional ruling aristocracy by birth or clientele remain - at least in the minds of the aristocracy - subordinate to the latter whatever their achievement.

(3) It is interesting to note that whenever an opportunity to ascend to the top of the ladder of the traditional elite (*e.g. when a chieftaincy becomes vacant*) such members who belong to the two elites always abandon the modern for the traditional status often to the surprise of non-aristocrats. For example, among incumbent Emirs in Northern Nigeria is a man who resigned from his job as an undersecretary in an important Federal government ministry to become Emir and another who abandoned an equally promising career as an ambassador.

(4) Recall that Hausa speakers apply the vowel reduction rule of Hausa which weakens both [ɔ] and [e] to [ə] to English and that in both Yoruba and Igbo English [ɔ] appears to be the most frequent vowel as a result of the merger of parts of /ə/, /ə:/ and /əɑ/ and all of /ʌ/ into /ɔ/. The results of these two separate processes is to give Hausa English a non-labial flavour

and Yoruba-Igbo English a labial one. A more detailed note on voice quality and articulatory setting is given in Chapter One.

(5) Plotnicov (1970, p. 279) observes that the Nigerian elite are noted for their "highly stylized - even Victorian - speech patterns (with display of erudition and an impressive polysyllabic vocabulary) ...". This is of course more true of the earlier generations of educated Nigerians than of today's youngsters. For excellent illustrations of these tendencies, see for instance Nnamdi Azikiwe's *Renascent Africa* (Frank Cass 1968) and Obafemi Awolowo's *The People's Republic* (Ibadan University Press, 1968).

(6) One of the weaknesses of Odejide's methodology is that she did not have her respondents listen to tape recordings which corresponded to each accent but merely gave them a questionnaire to fill in , leaving it to their individual imaginations to conceptualize what a "near-British accent" or "L'-based accent" was. There is therefore no evidence that her respondents were actually responding to the same stimuli, and this casts doubt on the validity of her test.

(7) It is , of course, possible that respondents felt constrained to make their choice of ideal speakers from the suggested list, hence the predominance of broadcasters. This implication was not foreseen when the questionnaire was being designed. An alternative phrasing of the question could be "Name a well-known Nigerian whose accent you consider worthy of imitation".

(8) As further illustration of the potency of the appropriateness condition we provide two anecdotes (however discredited these may be in linguistics):

(i) A Nigerian professor of English told a workshop of teachers of oral English how an undergraduate who had just performed creditably in an oral test was seen chatting to friends in his normal (mother-tongue-based) accent a few minutes after his test. When confronted, he told the professor "Well, I can put it on for you again if you like, but you can't expect me to go about speaking like that!"

(ii) A young Nigerian girl who had had all her primary and part of her secondary education in Ghana returned home with her parents and was found a place in a Kano girls' school. There, she was rediculed out of pronoucing such phrases as 'form one' with the accent on the first word (as in R.P.) and was forced to adopt the more Nigerian pattern which has the accent on the second word (i.e. [_ ^] instead of [^ _]). (Ghanian English appears to have retained R.P. patterns in these respects.)

(9) De Camp (1971, p. 354), for instance, observes that "a speaker's stylistic level keeps varying during an interview, no matter how hard the interviewer tries to keep the atmosphere of an interview constant" and Bickerton (1975, p.184) states that "Choice of style is governed, not by any inter-subjective and objectively perceptible features in the situational context, but by the autonomous and fluctuating feeling of the speaker himself or herself."

CHAPTER SIX

Aspects of the Rhythm and Intonation of Nigerian English

6.0. In this chapter, we shall attempt to describe and explain some of the important divergences between English and Nigerian English in rhythm and intonation. By rhythm here we mean melody, and especially the melody of isolated words in citation form. We shall first re-consider the traditional distinctions made between so-called tone and intonation languages and suggest a new way of looking at languages - not in terms of dichotomies but in terms of a continuum. We shall suggest a sense in which all languages appear to be tone languages, some being more so than others. We shall also offer a tonal analysis of English which we shall relate to the rhythm of Nigerian English. In the final section, we shall explore the divergences between R.P. and Nigerian English in intonation.

6.1. Tone Languages, Intonation Languages and Other Languages: A Re-consideration

Traditionally, languages are regarded as tonal if they have lexically contrastive tone and non-tonal if they do not. A further classification of non-tonal languages is also made depending on whether they are regarded as having pitch-accent or stress-accent. On a different level of analysis, many tone languages are regarded as being syllable-timed, that is as

timing all their syllables to occur in more-or-less equal intervals of time. Stress-accent languages, on the other hand, are considered as timing their stressed syllables to occur in more-or-less equal intervals of time. Thus a language such as Yoruba in which a monosyllabic word such as *ra* can have as many as three meanings depending on whether it is high-toned, mid-toned or low-toned is said to be a tone language. A language such as Japanese which requires that there be no more than one high-toned syllable after which there is a drop in pitch per word (i.e. one accented syllable per word) is said to be a pitch-accent language. A language such as English is said to mark the accent by means of stress rather than pitch and is thus regarded as a stress-accent language.

This traditional classification is deficient in many respects. It loses sight of the fact - which has been casually admitted by Pike (1948) that all human languages are pitch-using systems because "In order to be spoken at all, words must be pronounced on some pitch." (1948, p. 15) Furthermore, the pitch pattern that each word has in any language is not random or arbitrary but is assigned and specified to a greater or lesser extent (depending on each language) quite early in the derivation. Thus the Yoruba word *rá* (high-toned) means 'crawl', *ra* (mid-toned) means 'rub' and *rà* (low-toned) means 'buy'. The fact that each time the pitch of the segmental sequence r+a is varied between the three pitch levels a different and unrelated lexical item is produced in Yoruba is an indication of the functional load assigned to pitch in Yoruba at the lexical level. Even if the segmental

sequence r+a represented only one lexical item in Yoruba - say 'buy' (low-toned) the contrastiveness of the low pitch - i.e. its association with the lexical item 'buy' - would not be thereby reduced. In other words it is being suggested that the pitch or pitch-pattern assigned to a word in any language remains contrastive if an unwarranted variation of the assigned pattern results in a completely different word, in no word at all, or in an offensive violation of the native speaker's intuitive feeling of the intended word's inherent melody.

Thus a language such as Japanese can be re-anaylyzed as merely a tone language whose tone patterns have become fossilized and fairly predictable. Words such as *ʔinoti* 'life' which are said to have the accent on the first syllable (McCawley 1968, p. 132) simply have the tone-pattern HLL; *ko'koro* 'heart' with the accent on the second syllable is simply LHL and *miyako* 'city' which is said not to have any accent (because there is no drop in pitch after either of the two H's) is simply a LHH word. The fact that these pitch levels are specified for the relevant words in Japanese is enough to enable us to regard them as contrastive. For 'heart' above, the tone pattern is LHL; if we were to realize it with the pattern assigned to 'life' (HLL) the result may not be another word in the language but it would certainly violate the native speaker's intuition and could result in loss of intelligibility.

The notion of an accent - whether pitch or stress - appears to be based on the assumption that in a given word only the specification of that syllable which bears

the accent and the nature of the accent itself is important. Thus it was thought (McCawley 1968) that only the high-toned syllable after which there is a fall (the accented syllable) need be specified for Japanese words since the pitch of the other syllables was predictable from that. However, McCawley himself later found that "At least one contraction phenomenon in Japanese depends not on underlying accents but on the pitches that are assigned to individual syllables ..." (1978, p. 128). This is the realization of *itte iru* (LH, LL) as *itte'ru* (LHL) where the deletion of the syllable *i* which bears the first of two L's in the underlying form concentrates the drop in pitch on the second L and thus makes the preceding H appear to be accented.[1] In the same paper, as well as in McCawley (1970), McCawley revises his earlier dichotomy of tone versus pitch-accent languages because of his discovery that Ganda, a Bantu language of Uganda has "a pitch-accent system in its deep phonology and a tonal system in its surface phonology" (1978, p. 126) and that Kagoshima Japanese "can be described as being a tone language from a certain point in the derivation on, and neither a tone language nor a pitch-accent language prior to that" (1970, pp. 526-32).

That there is a legitimate difference between languages which make phonological use of pitch prominence - such as Japanese and, as we shall argue, English, and those which do not, such as Yoruba, is undeniable. In Japanese the accent is phonologically real since there is a difference between the pitch assigned to[a] syllable following

an accented syllable (the former being always low-toned) and that assigned to a syllable following an unaccented syllable. Thus *miyako* 'city' which is said to lack the accent does not cause a following nominative marker to take a low tone (*miyako ga *LHHL); instead, *ga* is (remains?) on a high tone. By contrast, *?atama'* 'head' (LHH̊) which has the accent on the final syllable causes a following nominative marker to take the low tone thus *?atama ga* (LHH̊L). This difference in the assignment of tone to *ga* after the two kinds of word cannot be accounted for other than in terms of the accent. In English and similar languages the phonological reality of the accent is all too obvious: the accented syllable in the word or utterance is usually the one that varies its pitch-pattern with intonation.

Implicit in the traditional distinction between pitch-accent languages and stress-accent languages is the assumption that in a language such as English, the accent is realized by means of 'stress' rather than pitch. This assumption is still widely believed in in spite of the fact that numerous studies and experiments have shown that what is usually believed to be, or referred to, as stress is prominence which is effected by a combination of a number of factors such as pitch, duration and intensity and that the most important of these in the perception of 'stress' (in English at least, on which such studies have been based) is pitch prominence (see for instance Fry (1955, 1958), Bolinger (1958), Lieberman (1960)). The difference between English and Japanese therefore is not so much that one uses stress and the other pitch to effect

the accent - both use pitch - but in the details of how this is realized. In Japanese, as we have seen, the accented syllable is a high-toned syllable after which there is a low-toned syllable whether in the same word or in a following word. Thus the accent in Japanese can be re-analyzed as a sequence of HL tones. There is remarkable similarity between accent in both Japanese and English since in the latter language, it is in a sense also a sequence of HL. However, while in Japanese a word may end on a high tone and have a following word or morpheme bear the low tone, in English no word may have any other tone than a low tone on its final syllable in citation form, unless it is monosyllabic in which case the HL of the accent is concentrated on the one syllable (e.g. morning HL but not *morning *HH - except after undergoing intonation rules but cf. morn HL). But like Japanese, English also splits its accent across words: in isolation, 'this' and 'one' would each have HL but when juxtaposed together in a phrase 'this one' the high tone is assigned to 'this' and the low tone to 'one'. Thus the chief difference between English and Japanese is that while in Japanese the accent may be split between two words where an accented word ends in a high tone and has to await a following word to bear the low tone for no particular intonational reason but merely because the lexical representation of the word requires that its accent be completed on a following word, in English all words have their accents fully realized internally unless there is a particular intonational reason why this should not be so. It would seem, therefore, that some terms other than

pitch-accent/stress-accent are required to account for the difference between English and Japanese since both of them appear to be pitch-accent languages. We shall use the term *accent* in place of pitch or stress-accent in the rest of this chapter.

A recent study of the transition of a language from a 'tonal' to a pitch-accent system (Williamson 1978) offers a plausible account of the historical status of each system. Williamson studied the Nembe and some Izon dialects of Ịjọ, a Nigerian language, which, having lost extending highs (i.e. high tones in a sequence specified for certain morphemes which subsequently were replaced by low tones) changed over from a tonal to a pitch-accent system. The ingredients of an accentual system can be found in Proto-Ịjọ in that the tonal system was fixed, and morphemes fitted into one of four (possibly more) tone classes. The sentence was divided into "grammatically-determined tone-groups" the tone pattern of which depended largely on "the tone-class of the initial morpheme". According to Williamson's reconstruction (p. 118-9) the four tone-classes had the following patterns:

	initial morpheme	rest of tone group
Class 1	L^n H	L^n
Class 2	H^n	H^n
Class 3	H^n LH	L^n
Class 4	(L) H (L)	L^n

The change referred to affected the H^n (extending highs - Williamson uses the symbol H and L for extending tones) of classes 2 and 3 which were replaced by low tones thus

permitting only one high tone per tone group in these dialects:

	initial morphemes	rest of tone group
Class 2	L^n .	L^n
Class 3	L^n H	L^n

Williamson reports that minimal pairs distinguished by tone alone in Proto-Ịjọ were few so that the levelling of tone brought about by the change to a pitch-accent system did not result in distinctions between minimal pairs being lost. "In Ịjọ the only cases where serious ambiguity would arise if tonal distinctions were reduced are among the pronouns, and the problem is avoided in Ịjọ by having them occur only in the position of maximum distinction i.e. initially in the tone group" (1978, p. 122). Williamson also reports that intelligibility is maintained between the dialects that now have a pitch-accent and those which retain a tonal system thus emphasizing the thinness of the dividing line between the two systems.

Williamson's paper thus implies that a tonal system is the primary stage historically, which may develop into an accentual system subsequently. This conclusion reinforces similar reports that some Bantu tone languages (Ganda, Kikuyu, Tongá) are changing into pitch-accent languages (see MacCawley 1970, 1978).

We may thus generalize as follows: all human languages are tonal, in the sense that words in isolation have an inherent pitch-pattern and melody which is associated with them and which may not be altered except in accordance with certain rules, especially intonation rules.

However, some languages, in addition to the pitch assigned to individual syllables of the word or the contour assigned to the word as a whole make phonological use of *accent* which is effected by a combination of attributes the most important of which is pitch-prominence.

We distinguish, however, between the phonological use of accent and its phonetic or psychological manifestation. An accented syllable, perceptually, is one that appears to be more prominent than neighbouring syllables in the utterance. Thus even in a language such as Hausa - which does not make phonological use of accent - prominent syllables can be perceived whenever words which consist of vowels of unequal length or tones of unequal height or contour are uttered. Thus in a word such as /b̀àrá:wò:/ 'thief' the ear that is accustomed to picking out the accented syllable would easily perceive the middle syllable which has a long open vowel and high tone as accented in relation to the neighbouring low-toned and less open vowels. The fact that a low tone follows /á:/ also makes it very much like the accented syllable in English and Japanese.

Siertsema (1959b) was so sure she could hear stress in Yoruba words that she formulated rules to describe its operation. This is in spite of the fact that 'stress' in Yoruba is only an accidental concomitant of the interaction between phonetic features of unequal strength which is not made phonological use of. Afolayan (1968) in an experiment (p. 127) found that the amount of stress a listener heard in Yoruba depends on "its use in his own language or the language with which he is conversant" and that accordingly, a Yoruba speaker with very little

English would hear few stresses in Yoruba, another speaker with more English would hear more stresses and a native speaker of English would hear even more.

This failure to distinguish between the incidence of 'stress' or accent and its phonological use has led to contradictory descriptions of at least one language - Arabic. Al-Ani (1970) claims that Arabic has three degrees of stress: primary, secondary and weak and that (p. 88): "potentially, every word has an inherently stressable syllable. This syllable receives the primary stress. Its locations and distribution is affected by the number and types of syllables contained in the word-syllable sequences ..." Al-Ani then goes on to formulate rules for the assignment of stress in Arabic warning that "on the lexical level, stress is predictable and therefore not phonemic", in other words it is only a concomitant of the interplay of syllables of unequal length, and, if we may add, unequal tone height. But Haywood and Nahmad (1965, p. 12) quite rightly take the position that "... Arabic is a language of syllable length, rather than accent or stress. When read aloud all syllables should be given their full length, without slurring any letter, but no effort should be made to emphasize any syllable at the expense of another. The resultant reading may sound as if some syllables are stronger than others, but this will in reality be because of their length."

A far more important aspect of the rhythm of Arabic than Al-Ani's notion of non-phonemic stress is pitch-assignment. As a further illustration of our hypothesis that all human languages are tonal - call it the universal tone hypothesis - we can examine pitch-assignment in

Arabic. If we take the root of the verb 'to say', for instance, we obtain the following paradigm (note that the macron indicates phonemic vowel length):

qāla [qa:la] *HL 'he said'
yaqūlu [jaqu:lu] *LHL 'he is saying'
qul [qul] H 'say!'
qā?ilun [qa:?ilun] *HHF 'sayer'
qa?il [qa:?il] *HL (alternative pronunciation of above)
qaulun [qaulun] *HL 'saying' (noun)
qaul [qaul] *F (variant of above)

As can be seen, such an analysis of Arabic is not only possible but also profitable. It is rooted not in the fiction of non-phonemic stress but in the reality (often taken for granted) of pitch melody. In isolation, these Arabic words have to be assigned pitch melodies as posited above otherwise the resultant melody would violate the native Arab's intuitive knowledge and expectation of the rhythm of Arabic. It is also interesting to observe some of the tonal alternations which occur in Arabic. A word which in its full form would have the pattern HHF reverts to HL when the final syllable is deleted (qā?ilun HHF > qā?il HL) and a word which in its full disyllabic form has the pattern HL (qaulun) has the two tones realised as a falling tone on a single syllable when the nucleus and coda of the second syllable are deleted (qaul F). Such alternations are in consonance with tendencies in other languages as has been demonstrated by autosegmental phonologists (see especially Goldsmith (1976) and Leben (1978)). The accent can be heard on everyone of the Arabic words in the list above on the syllables marked with a star but this is phonologically redundant in Arabic and therefore need not be marked at all.

We return now to the question of stress versus syllable-timing. Traditionally a language such as English is classified as being stress-timed and a language such as Hausa as being syllable-timed. By stress-timed is meant the tendency of stressed (i.e. accented) syllables to occur in more-or-less equal intervals of time. That this is a misrepresentation of English rhythm has been demonstrated by Knowles (1974). The intervals between accented syllables are "more equivalent than equal" (p. 146) and isochrony in the Abercrombian sense is rarely produced in natural, conversational English. What is certainly true about English is the tendency to re-distribute accents according to the length of the utterance so that, in particular, two accents may not occur next to each other. Thus in isolation 'dining' and 'hall' would both have the pattern $\overset{*}{H}L$ and $\overset{*}{H}L$ respectively but when juxtaposed together in 'dining-hall' they would have the pattern $\overset{*}{H}LL$.

The notion of syllable-timing is also a misrepresentation of the rhythm of languages such as Hausa. Of course where a Hausa word consists of syllables which have vowels of equal length - say all short vowels - and the same tones on all syllables - such as *Ikara* [ʔɪkəɾə] LLL (name of a town) - all syllables are bound to be perceived as being of equal prominence and duration. This is then used to classify Hausa as syllable-timed, i.e. as organizing its syllables to occur in equal intervals of time. However, if one takes a different word in the same language - such as *ɓarãwō* [bəɾa:wo:] LHL where the vowels are not of equal length and the tones not of equal height the second syllable is heard as accented because it is longer than both the first and the last and its tone higher than

the first and the third (which are both low). Here the notion of syllable-timing breaks down since the syllables do not have the same duration or tone height.

It is true that in an accent-using language such as English a word such as *Ikara* with all tones low is inadmissible in the lexicon since the function of the accent is to make one syllable more prominent in the word, principally through the use of pitch prominence but also through vowel length and intensity. While it is not being denied that there is a difference between a language such as Hausa in which such a word is admissible and a language such as English in which it is not, this difference is not fairly accounted for by the notion of stress versus syllable-timing.

Another misleading dichotomy is that maintained between tone and intonation languages. It is based on the assumption that tone languages "must have pitch that is both significant and lexical" while intonation languages, even though pitch-using as well [there] "the semantic differential applies to the phrase as a whole, constituting a shade of meaning rather than a dictionary lexical meaning" (Pike 1948, p. 3). There are two corollaries to this assumption: firstly, that a language such as English which uses pitch for intonation does not also use it as the principal cue for distinguishing between lexical items, and secondly that a language such as Yoruba which uses pitch for distinguishing between lexical items does not also use it for intonation. Both of these assumptions will be shown to be false.

There are at least 38 pairs of words in English which are distinguished principally by pitch. Most of these are

verb/noun pairs such as insult/insult but some are unrelated lexical items such as desert/dessert.[2] The qualification 'principally' is inserted because in many of these pairs there is a difference of vowel quality as well e.g. 'contrast' (noun) [kɒntrɑ:st] $\overset{*}{H}$L, 'contrast' (verb) [kəntrɑ:st] L$\overset{*}{F}$ where /ɒ/ in the noun surfaces as [ə] in the verb when the accent shifts away from it. Notice, however, that the vowel of the second syllable remains /ɑ:/ in both words. But this vowel quality difference is only a secondary cue and would be over-ridden by the pitch if the two were in conflict . In other words if a listener hears [kɒntrɑ:st] with the pattern L$\overset{*}{F}$ he is likely to disregard the fact that /ɒ/ is unreduced and judge the word to be the verb, on the basis of the pitch-pattern. Indeed Fry (1958) reports that "In American speech, it happens quite commonly that there is little or no opposition of vowel quality in such noun and verb pairs ..." (p. 409). Moreover, both Fry (1958) and Lieberman (1960) who experimented with such pairs of English words found that fundamental frequency was the principal cue for distinguishing between them. In some of these pairs - such as transfer/transfer there is no variation in vowel quality between the noun and the verb and the sole cue for distinguishing between them is pitch. Thus even on the basis of Pike's traditional criteria, English would appear to qualify as a tone language!

The second assumption, that tone languages do not use intonation is equally false. Carnochan (1962, 1964), Siertsema (1963), Meyers (1974, 1976) and Miller and Tench (1980) have shown how intonation is superimposed on, and sometimes allowed to override, tone in Igbo,

Yoruba and Hausa. Intonation in these languages however does not consist in manipulating and varying the pitch contour of the accented syllable - since there are no such syllables in these languages - but of using a different register for the utterance as a whole - e.g. a higher register for questions than for statements which also occurs in English - and having an additional tonal morpheme at the end of the utterance to signify an attitude or additional shade of meaning. In Yoruba for instance, an additional tone which is opposite in height to the final tone of the utterance (i.e. L if the final is H or M and M if the final is L) characterizes what Bamgbose (1966) calls the "strong-emphatic clause". A clause having such an additional tone stands in contrast to one that lacks it as emphatic/pleading e.g. (examples taken from Afolayan 1968, p. 126):

Mo	fẹ́	lọ	'I want to go'
M	H	M	
Mo	fẹ́	lộ	'I plead with you, I *do* want to go'

Now it is clear that the additional tone at the end of the utterance does not contrast *lọ* (M) with *lộ* (ML) as two lexical items but the utterance as a whole against the neutral declarative one. In other words this is an instance of the intonational use of pitch rather than its contrastive lexical use.

It is hoped that the foregoing discussion has pinpointed some of the inadequacies of traditional (i.e. current) dichotomies and labels which are used in classifying human languages. Our aim is not to show that all human languages are identical, because they are not, but to show that they are more similar than present classifications and labels would allow us to recognize. If we re-define 'tone

language' as any language which associates specific pitch-patterns or configurations with specific words or word-types which pattern or configuration may not be altered arbitrarily, this would admit all human languages as tone languages. As students of contrastive linguistics and of second language learning, such an approach would enable us to observe similarities between languages and deploy them in language teaching. For example, the Mandarin student of Arabic who imposes Mandarin melody on Arabic would be glad to have a description of Arabic in tonal terms so that he can appreciate the fundamental divergence between the two melodies and aspire to acquire the target one. But as long as we pretend that Mandarin and Arabic have no common ground and that melody in each language is achieved by very different processes, so long will the Mandarin student continue to be confused.

The hypothesis that all human languages are tonal does not imply that they are all tonal to the same degree. Some are clearly more tonal than others. A language such as Thai or Yoruba would occupy the most tonal extreme of the continuum of human languages. In such languages, the number of words distinguished by tone alone is considerable, and in Asian languages especially, the number of contrastive tones may be as many as five or more (compared to three level tones in Yoruba). Somewhere near the middle of the continuum is Hausa, where the number of contrastive tones is only 2 (H, L but three if we consider F as a separate tone and not a combination of H̋L on a single syllable) and where the number of words distinguished by tone alone is negligible, and probably smaller than the 38 pairs listed for English (see f.n. 2). In the middle of

the continuum is a language like Japanese whose tones have become fossilized in a particularly predictable pattern. At the least tonal end of the continuum is a language such as English where the accented syllable dominates the word and where some degree of variation is allowed in the assignment of pitch to syllables other than the accented.

There also appear to be remarkable correspondences between the point a language occupies on the continuum and the details of its vocalic system. Languages which are most tonal tend to have a restricted vowel system and in particular, tend not to make phonological use of vowel length distinctions while languages which have a fairly liberal tonal system - such as English - tend to have an extensive vowel system to rely on to carry lexical contrasts. However, as this observation is based on only a few languages it is merely speculative.

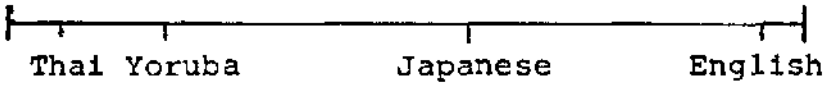


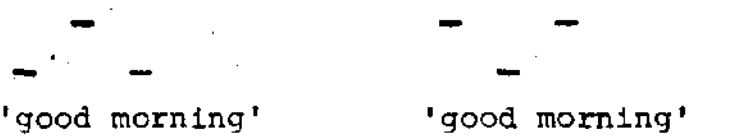
Figure 6.1. A model of the tonal continuum of human languages

6.2. The Tonal Analysis of English

That a tonal analysis of English is not only possible but desirable has long been recognized. Beach (1924) is reported to have defined tone so broadly as to make a language like English tonal because of the contrastive function of pitch in English intonation (Fromkin 1978, p. 3). Siertsema (1963) employs the notation used to characterize tone in discussing the role of pitch in English intonation - for example (p. 55): "What's your name - What's your name - What's your name; He's

going to London - He's going to London". Thus without offering an explicit analysis of the tones of English, Siertsema implies that such an analysis is possible. Indeed at the end of the paper under discussion she states emphatically that a tonal analysis of the so-called non-tone languages "will have to be done, for I am convinced that the deadlock in which modern syntactic research of those languages is, is partly due to a neglect to recognize syntactic tone, and to a confusion of it with intonemic tone" (1963, p. 64).

Abraham (1959a) also illustrates the use of pitch in English intonation by representing it in terms of tones - low and high. His examples include 'good morning' as a greeting and as a polite way of ending an interview (p. 181):



'good morning' (low, high, low)

'good morning' (high, low, high)

Abraham was not concerned with English intonation, but was merely demonstrating the use of pitch in English in order to relate it to Hausa tone in his handbook of Hausa grammar. Nevertheless it is significant that he represented pitch levels in terms of tone (high, low) and as occurring on individual syllables.

It is now almost universally accepted that what is popularly known as stress in English and other languages has no direct physical correlate. Ohala (1977) in his study of the physiology of stress concludes that "an appreciable expiratory pulse" is not always necessary in

the production of stressed syllables unless the stress is emphatic (p. 161). Adams (1979) who did a study of English speech rhythm which she linked to a remedial course in spoken English for foreign learners found that her "electromyographic investigation of the activity of the expiratory muscles believed to be associated with stress" did not lead her to correlate increased internal intercostal muscular activity with stress.

Indeed the term stress has been almost wholly abandoned for the more precise 'accent'. An accented syllable is defined in perceptual terms: it is the syllable that is heard to be most prominent in the utterance by the listener. Experiments by Fry (1955, 1958) using synthesized speech to investigate the cues used by British and American listeners to distinguish between verb-noun pairs of the OBject/obJECT type found that when only the effect of duration and intensity were investigated, duration was the better cue to the recognition of the accented syllable (1955). However, when fundamental frequency was added as another variable, it easily outweighed both duration and intensity. In his seminal paper Bolinger (1958) convincingly demonstrated, using both natural and synthetic speech, that the most important cue to the perception of 'stress' was pitch-prominence - which does not necessarily mean higher pitch, but pitch movement. Bolinger found that intensity was a negligible cue to stress. We owe to Bolinger the suggestion that 'pitch-accent' be used instead of stress in describing English intonation. Lieberman (1960) who analyzed 25 pairs of words of the OBject/obJECT type produced by 16 Americans

in context found that "The stressed syllable had a higher fundamental frequency than the unstressed syllable of the same utterance in 90 per cent of the cases, a higher peak envelope amplitude in 87 per cent, and a longer duration in 66 per cent" (p. 453). Thus all three studies converge on the primacy of pitch as a cue to the perception of the accented syllable in English.

This primacy of pitch has been recognized by most students of English intonation. Thus O'Connor and Arnold (1973), for instance, describe the accented syllable of their tone group in terms of its pitch configuration. However, while the relevance of pitch to an understanding of English intonation is universally acknowledged, its relevance to citation-form word melody has not yet been fully recognized. It is still widely thought that all one needs to know about an English word in order to achieve a "correct" pronunciation is the location of the accented syllable since it is assumed that information on all other syllables is automatically predictable therefrom. This may be so indeed for the native speaker who has internalized all the rules of pitch-assignment and adjustment but not for the second language learner or for the descriptive linguist who aims at a comprehensive study of English rhythm. Knowles (1980) recognizes the inadequacy of specifying pitch only for the accented syllable and suggests that we might apply the concepts of *udātta* and *svarita* (as used by Vedic grammarians) and take account of both what precedes and what follows the accented syllable in English intonation. *Udatta* refers to the raising of the accented syllable "above the level of surrounding

syllables" and *svarita* to the fall that follows the accented syllable (Knowles 1980, p. 2).

Recent studies of English intonation in America have viewed English as being a tone language. Goldsmith (1976, 1978) proposed $\overset{*}{H}L$ or $M\overset{*}{H}L$ (the star denoting the accented syllable) as a neutral intonation contour for English. This has been elaborated by Leben (1976) who, like Goldsmith, works within the autosegmental framework. The underlying assumption of the autosegmental hypothesis is that tones are independent of segments but are associated with them. Evidence from tone languages especially, suggests that tones (and suprasegments generally) depend for their realization on segments but their existence is more a property of the word or utterance as a whole than of particular segments. This is strongly supported by the well-known tendency of suprasegments to re-appear on some other segments when the segment with which they are 'associated' is deleted. If suprasegments were properties of segments they should disappear when their owner-segments disappear. For example, nasality persists in the Yoruba utterance [kpẽwé] 'share the leaves' even when the underlying nasalized vowel is deleted as a result of contraction - the phonemic form of the utterance being/kpin ewé/ (where/kp/ represents a labio-velar implosive [kp] and /in/ represents a nasalized vowel [ĩ], see Bambgose 1966, p. 8). Further support for the autosegmental framework comes from tone assignment in languages like Mende where a particular melody - ranging from H, L, LH, HL to LHL is assigned to word-types regardless

of the number of syllables in a particular word (Leben 1978). Thus a monosyllabic word which is assigned H has a high tone realized on its only syllable; a disyllabic word has two successive highs and a trisyllabic three successive highs. The argument is that it makes more sense to map a single melody to word-types than to list what is essentially repetitive information separately for each word.

The application of autosegmental analysis to English by both Goldsmith and Leben has tended to concentrate on intonation - and specifically on the intonation of grammatically complete sentences. In particular, the supposed neutral intonation contour of English - M$\overset{*}{H}$L - has not been applied to a sufficient number of English words in isolation to prove that it applies equally truly to them. Goldsmith (1976, 1978) cites examples such as *Japan*, *hat*, *pin*, and *archipelago* which he shows as having the following contours:



One wonders how Goldsmith's system would handle polysyllabic words such as *consumerism*, *interrogation* (which I shall show as having the patterns L$\overset{*}{H}$LHL and LHL$\overset{*}{H}$L respectively). Difficulties also arise when we insist on mapping melodies onto segments and representing any sequence of like tones by one symbol only since we would still need to know which way the tone is spreading, left or right. If we take *organization* and *intermediary* for instance, we shall see that they have the tone pattern

(in our analysis) HLL$\overset{*}{H}$L and HL$\overset{*}{H}$LL. Now this is a significant distinction in the melodies of the two words which would be blurred if we adopted the autosegmental model of representation since both the two medial L's of *organization* and the two final L's of *intermediary* would be represented as one L only, at the pre-mapping level. Both words would then appear to have the pattern HL$\overset{*}{H}$L. It is clear that whatever economy is achieved by having fewer symbols represent the melody is more than cancelled out by the additional information required for the correct tones to be associated with the correct peaks.

A related study to Goldsmith's and Leben's is Levine's (1977). Levine examined English intonation using computerized speech synthesis and concurred with both Goldsmith and Leben in analyzing the intonation of declarative sentences in English as (M)HL. One of Levine's limitations is that he abstracted his tone levels from the pitches of voiced segments in his data. Now, a voiced segment could be a consonant or a vowel and it seems a distortion of the notion of tone to associate it with the pitch of segments other than syllabic peaks. This is because we do not perceive a voiced consonant which precedes a vowel as a tone-bearing segment. In essence, Levine's study contains nothing new - except the surprising submission that speech is similar enough to music for the latter to provide a motivation to Levine for his tone group hypothesis (1977, p. 8).

Our analysis focuses on the citation form of individual English words. Intonation of longer utterances is built

on the foundation of the inherent pitch pattern of individual words, hence our preoccupation with these. Also, from a language teaching point of view, foreign and second language learners encounter severe difficulties with the melody patterns of English words over and above their well-known difficulties with English intonation. From the point of view of the present study, we have a vested interest in a tonal analysis of English words because of our desire to relate this to the tone patterns assigned to words in Nigerian English.

The analysis we offer here is by no means comprehensive but we have attempted to analyse as many different patterns as possible. A sample of the words analyzed and their tone patterns is given in Table 6.1 below. The most striking feature of these tone patterns is the absence of persistent sequences of like tones (e.g. HH, LLL etc.) and the strong tendency for HL (which, with Goldsmith (1976, 1978) and Leben (1976) we agree is the neutral contour for *monosyllabic* words in English) to alternate in polysyllabic words. In other words no English word appears to be allowed to occur in isolation with a succession of identical tones.

Our analysis is necessarily tentative because of the constraints of time and space. However, all the words that have been analyzed were first assigned a tone-pattern on the basis of this researcher's humming of their melodies which in turn was based on the tape recording accompanying Gimson (1975) and the transcription in Gimson (1977). These tone patterns were then checked by feeding the words into the VisiPitch which enabled

Table 6.1. Tone patterns of some English words

1 syll.	3 syll.	4 syll.	5 syll.	6 syll.
1. *F come go	6. *HHL possible	11. LHL*F Vietnamese officialese	16. HL*HHL intermediary	21. HLL*HHL vulnerability
2 syll.	3 syll.	4 syll.	5 syll.	6 syll.
2. *HL table matter contact (n)	7. *LHL experience interior Vanessa depression	12. *LHLL experiment (n) intelligence	17. *HLHHL agricultural supernatural	22. HHL*LHL decolonization
2 syll.	4 syll.	5 syll.	5 syll.	7 syll.
3. *LF contact (v) machine indeed unrobe	8. *HLHL comparable humanism	13. *LHLHL irreparable consumerism	18. *HHLHL capitalism	23. *HLHHLHL constitutionalism internationalism
3 syll.	4 syll.	5 syll.	6 syll.	8 syll.
4. *HLL centrally relevance	9. *HLHL compensation agriculture controversy	14. *HLLHL organization velarization	19. *HLHHLF constitutionalize internationalize	24. HLHHLL*HL internationalization
3 syll.	4 syll.	5 syll.	6 syll.	
5. *HLF registrar journalese appointee	10. *LHHL conservator developing	15. LHL*HL interrogation consolidation	20. LHLL*HL experimentation expropriation	

the fundamental frequency of various points on their contour to be measured and the pre-assigned tone-patterns to be revised accordingly.

One of the decisions that had to be made was to determine the status of the mid tone in English. It was observed that a low tone at the beginning of a word was higher than the final low. It is obvious that since English has intonational downdrift a low at the beginning should be higher than a low at the end. Indeed downdrift can cause a high tone late in the utterance to be lower than an early low tone as in 'protectionism' (no. 13 L$\overset{*}{H}$LHL) where the pitch of the first low-toned syllable ([(p)rə]) is 158 hz and the pitch of the penultimate syllable - which is high-toned is 130 hz. The word as a whole has the following fundamental frequency distribution:

(p)rə	(t)e(k)	(ʃ)ə	nɪ	zm
158	232	156-102	130	108-102
L	$\overset{*}{H}$	L	H	L

Each syllable takes its cue from the preceding one and so the pitches do not represent the tones in any absolute sense. (Segments in brackets are voiceless and do not therefore appear on the VisiPitch screen). For these reasons, it was decided that what appears to be a mid tone is really a tonologically conditioned high or low tone as far as English is concerned.

In many words of three or more syllables when the accent is on the antepenultimate, penultimate or final syllable there is usually another prominent syllable earlier in the word which is traditionally called

the syllable with secondary stress. In our analysis this syllable is always high-toned as in 'Hindustan' (no. 3 HL$\overset{*}{F}$) (note that F is the same as $\overset{\frown}{HL}$ in this study) and 'agricultural' (no. 17 HL$\overset{*}{H}$HL) where the underlined H refers to the tone in question). There is an alternative pronunciation of these words - in traditional terms without secondary stress but in our terms with a lowering of the H to low, so that 'Hindustan' and 'agricultural' would be LL$\overset{*}{F}$ and LL$\overset{*}{H}$HL respectively. These series of initial lows are phonetically mid but we shall call them low in keeping with our earlier decision. In Nigerian English, however, we shall posit these as mid tones. We shall return to this point later. Below we set out some of these words and their two variant pronunciations:

Table 6.2.
Variant pronunciations of some polysyllabic words in English

	Variant 1 (with pre-accent H)	Variant 2 (without pre-accent H)
Hindustan	HL$\overset{*}{F}$	LL$\overset{*}{F}$
compensation	HL$\overset{*}{H}$L	LL$\overset{*}{H}$L
organization	HLL$\overset{*}{H}$L	LLL$\overset{*}{H}$L
interrogation	LHL$\overset{*}{H}$L	LLL$\overset{*}{H}$L
agricultural	HL$\overset{*}{H}$HL	LL$\overset{*}{H}$HL
experimentation	LHLL$\overset{*}{H}$L	LLLL$\overset{*}{H}$L

6.3. The Melody of Isolated Words in Nigerian English

It is appropriate to point out that this and the following part of the study are not based on a detailed speaker-by-speaker analysis of the corpus of Nigerian English which provided the basis for previous chapters. Considering the highly fluid and variable nature of rhythm and intonation as well as the present state of knowledge in this field, it was judged wiser to abstract from the corpus and pick out salient features of Nigerian English rhythm and intonation for intensive study. After a preliminary list of items was thus abstracted from the corpus, three Nigerians - one each a speaker of the three languages we have been focusing on - and all students of Lancaster University were interviewed and recordings made of their renderings of these selected items. After further study and analysis of these recordings, one of these Nigerians - the Yoruba speaker - spoke some of these items into the Visi Pitch at the Lancaster University Phonetics Laboratory and the pitch contours thus produced on the screen of the machine were instantly compared with (i) those of an educated English speaker from South-East England (who pointed out that he did not regard himself as R.P.-speaking but whose accent some native speakers judge to be remarkably close to R.P.) and (ii) an educated speaker of Northern English from Barrow in Cumbria. Each utterance of the Nigerian speaker and one of the two English

speakers was photographed, with the Nigerian speaker's always at the upper half of the screen and the native speaker's always at the lower. There were thus two sets of photographs which provided an opportunity for a two-way comparison between one variety of Nigerian English and two varieties of British English - one near-R.P. and the other Northern. In the event, it turned out that Nigerian English used a different system of intonation and different pitch assignment rules from both accents of British English. Some of these photographs will be presented as illustrations below. The recording of the three Nigerian speakers has been appended to the tape which contains the main corpus.

The only other study of the melody of Nigerian English known to us (apart from this) is that made by Amayo (1980). The strength of Amayo's study is that it shows that Nigerians perceive and internalize English rhythm in terms of their own tonal systems and that in some cases, low level tone assimilation rules apply to change the surface pitch-pattern of words in Nigerian English and remove them even farther away from English. Amayo's data (his Table 1, p. 6) consist of 12 words of English and their pitch assignment in the English of speakers of Hausa, Yoruba and Edo (another Kwa language spoken in South Western Nigeria). Four of these words are disyllabic (*action, army, about* and, if we may regard a phrase as a word for the moment, *at last*), one is trisyllabic (*ambition*) and four are quadrisyllabic (*escalator, publicity, ridiculous, available*). The two other words, 'examination' and 'industrialization', have

five and six syllables respectively.

Amayo viewed English from the traditional angle of being a 'stress-accent' language which has little to do with tone. He could therefore not explain satisfactorily how the melody of English provides the input to the melodies given to the words in his data in the English of speakers of the three Nigerian languages. His conversion formula is "primary stress converts to high tone, and all other stresses convert to low tone" (p. 7). The fact that a mid tone appears in some of the Nigerian English forms is explained away as a variant conversion of secondary and tertiary stresses which depended on the relative height of the pitch of such syllables" (p. 7). One is not sure whether "such syllables" refers to the pre-converted English words or to the converted ones. If it is the former, then one wonders why we are not offered a more consistent analysis which would show that even primary and secondary stresses *have* pitch and that this provides the basis for their conversion to high and low tones in Nigerian English.

Amayo does not tell us how his data were collected, whether by casual observation and subsequent recollection, by introspection or by recording actual speakers. We shall refrain from commenting on the Edo data not only because we know nothing about Edo English but also because Amayo's report of the forms used by speakers of his mother-tongue ought to be accurate. We shall however point out some discrepancies in the Hausa data.

Some tones which do not occur even in Hausa are posited as Hausa English tones - the mid tone and the rising

tone. Thus the Hausa pronunciation of *ambition* is given as LHR and of *ridiculous* as LHML. One hopes that this is a typographical error as Amayo indicates in the text that "Hausa speakers do not have any of the allotones indicated for the Edo and Yoruba speakers" (1980, p. 7). On the whole, Amayo's study is sketchy, unsystematic and full of distortions and inaccuracies. These are dealt with in a footnote.[3]

In Table 6.3. below we present the Nigerian English version of English tone-patterns as presented in Table 6.1. The English patterns are given in parenthesis for easy comparison. It will be noticed that divergences from English begin to occur from tone pattern 5, after which there is no more divergence until tone pattern 8 after which divergence becomes regular and predictable by rule.

As is clear from our study of Nigerian English in the preceding chapters, Nigerian English is not a homogenous single variety but a continuum of varieties. The tone patterns given in Table 6.3. represent the usage of speakers of Basic Southern Nigerian English and indeed of other speakers of English on the West African Coast. Sophisticated Southern Nigerian speakers and most Hausa speakers (whether sophisticated or not) use the tone-patterns of English as given in Table 6.1, or more precisely, a mixture of patterns from both lists but with the English patterns predominating.

It can be observed from Table 6.3. that the 24 tone patterns of English convert into 18 tone patterns in Nigerian English. Indeed as from tone pattern 9 (but with the exception of 11), all the remaining patterns can

Table 6.3. Some tone patterns of Nigerian English

1 syll. 1. F (Eng. F) come	3 syll. 6. LHL (Eng. LHL) depression	5 syll. 12. MMHHL (E.LHLHL) consumerism intermediary (E. HLHHL) agricultural (E. HLHHL) capitalism (E. HHLHL)	6 syll. 16. MMMHHL (E. HLLHHL) vulnerability
2 syll. 2. HL (Eng. HL) table	4 syll. 7. MHHL (Eng. HLHL) humanism		7 syll. 17. MMMMHHL (E.HLHHLHL) constitutionalism
	4 syll. 8. LHHL (Eng. LHHL) humanity publicity		
2 syll. 3. LF (Eng. LF) indeed	4 syll. 9. MMHL (Eng. HLHL) compensation conservator (E.LHHL)	5 syll. 13. MMMHL organization (E. HLLHL) interrogation (E. LHLHL)	8 syll. 18. MMMMMMHL (E.HLHHLLHL) internationalization
3 syll. 4. HLL (Eng. HLL) relevance	4 syll. 10. MMMF Vietnamese	6 syll. 14. MMMMMF (E.HLHHLF) constitutionalize	
3 syll. 5. HHL (Eng. HLF) registrar possible (E.HHL)	4 syll. 11. LHLL (Eng. LHLL) intelligence	6 syll. 15. MMMMHL experimentation (E. LHLLHL) decolonization (E. HHLLHL)	

be reduced to two, by rule: $M^{n}\overset{*}{H}L$ and $M^{n}\overset{*}{H}HL$. We shall spell out the details of this rule in due course.

There is usually no divergence between any variety of Nigerian English in the corpus and English in monosyllabic and disyllabic tone-patterns, which are $\overset{*}{F}$ and $\overset{*}{H}L$ respectively. However, in Nigerian English, some words which have pattern 3 in English - $L\overset{*}{F}$ - are reassigned to $\overset{*}{H}L$. An example is 'estate' which is almost universally $\overset{*}{H}L$ in Nigerian English.

Among trisyllabic words the ones with English pattern 5 $HL\overset{*}{F}$ may be changed to $\overset{*}{H}HL$ in Nigerian English as in 'registrar' in Table 6.2. Such words are categorized as belonging to the same class as 'possible' (English pattern 6). Whether as cause or effect, the final vowel of 'registrar' is shortened in Nigerian English.

It will be recalled that in Table 6.2. we gave a list of some words in English which have two variant pronunciations, one with a high tone at or near the beginning (which corresponds to secondary stress in traditional terms) and the other without this high.tone. Thus a word such as 'compensation' can be both $HL\overset{*}{H}L$ or $LL\overset{*}{H}L$. As long as the locus of the accent is not changed, the native speaker would accept the second pattern as equally valid. Now, an initial low tone in English is as high as a mid in those languages - such as Yoruba which have a mid tone. The Yoruba English version of the second variant pronunciation of 'compensation' is therefore $MM\overset{*}{H}L$. As can be seen from Table 6.3, all words of four or more syllables (with the exception of some words which have English tone patterns 10 and 12 - $L\overset{*}{H}HL$ and

$\overset{*}{\text{LHLL}}$ e.g. 'humanity' and 'intelligence' respectively) have the cover tone-pattern $\text{M}^{\text{n}}\overset{*}{\text{HL}}$ or $\text{M}^{\text{n}}\overset{*}{\text{HHL}}$ mapped onto them in Nigerian English.

Words which have *ism* as their final morpheme take on $\text{M}^{\text{n}}\overset{*}{\text{HHL}}$, i.e. mid tone(s) on any syllables preceding the penultimate, high tone on the penultimate which also takes the accent and then high and low respectively on the two final syllables. Thus we have 'humanism' with $\overset{*}{\text{MHHL}}$, 'consumerism' with $\text{MM}\overset{*}{\text{HHL}}$, 'capitalism' also with $\text{MM}\overset{*}{\text{HHL}}$, 'constitutionalism' with $\text{MMMM}\overset{*}{\text{HHL}}$ and 'internationalism' also with $\text{MMMM}\overset{*}{\text{HHL}}$. In all these cases, the locus of the accent diverges from its locus in English. The vowel of the accented syllable in these words is lengthened to [a:] in Nigerian English in accordance with the rules of English. It is not clear why the antepenultimate syllable is always given the accent in these words in Nigerian English. In the case of 'humanism' it is possible to infer analogy with 'humanity' which has the accent on the antepenultimate syllable but since the rule in Nigerian English applies regardless of the details of a particular word, its motive appears to be more profound than analogy based on a single word.

It is of course possible that this tone pattern is assigned to words ending in *ism* on analogy with the numerous words which have antepenultimate accent in English and which are assigned an identical tone pattern as for *ism* words in Nigerian English. These are words such as 'intermediary' which is assigned $\text{MM}\overset{*}{\text{HHL}}$, 'agricultural' which also has $\text{MM}\overset{*}{\text{HHL}}$ and 'vulnerability' which has $\text{MMM}\overset{*}{\text{HHL}}$.

Since the cover tone pattern of Nigerian English essentially involves the levelling of all pre-accentual tones to mid, four syllable words with the accent on the final syllable ($\overset{*}{F}$ - a contour tone made up of $\overset{\frown}{HL}$) such as 'Vietnamese' (English LHL$\overset{*}{F}$) are also included in the mapping. This word has the tone pattern MMM$\overset{*}{F}$ in Nigerian English.

Verbs ending in the causative morpheme *ize* which in English have a weak falling tone on *ize* but are accented elsewhere also have $M^{n}\overset{*}{F}$ mapped onto them in Nigerian English, with the accent moving to the final syllable. This is merely a variant of the $M^{n}HL$ melody. Thus 'constitutionalize' becomes MMMMM$\overset{*}{F}$ in Nigerian English.

All other polysyllabic words which have penultimate accent have the cover pattern $M^{n}HL$ mapped onto them in Nigerian English, hence 'compensation' MM$\overset{*}{H}$L, 'interrogation' MMM$\overset{*}{H}$L, 'experimentation', MMMM$\overset{*}{H}$L, 'decolonization' MMMM$\overset{*}{H}$L and 'internationalization' MMMMMM$\overset{*}{H}$L.

Sometimes, a three-syllable word which has the accent on the initial syllable but then has a final heavy syllable - especially if there is a nasal at its coda (which in many Nigerian languages will correspond to a syllabic, and therefore tone-bearing nasal) the accent is assigned to this final syllable as a falling tone. The word 'telephone' is a good example, for it has the tone pattern MM$\overset{*}{F}$ - rhyming with 'Hindustan' in Nigerian English.

Having described the details of the mapping of $M^{n}\overset{*}{H}L$/ $M^{n}\overset{*}{H}HL$ in Nigerian English, we may now turn to some speculations on its motive and origin. We started this

investigation with the hypothesis that the process originated in Yoruba English and then spread to Igbo and other varieties of Southern Nigerian English and is now in the process of spreading to Hausa English. This hypothesis has not been substantiated by our findings.

To begin with, there is no particular reason why Yoruba, or any other Nigerian language should have chosen the pattern M^nHL in preference to other possible patterns. Salami (1969) has shown that even English loan-words in Yoruba have their own separate tonology which they do not share with native Yoruba words. Indeed the base of the melody assigned to English words in Nigerian English - the pattern MMHL - is not used by native Yoruba words at all, only by loanwords. More strikingly, Salami found (pp. 327-8) that while the favoured tone initially in native words was L, the favoured initial tone in loanwords was H and while the favoured final tone in native words was H it was L in loanwords. For disyllabic words, this would mean LH for native Yoruba words and HL - which would correspond to the patterns for most such words in English - for English loanwords. In addition, Salami found no loanwords having the pattern LLL, HHHH, HHHHH among others. It is thus quite clear that even in loan nativization, the tone pattern assigned to English words is determined more by the perceived pitch pattern of the word in the source language than the predilection of the target language.

What appears to be the origin of $M^{n*}HL/M^{n*}HHL$ is rule over-generalization. As we have seen, $M\overset{*}{M}HL$ assigned to a word like 'compensation' corresponds to an alternative

realization of the word in R.P. as LL$\overset{*}{H}$L since a mid tone in a language which has it is the same as an initial low in a language like English which does not. Rather than the West African learner of English (and we refer here to the very first generation of such learners two or three centuries ago) memorizing all the different tone patterns of English it was easier to map a uniform pattern for the longer words. Such a pattern came originally not from any West African language but from a variant pattern of English.

Although English loanwords in Yoruba tend to have the same tone-patterns as those posited for Nigerian English this still does not prove that Yoruba is the source of $M^{n*}HL/M^{n*}HHL$. Indeed an examination of tone patterns of English-derived polysyllabic words in Krio (the Sierra-Leonean English-based Creole) shows that this same melody is assigned to them. Thus Fyle and Jones (1980) give the pattern LLLHL for 'accommodation' (Krio akɔmɔdeshɔn), LLHL for 'complication' (Krio kɔmplɪkeshɔn) and LLHL for 'television' (Krio tɛlɪvɪshɔn). Krio does not have a mid tone and so, like English, its initial low tones correspond to the mid tones of Nigerian English.[4] In effect, the same principles are applied in the assignment of tones to English loanwords in Yoruba and to English-derived words in Krio.

It is of course possible that the process of mapping this melody onto English words did start in Yoruba and then spread onto Krio and thence to the whole of coastal West Africa. This is especially plausible since Yoruba is known to have contributed more to Krio than any other

African language. Most of the re-settled freed slaves who first spoke Krio were Yorubas. However, it is also known that Pidgin English had been being spoken on the West African coast since the 18th (or even the 17th) century and that Yorubas were not the principal trading partners of the European traders until the nineteenth century. The melody in question is also used in West African Pidgin English which suggests that it may have pre-dated Yoruba influence. Another complication is introduced by the fact that almost all the languages spoken along the coast of West Africa belong to the Niger-Congo language family and share many deep phonological (and semantico-syntactic) characteristics. It is therefore difficult to identify any one of these as the source of the melody $M^{n*}HL/M^{n*}HHL$ on the basis of the present evidence.

Figures 6.2-6.4 show fundamental frequency contours of 'capitalism', 'internationalization' and 'internationalism' respectively as spoken by the Nigerian speaker mentioned earlier and the two British speakers. The Nigerian's $M^{n*}HHL$ and $M^{n*}HL$ can be seen on the upper parts of Figures 6.2. and 6.3. and 6.4. respectively. The Northern English speaker provided the contours shown at the lower half of Figures 6.2. and 6.3. while the Southern English speaker provided the contour shown at the lower half of Figure 6.4. As can be observed, the Nigerian's utterances start mid and remain steady until the antepenultimate (in the case of Figures 6.2. and 6.3) or the penultimate syllable (in the case of Figure 6.4). But the utterances of the two English speakers show instead a gradual descent from the initial high tone.

Figure 6.2. for instance shows the Northern English speaker's 'capitalism' (English tone pattern 18 *HHLHL) composed of two highs, the first slightly higher than the second, followed by a lower syllable followed by another 'high' which starts at about the same level as the preceding 'low' and then a very short low. This is in contrast to the Nigerian's contour at the upper part of the same Figure which does not show this gradual descent. (The vertical line on the third peak is to be disregarded as it is no more than a transient feature.)

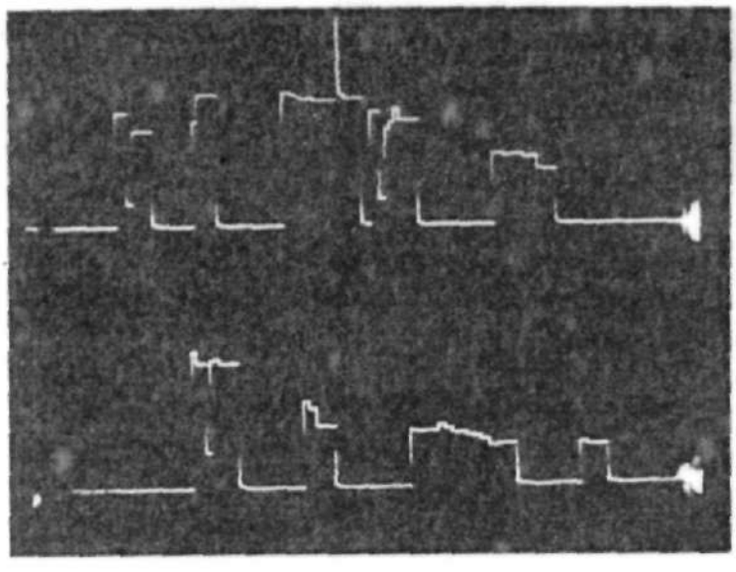


Figure 6.2. 'capitalism'

upper contour: Nigerian (Yoruba) speaker [kapɪta:lɪzɪm]
lower contour: Northern English speaker [kapɪtalɪzəm]
time: 1 sec

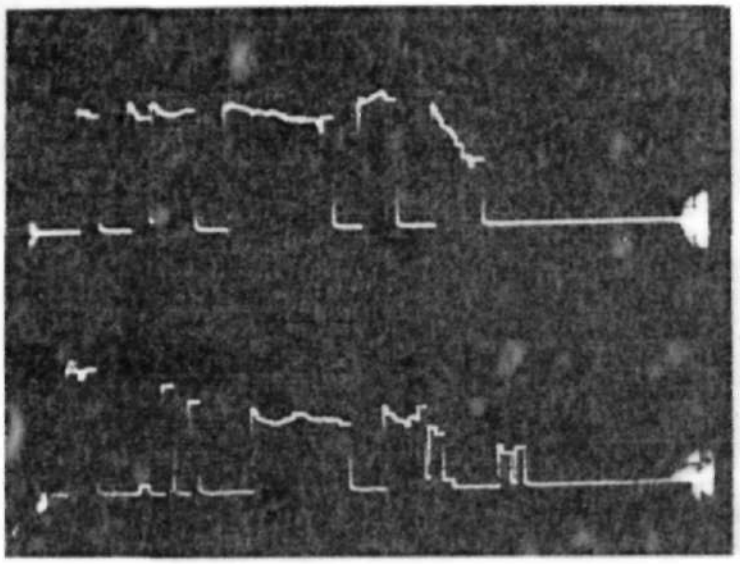


Figure 6.3. 'internationalization'
upper contour: Nigerian (Yoruba) speaker
[ɪntanaʃɔnalaɪze:ʃɔn]
lower contour: Northern English speaker
[ɪntənaʃənəlaɪzeɪʃn]
time: 2 secs

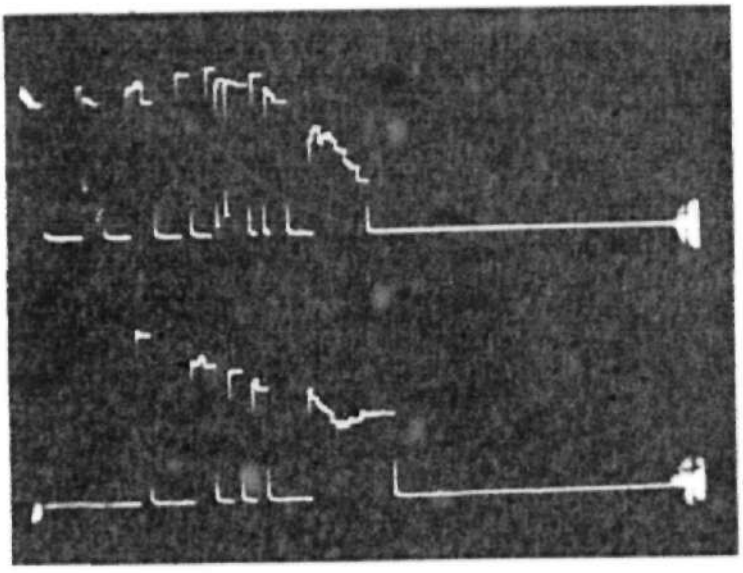


Figure 6.4. 'internationalism'
upper contour: Nigerian (Yoruba)speaker [ɪntanaʃɔna:lɪzɪm]
lower contour: South-East English speaker [ɪntənæʃnəlɪzm]
time: 2 secs

Compounds are assigned the same cover tone-pattern of $M^{n}HL$ in Nigerian English as is assigned to polysyllabic words. When the two elements of a compound word occur in isolation they are given the appropriate tone patterns as set out in Table 6.3. Thus two words like 'feeding' and 'bottle' occurring as two separate words would each have $\overset{*}{H}L$ as in English. However, when they are juxtaposed as two elements of a compound, 'feeding' is assigned two mid tones and 'bottle' a high and a low so that the accent moves to '*bo*'(ttle). Now, this is a compounding rule of Nigerian English which runs counter to that of English where the accent is usually on the initial syllable of the first word, in this case *fee*(ding). Thus where English would have

feeding-bottle
$\overset{*}{H}$ L H L

Nigerian English would have

feeding-bottle
M M $\overset{*}{H}$ L

This applies uniformly to all such compounds in Nigerian English regardless of the length of words or syllables involved. In the corpus, speaker (58) has [ɔva sentralaɪseʃɔ̃n] 'over-centralization' with a MMMMM$\overset{*}{H}$L tone pattern.

It is clear that this is an extension of the cover melody assigned to polysyllabic words. In Figures 6.5. and 6.6. we present fundamental frequency contours of both the isolated and compound forms of 'feeding' and 'bottle' as spoken by the Nigerian speaker and the South-East English speaker. Figure 6.5. shows the isolated form

of the words, which have *HL in both speakers. Figure 6.6. shows that the HL HL contour of the Nigerian speaker changes to MM HL when the words are joined together in a compound while the English speaker's initial syllable is boosted upwards and stands out as the most prominent part of the compound. In Figure 6.7, contours of 'dustbin' as spoken by the Nigerian and the Northern English speaker are shown; the same pattern as in Figure 6.6. is repeated here as well.

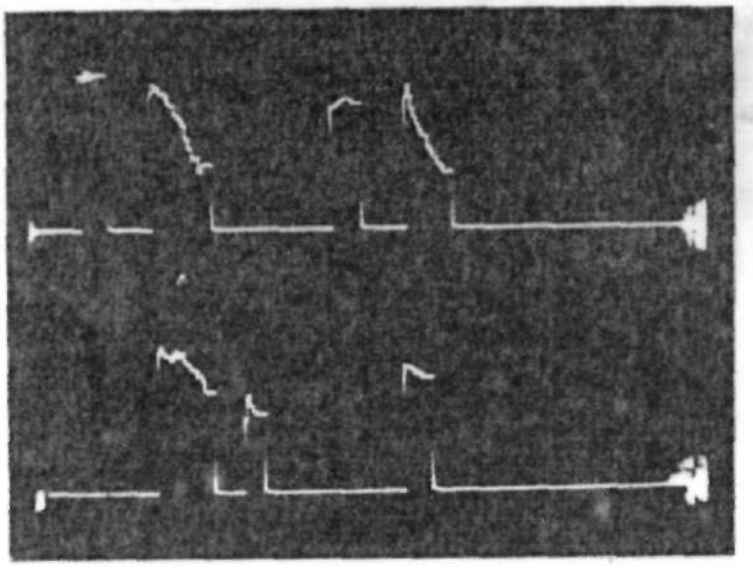


Figure 6.5. 'feeding' 'bottle'

upper: Nigerian: [fi:diŋ] [bɔtəl]
lower: Southern English: [fi:dɪŋ] [bɒtl̩]
time: 2 secs

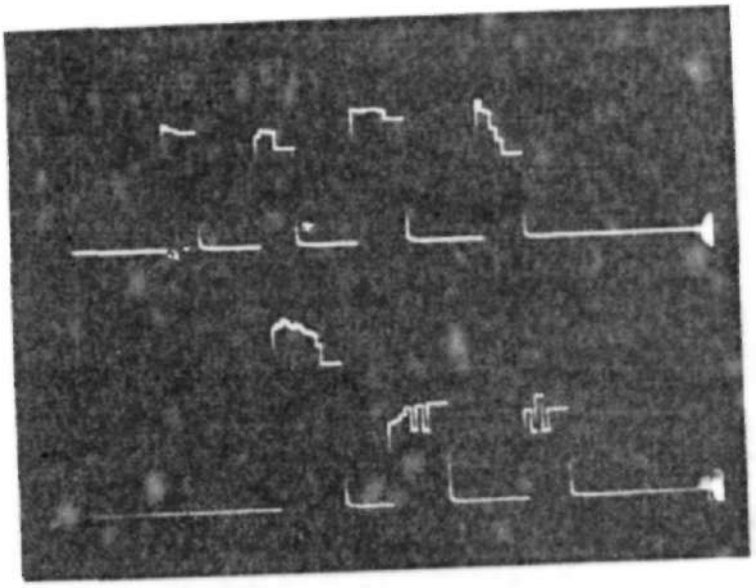


Figure 6.6. 'feeding-bottle'
upper: Nigerian: [fi:dɪŋ bɔtɔl]
lower: Southern English: [fi:dɪŋ bɒtl̩]
time: 1 sec

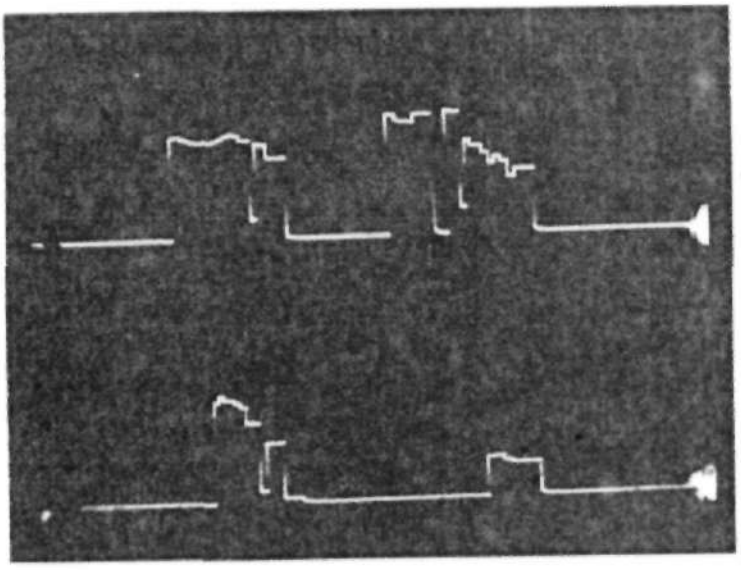


Figure 6.7. 'dustbin'
upper: Nigerian: [dɔstbɪn]
lower: Northern English: [dʌstbɪn]
time: 1 sec

Apart from the assignment of $M^{n*}HL$ to polysyllabic words and compounds, there are other tendencies which are mother-tongue specific. Among Hausa speakers in the corpus was found a tendency to re-assign the tone pattern of some polysyllabic words, by merging them with another pattern in the English list. Thus speaker (82) has [kɔʔɔpɾe:ʃɨŋ] 'cooperation' with a HLL$\overset{*}{H}$L tone pattern (as for English tone pattern 14) thus having it rhyme with 'organization' instead of assigning it English tone pattern 15 LHL$\overset{*}{H}$L.

Among Igbo speakers was observed a tendency to avoid the $M^{n*}HL$ pattern and to hypercorrect by moving the accent of some polysyllabic words leftward, i.e. as near to the initial syllable as possible. Speaker (79) thus has [dɛvlɔp] 'develop' with a $\overset{*}{H}$L pattern (note the deletion of the vowel which receives the accent in English) and [kɔmnɪkɛt] with a $\overset{*}{H}$LL tone pattern again with the deletion of the vowel which bears the accent in English. In both these words the accent moves from the second to the first syllable in hypercorrect imitation of initial accent in English.

The specifically Yoruba tendency observed in the corpus is the application of low level tone assimilation rules to English words. The rule as it operates in Yoruba has been reported by Salami (1969) and Amayo (1980). According to Amayo (1980 , pp. 5-6) a low tone after a high tone may become a falling tone and a high tone after a low tone may become a rising tone in Yoruba. Amayo gives the following examples:

(a) /àpá/ →[àpǎ] 'mark'
/òmíràn/ → [òmǐrân] 'another one'

In our corpus this rule has been found to be applied to English by Yoruba speakers. Speaker (27), for instance has [ɛgzaktɪ:] 'exactly' with a LRF tone pattern. The process consists of the following stages:

English tone-pattern $\overset{*}{L}HL$

1. H $\longrightarrow$ R/L ___
2. L $\longrightarrow$ F/H ___

$\overset{*}{L}HL \longrightarrow$ LRF

In Figure 6.8., fundamental frequency contours of 'centrally' as said by the Nigerian (Yoruba) speaker and the Southern English speaker are shown. It can be observed that the rise and fall of the second and final peaks in the Nigerian's contour are not as sharp or prominent as contours which derive from the merger of two level tones. However, the contrast with the English speaker's 'centrally' HLL is very clear.

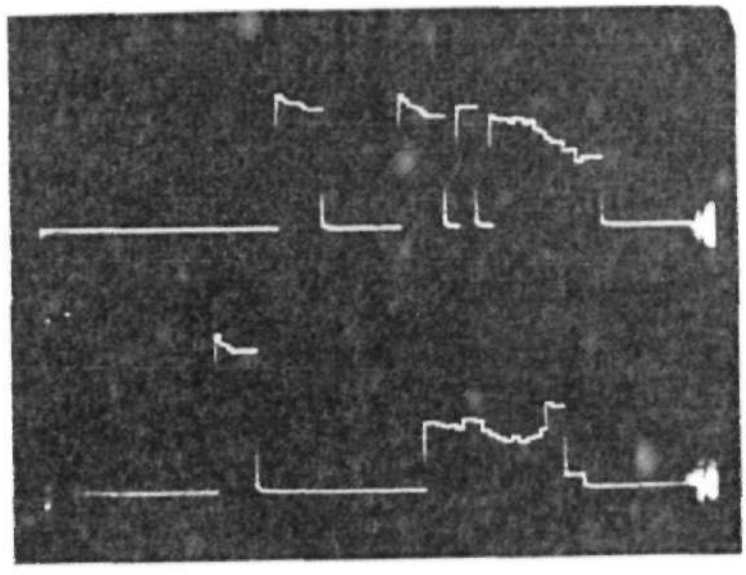


Figure 6.8. 'centrally'
upper: Nigerian (Yoruba) speaker: [sɛntrəlɪ] HRF
lower: Southern English speaker: [sentrəlɪ] HLL
time: 1 sec

6.4. Aspects of the Intonation of Nigerian English

One of the prominent distinguishing characteristics of Nigerian English is the phenomenon of 'juncture raising'. This refers to the raising of the final low toned syllable to high when a word precedes and "grammatically presupposes a following item" (to borrow the description of a similar phenomenon in Yoruba by Bambgose (1966, p. 10)). Thus the phrase 'sitting down' in Nigerian English is pronounced with the tone pattern HH$\overset{*}{F}$. However, when the two words are pronounced in isolation each has the tone pattern applicable to citation forms, i.e. $\overset{*}{H}$L and $\overset{*}{F}$ respectively. There is also the option of pausing at the end of the first word and of lengthening the syllable whose tone is raised (in this case [tɪŋ]) in Nigerian English. (See Chapter Three for 'juncture lengthening'.) It should be noted that this is a different rule from that which governs compound-accentuation. The phenomenon of juncture raising occurs most commonly in noun + noun and adjective + noun phrases - especially where the two words collocate as in 'territorial integrity' and 'poultry production'.

Almost certainly, juncture raising has its origins in Yoruba. Bamgbose (1966, p. 10) reports that in Yoruba "The optional pause is not associated with specific grammatical units. When it occurs immediately after an item which grammatically presupposes a following item, and where there could have been an elision, the final syllable of the first item is

always lengthened." One of Bamgbose's examples is a nominal junction - *ilée:tíṣà* 'teacher's house' which has the pattern MHMHL. The tone pattern of the two words in isolation is

ile tiṣa
MH H L

Bamgbose explains later (1966, p. 101) that when two nominals co-occur and the second happens to be consonant-initial "a mid tone syllable is added to the final syllable of the preceding item. This additional syllable is optional if the last syllable of the preceding item has a mid tone." This additional syllable appears as the second e in ilée tíṣà - i.e. it is merely a lengthening of the final vowel of the first nominal. The additional mid tone is of course the second mid tone in the phrase ilée tíṣà MHMHL.

There is of course no one-to-one correspondence between the operation of juncture raising in Yoruba and Nigerian English. To begin with, while only an additional mid tone is inserted in Yoruba (or, as would be the case if the rule applied in exactly the same way in Nigerian English, a low tone is replaced by a mid) in Nigerian English the low tone of the final syllable of the first word is replaced by a *high* tone. Indeed this new tone is often heard to be the highest in the phrase as a whole, so it certainly is *not* a Yoruba mid which we have interpreted as a high.

Juncture raising in Nigerian English is also similar to the effect of the associative high tone in Igbo. The associative high tone has a grammatical function - the marking of a genitive relationship between two nouns. It

raises both the final tone of the first word (the 'possessed') and the initial tone of the second word (the 'possessor'). The common example given is àlá Ádá LH'HH 'Ada's land'. The stages of derivation are as follows:

1. Lexical tones ala 'land' LL, Ada female name - literally 'elder daughter' LH
2. When the two words are in genitive relationship, the associative high tone raises the final L of ala to high, so àlà → àlá and the L of the initial syllable of Ada to H, so Àdá → Ádá
3. Downdrift rules change the second of two sequences of highs to a downstepped high 'H, so Ádá → Ádá

In the sense that the associative high tone of Igbo marks genitive relationship and therefore affects nominals, its operation is similar to juncture raising in Nigerian English. However, the latter is not restricted to nominals (cf. speaker (47) [wɪ wɪl nɛvá: hav] where it occurs at a non-nominal junction) and in Nigerian English only the final tone of the first word is raised while in Igbo both this and the initial tone of the following word are raised.

However, even in English the phenomenon of juncture raising does occur. In the phrase 'sitting down' the English lexical low tone of the second syllable of 'sitting' does not descend to its pre-pausal low but remains fairly level in anticipation of the second part of the phrase. The difference between the process here and that which occurs in Nigerian English is that in English there is no option of lengthening the raised

syllable nor in fact of raising it to the level permitted in Nigerian English.

In Figures 6.9. and 6.10 fundamental frequency contours of 'sitting down' as isolated words and as a phrase respectively, are shown. Figure 6.9. shows the speech of the Nigerian speaker at the upper part and that of the Southern English speaker at the lower half where both say 'sitting' and 'down' as two separate words. Both contours show the $\overset{*}{H}L/\overset{*}{F}$ patterns associated with such words in both Nigerian English and English. Figure 6.10 shows that the peak corresponding to [ɪŋ] in both the upper and lower parts of the Figure is much higher than that shown in Figure 6.9. where the words are isolated. However, the upper contour of Figure 6.10. shows this rise to be much higher than the corresponding rise in the English speaker's utterance.

Similarly, Figures 6.11 and 6.12 show *territorial* and *integrity* as isolated words and as a phrase respectively. Again the rise in the Nigerian's contour (upper part of Figure 6.12) on the final syllable of 'territori*al*' is much higher than that of the Southern Englishman.

But there are even more fundamental differences between Nigerian English and R.P. (and indeed other accents of native speaker English) in the intonation of longer utterances than the instance represented by juncture raising. True, neutral declarative sentences and wh-questions "go down", and yes-no questions "go up" in both Nigerian English and R.P. This is not surprising as it appears to be the favoured tendency in most languages of the world. However, this is perhaps where the similarity

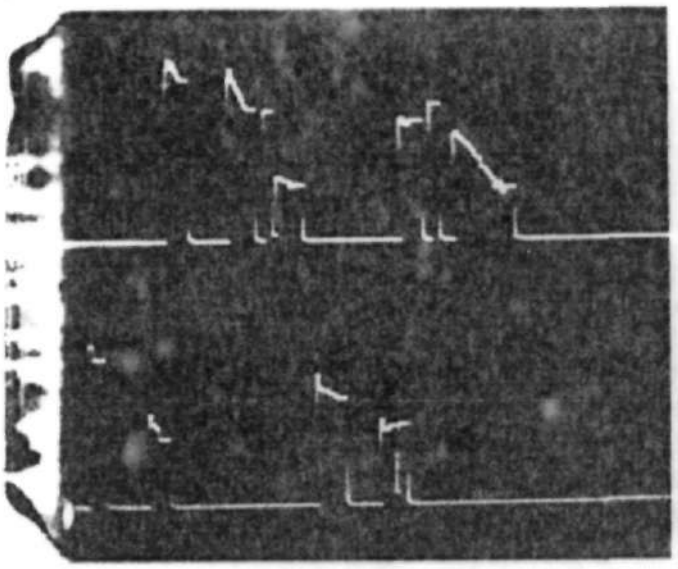


Figure 6.9. 'sitting' 'down'
upper: Nigerian (Yoruba)
lower: Southern English speaker
time: 2 secs

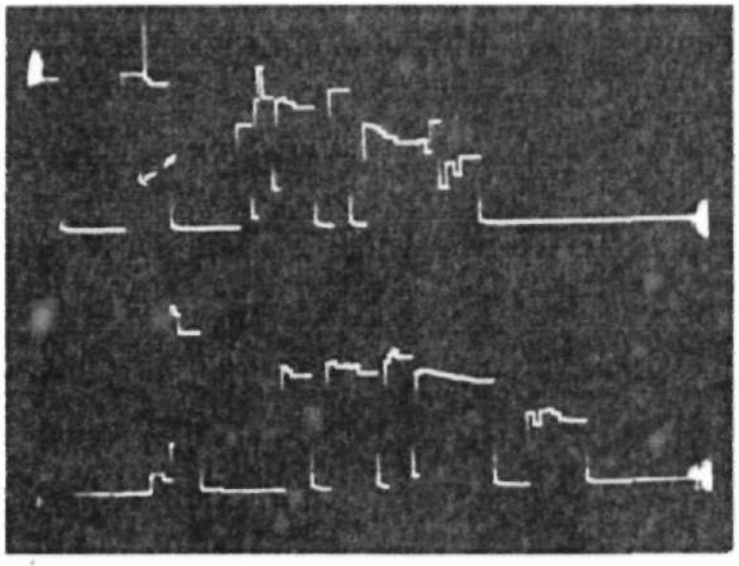


Figure 6.10. 'sitting down'
upper: Nigerian (Yoruba) speaker $\overset{*}{\text{HHF}}$
lower: Southern English speaker $\overset{*}{\text{HLF}}$
time: 2 secs

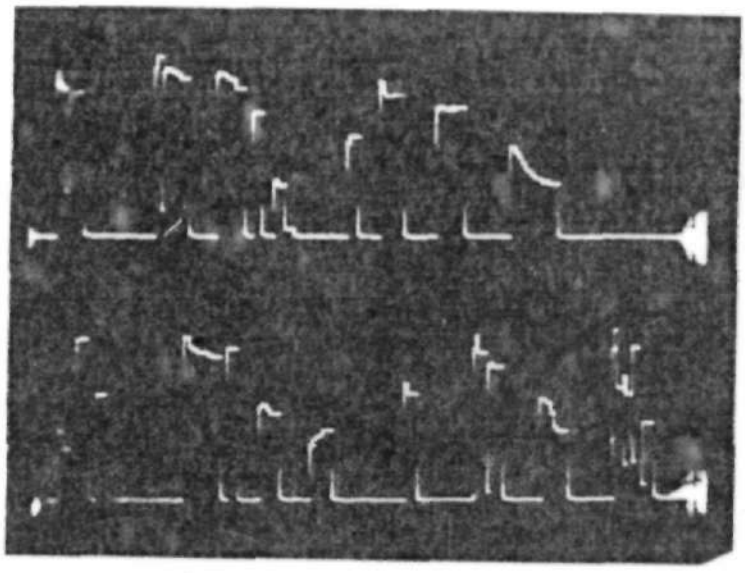


Figure 6.11. 'territorial' 'integrity'
upper: Nigerian (Yoruba) speaker
lower: Southern English speaker
time: 4 secs

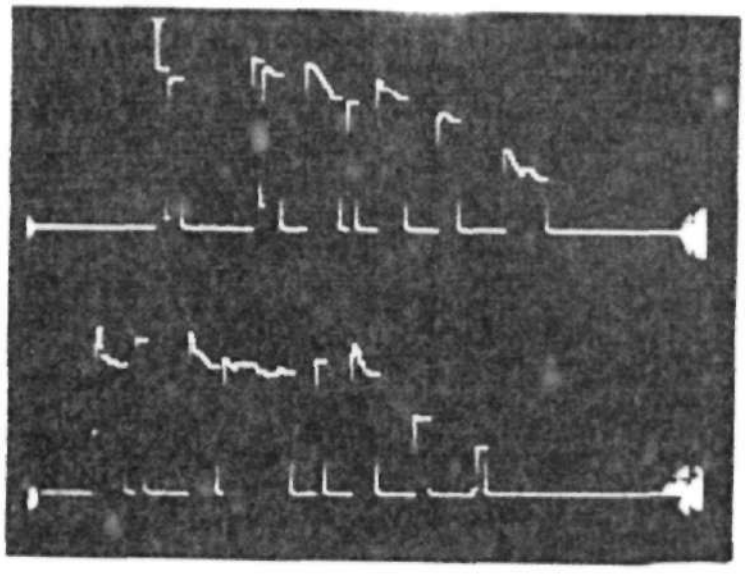


Figure 6.12. 'territorial integrity'
upper: Nigerian (Yoruba) speaker
lower: Southern English speaker
time: 2 secs

between the two kinds of English ends. English intonation allows the lexical pitch of any item in the utterance to be transformed beyond recognition by intonation, but in Nigerian English intonation is achieved by a change of register or by a change in the final pitch of the utterance, or both.

Thus in English, a simple sentence such as 'I broke the glass' can have, among others, four different points of emphasis according to which word the speaker feels contains new information or will convey the particular emphasis he wants. If we take a very simple pitch contour - the falling tone - as a variable we can place it on any of the four words thus:

	I	broke	the	glass
1.	*F	L	L	L
2.	L	*F	L	L
3.	L	L	*F	L
4.	L	L	L	*F

Each of these four patterns will focus on the word that bears *F. It would be tedious to go into the details of the meanings attached to each of the four variants of the sentence since that is obvious enough to any one familiar with English intonation. The point is that such variations in points of emphasis whether for attitudinal or semantic purposes are not achieved in Nigerian English by giving the relevant word pitch prominence. Indeed most Nigerian speakers of English do not even know that English intonation operates on this principle. We shall show how similar effects are achieved in Nigerian English in due course.

The fact that both in Nigerian English and British English wh-questions "go down" and yes-no questions "go up" can be observed in Figs. 6.13 and 6.14. In Fig. 6.13, the fundamental frequency contours of 'Where do you come from?' as spoken by the Nigerian and Southern English informants are shown. However, the fact that both contours end on low pitch does not mean both speakers said the question in exactly the same way. Whereas the Southern English informant had a series of low tones preceding [kʌm] which has a high tone and then a low tone on [frəm], the Nigerian had an initial high tone, followed by a low and then two highs before the final low. The Nigerian's extra high tones would give an English listener the impression of too many accented syllables.

In Figure 6.14, the Northern English informant's and the Nigerian's contours of "Are you coming?" are shown. Both questions end on a rising pitch. However, while the Northern Englishman accents the initial 'Are' by giving it a H, the Nigerian gives it a L. This is variable even in English. The Englishman's next two syllables are also L, followed by a rising final syllable while the Nigerian's two corresponding syllables are both H. Again, the Nigerian has one more H than the Englishman.

The fact that the intonation system of English which allows, indeed requires, that words (or parts of words) be picked out for pitch prominence to convey varying shades of meaning or emphasis is not taught in Nigeria results in Nigerian speakers of English falling back on the intonational resources and systems of their mother-

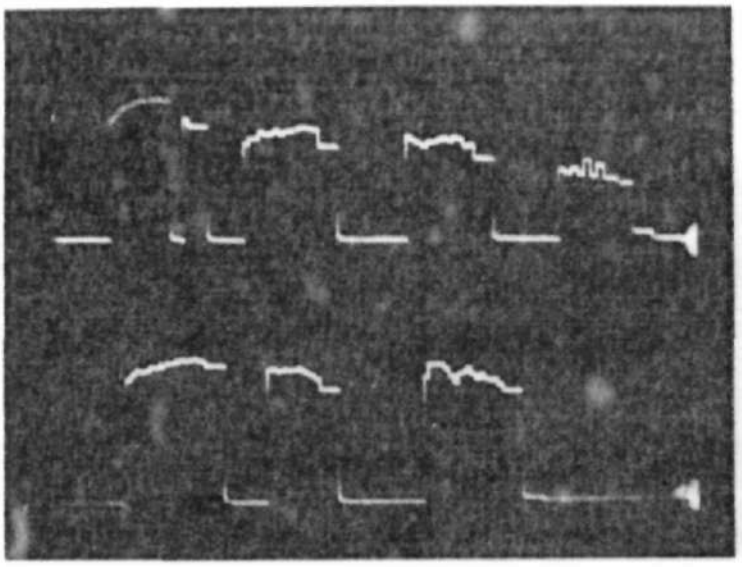


Figure 6.13. 'Where do you come from?'
upper: Nigerian: [wɪə do jo kɔm frɔm]
H L H H L
lower: Southern English: [wɛə do jo kʌm frəm]
L L L H L
time: 1 sec

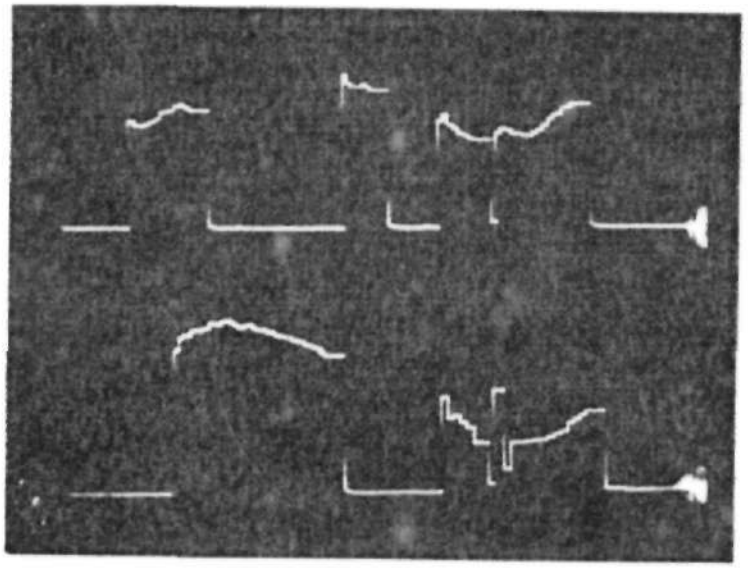


Figure 6.14. 'Are you coming?'
upper: Nigerian: [a ju: kɔmɪŋ]
L H H R
lower: Northern English: [a: jo kɔmɪŋ]
H L L R
time: 1 sec

tongues when they speak English. In particular, the intonational system of Yoruba appears to have established itself as *the* intonation of Nigerian English.

According to Bamgbose (1966, p. 44) emphasis is conveyed in Yoruba by the addition of an extra syllable and extra tone to the final syllable of an utterance. The extra syllable is phonetically a mere lengthening of the final vowel of the utterance, and the extra tone is L if the final syllable is H or M, and M if the final syllable is L. The following examples (from Bamgbose, op.cit.) illustrate the process:

1. ó burú 'It's bad'
   H M H
2. ó burúu 'It's really bad'
   H M HM
3. ìýa yẹ́n tɪ sọ tẹ́lè 'That woman gave a notice'
   L H H M M H M
4. ìyá yẹ́n tɪ sọ́ tẹ́lèẹ 'That woman *did* give a notice'
   L H H M M H LM

Afolayan (1968) also reported this use of an additional syllable which is tonally polar to the final as a mark of emphasis or pleading in Yoruba and notes that Yoruba speakers transfer this to English so that 'I want to go' when said as a plea is pronounced with a lengthened final [ɔ] and sustained falling pitch. This particular intonation pattern does not appear to be widespread among Nigerian English speakers other than Yorubas.

In Fig. 6.15. can be observed fundamental frequency contours of one of Afolayan's examples - *Mo fẹ́ lọ* 'I want to go' - as spoken by the Yoruba informant. The lower contour is that of the neutral declarative version of the sentence while the upper contour is that of the emphatic/pleading version. It is clear that apart from

the additional low pitch at the end of the upper contour, there is a change of register as well, with the emphatic/pleading version starting and remaining much higher than the neutral declarative version.

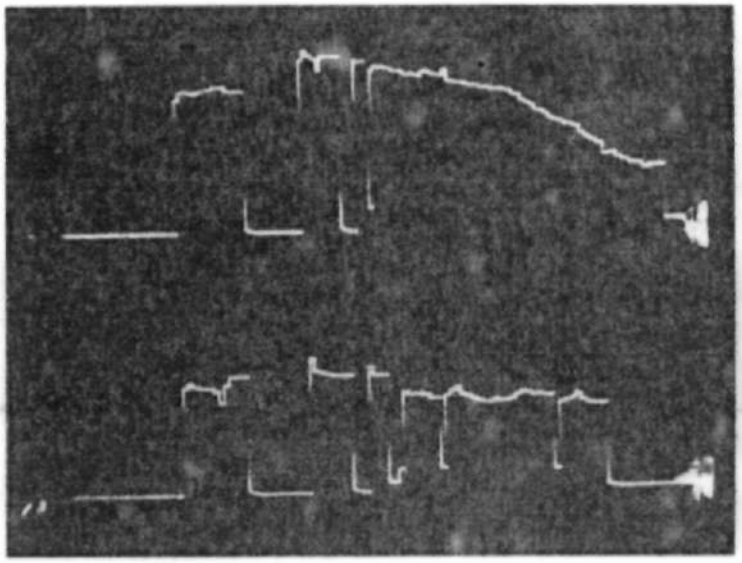


Fig. 6.15. 'Mo fẹ́ lọ/ Mo fẹ́ lộ
lower: Mo fẹ́ lọ
M H M
upper: Mo fẹ́ lọ̀ọ̀
M H ML

The one Nigerian English intonation pattern that is undeniably Yoruba in origin is that used to contradict a previous statement - what is usually called 'contrastive stress' in English. In Yoruba, an utterance which contradicts a previous statement - say a strong denial of some previous statement - is marked by a change in the final pitch from whatever level to a falling-rising contour in addition to a higher register, accompanying gesture and facial expression. Thus in a sentence such as *Mo wà ḿ-bẹ̀* - 'I was there' - said as an indignant reply to a sugges-

tion that 'one was not there' is spoken on a higher register than for a neutral non-contrastive statement and the final low tone is replaced by a falling-rising tone which is borne by a lengthened final [ẹ]. The English equivalent of this intonation pattern is one which accents *was* as opposed to one which does not. In Fig. 6.16 we show the contrast between neutral *Mo wà ḿ-bẹ̀* and contrastive *Mo wà ḿbệ:*. The higher pitch of the contrastive version can be seen at the upper part of the figure, as can the lengthened falling-rising final syllable. In addition, the contrastive version is clearly more vigorously spoken than the neutral version.

In order to demonstrate the unmistakeable connection between this Yoruba intonation pattern and the one used in English we present in Fig. 6.17 the Nigerian English versions of *Mo wà ḿ-bẹ̀*, i.e. 'I was there'. The lower contour of Figure 6.17 shows the neutral declarative 'I was there' and the upper contour shows the contrastive 'I was *there*'. The identity of pattern between this and the Yoruba equivalent of the utterance is remarkable as can be seen by comparing the contour of the final syllable in both languages and the higher register of each contrastive statement in relation to its neutral version.

The fact that this Yoruba intonation pattern has now established itself as the Nigerian English pattern is confirmed by the performance of all three Nigerian supplementary informants recorded at Lancaster University. These speak Hausa, Igbo and Yoruba respectively. They were given a card on which was written the sentence

"But I was there" and asked to read it as a reply to someone who said they were not in class today when in fact they were. They were recorded separately, each in his own room and although they toyed around with different possibilities before the recording, they all came up with the same version as is employed in similar situations in Yoruba.

In Figure 6.18 we show contours representing the Southern English informant's version of 'But I was there' (he was similarly asked to say it as a reply to a suggestion that he 'was not there') and the Nigerian informant's version of the same utterance. The Englishman accented *was* as can be seen (second peak) from the lower contour of Fig. 18. The Nigerian of course had a falling-rising contour on the final syllable.

Finally in Figure 6.19 we show the renderings of the Northern Englishman and the Nigerian of the sentence "I didn't say he was guilty, I said he might be" which was presented to both informants without any word being underlined. The Englishman accented *I*, *was* and *might*. The accenting of *I* is a Northern English feature (G. Knowles, personal communication) for the Southern Englishman did not accent it in the same sentence. Now, while both Englishmen immediately saw a contrast between *was* and *might* and gave both words pitch prominence, the second more than the first, the Nigerian merely read the sentence in a neutral fashion, leaving the task of emphasis to the lexical meanings of the words.

This is an important difference between most kinds of native speaker English and Nigerian English. While in

English intonation is required to re-inforce lexical import, in Nigerian English this is not necessarily so. Also, many of the effects that are achieved in English only or largely through the use of intonation are achieved instead by syntactic and lexical means in Nigerian English. Indeed English appears to be almost in a class by itself among the languages of the world in the weight it places on intonation.

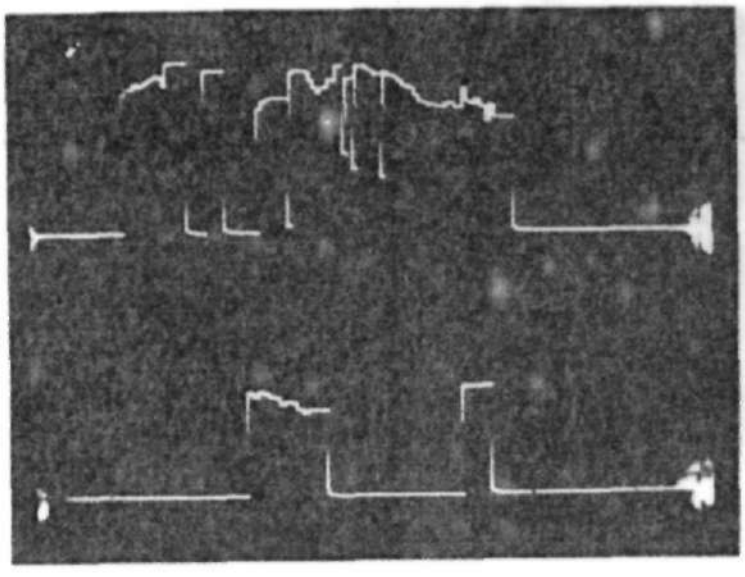


Fig. 6.16 'Mo wà ḿ-bẹ̀/ Mo wà ḿ-bẹ̃́'
lower: Mo wà ḿ-bẹ̀ (neutral)
M L H L
upper: Mo wà ḿ-bẹ̃́: (contrastive)
M L H FR
time: 1 sec

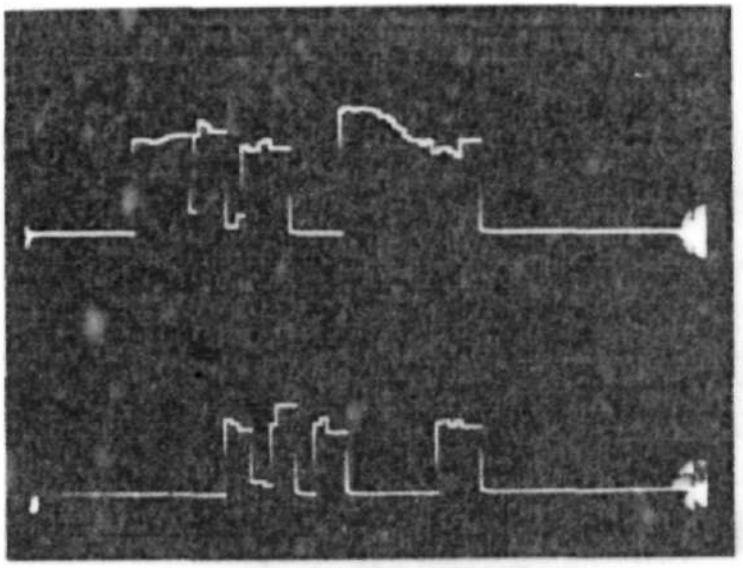


Fig. 6.17. 'I was there' (neutral and contrastive)
lower: I was there neutral
L L *F
upper: I was there [ɖɛa:]
L L *FR (raised register)
time: 1 sec

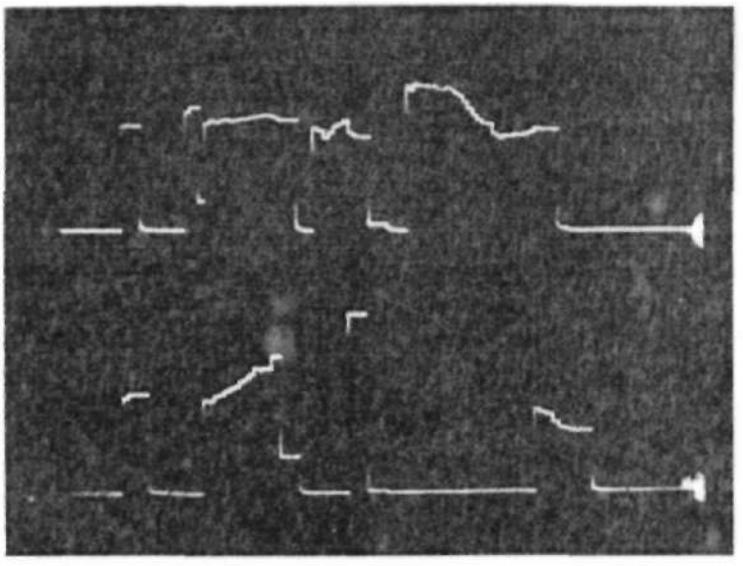


Fig. 6.18 'But I was there' (contrastive)
upper: Nigerian: accent on final syllable [ɖɛ̃a:]
lower: Southern Englishman: accent on 'was' [wɒ̂z]
time: 1 sec

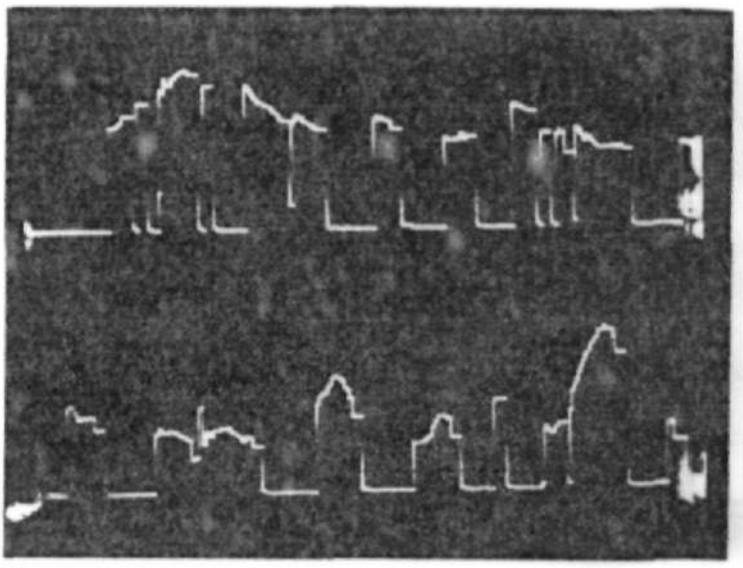


Figure 6.19. 'I didn't say he was guilty, I said he might be'

upper: Nigerian (neutral)

lower: Northern Englishman: accent on *I*, *was* and *might*

6.5. Conclusion

It is hoped that the foregoing consideration indicates the nature of divergence between Nigerian English and British English in rhythm and intonation. The melody pattern assigned to polysyllabic words in Nigerian English has been shown to be very different from that used in English. This divergence in melody pattern must be viewed in conjunction with divergence between the two kinds of English in the realization of vowel length distinctions which has been documented in Chapter Three. When taken together, the two divergences are very profound indeed.

But even more profound is the divergence between the two kinds of English in intonation system. The

outline of the intonation system of Nigerian English as presented in the preceding pages only indicates how much more needs to be known about this interesting area.

Notes to Chapter Six

(1) The accented syllable is always a high-toned syllable followed by a low-toned syllable. Where the accented syllable is word-final, the drop is realized on the following word. Thus the difference between accent-less *miyako* 'city' (LHH) and accent-bearing *?atama* 'head' (LH$\overset{*}{H}$) can be seen in the way each word affects the realization of the nominative marker *ga* which bears a low tone after 'head' but a high-tone after 'city'. Thus 'unaccented' *itte iru* 'is going' becomes *itte'ru* by analogy with forms such as *?atama' ga* 'head' + nominative marker.

Concerning the realization of underlying *itte iru* (LH, LL) 'is going' as *itte' ru* (L$\overset{*}{H}$L) McCawley (1970) explains:

"I propose that in Japanese, consecutive high pitches become successively lower in pitch (even if no low intervenes between the highs) and that the rule assigning successively lower pitches to highs precedes the rule that deletes the initial vowel of *iru*. Since the amount by which pitch drops in Japanese is quite small, a major or minor second, it is of the same magnitude as the difference in pitch between the first

and third of three consecutive high pitches, and if the pitch assignment rule to which I have been referring precedes the contraction rule, the drop in pitch between the *te* of *itte* and the *ru* is indistinguishable from the drop in pitch that manifests accent."

(2) We give below a list containing 38 of such pairs. The first 25 are from Lieberman (1960):

1. contract/contract
2. rebel/rebel
3. overflow/overflow
4. attribute/attribute
5. conflict/conflict
6. conduct/conduct
7. compress/compress
8. contest/contest
9. contrast/contrast
10. torment/torment
11. absent/absent
12. compact/compact
13. uplift/uplift
14. escort/escort
15. incline/incline
16. insult/insult
17. object/object
18. record/record
19. digest/digest
20. convert/convert
21. export/export
22. survey/survey
23. minute/minute
24. compound/compound
25. perfect/perfect

26. contact/contact
27. subject/subject
28. permit/permit
29. import/import
30. console/console
31. transfer/transfer
32. defect/defect
33. present/present
34. frequent/frequent
35. convict/convict
36. refuse/refuse
37. desert/dessert
38. converse/converse

(3) Amayo unquestioningly accepts the traditional division of languages into syllable-timed and stress-timed. He quotes sentences of the "This is the house that Jack built" type to demonstrate stress isochrony in English in spite of the evidence adduced by Knowles (1974) and references therein to the contrary. Amayo also echoes traditional views of syllable-timing in tone languages and indeed goes beyond these to deny, implicitly, that downdrift occurs in Hausa by claiming that a word with low tones throughout - such as *ayaba* LLL 'banana' - is said "on exactly the same pitch level" (p. 4). This is contrary to the findings of Meyers (1976, p. 80) that

even a sequence of like tones in Hausa would be progressively lower as a result of the pervasive effect of downdrift. Amayo also erroneously states (p. 5) that "every syllable in a tone language is given an equal amount of prominence irrespective of its pitch level" thus denying that in a word with, say, two low tones and one high tone we do not hear the high-toned syllable as more prominent and, more importantly, that in a tone language which also has phonemic vowel length all syllables, regardless of the length of their vowels, are equally prominent. This misconception is even reported as a feature of Nigerian English (p. 7) which is said to be spoken with 'equal prominence [assigned] to every syllable by Nigerian speakers'. While this would be partially true of a speaker who has no long vowels in his phonemic system it certainly is not true of those speakers who do have long vowels. Indeed even those speakers for whom we posited no long vowels (see Chapter Three) do have occurrences of long vowels which are not frequent enough to be regarded as part of their vocalic system. Thus even in their case it would be a distortion to claim that *all* their syllables have equal prominence.

Finally, Amayo, apparently unaware of work by Bolinger (1958), Fry (1958) and Lieberman (1960), concludes that 'pitch is the most important phonetic cue for the perception of stress by Nigerian speakers of English ..." but that this primacy of pitch as a cue to stress is "conclusive only for non-native speakers

whose mother-tongues are tone languages"!

(4) Further evidence that a pre-high tone L or an initial low in Krio is the same as a mid tone in Yoruba is observable in the conversion of Yoruba mid tones to L in Krio as in *Akindele* LHHH (male name) ← Yoruba MHHH (cf. Abraham (1962, p. 43).

CONCLUSION

7.0. The results of this multi-dimensional study have implications for a number of disciplines which we briefly outline below.

7.1. Implications for Phonological Theory

The technique adopted in this study of approaching phonology through a variationist point of view is novel, though the principle has been proposed by Labov (1970). The variationist phonology that results is not only based on solid phonetic principles but also on a sensitive awareness of the naturalness of linguistic variability and its relationship to social, historical and geographical settings.

The study has also afforded us an opportunity to show that so-called universal strength hierarchies for consonants have no predictive value whatsoever. They fail to predict which consonant should delete before which in Nigerian English because they were designed with phonological lenition process/es such as spirantization and voicing in mind rather than deletion per se. Now, since vulnerability to deletion is the ultimate test of the weakness of a consonant (because in fact spirantization is regarded as a lenition process precisely because it takes the consonant closer to zero), any "universal strength scale" which fails to predict the relative vulnerability of each consonant or group of consonants is neither a strength scale, nor universal in any sense.

7.2. Implications for Sociolinguistic Theory

Our sociolinguistic study of Nigerian English (Chapter Five) has shown that although linguistic and social variables may co-occur, the pattern of co-variation is neither universal nor fixed but is a product of the nature of social organization in the society under study, the manner in which the relevant language is acquired and the historical and other contexts of its diffusion and use. This observation may seem rather obvious but one only has to reflect on the tendency in sociolinguistics to replicate the model and methods of William Labov. Our methodology - both in the collection of data and in correlating linguistic and social variables has taken account of the shortcomings of Labov's model and the criticisms made of it. Our data were not elicited through a linguistic interview but relate to an actual human communication situation. In finding correlations between linguistic and social variables, we proceeded *from* the linguistic variables *to* the extralinguistic ones rather than the other way round.

7.3. Implications for the Teaching of Spoken English in Nigeria

The study has shown that many highly educated and well-placed Nigerians - including university professors, politicians (one of them a state governor!) and lawyers do not approximate closely to native patterns of English pronunciation. This finding is not surprising when viewed in the context of attitudes to native-like English as summed up by Davies (1968), Sofenwa (1975), Stevenson (1969) and Adekunle (1970) who report that Nigerian pupils are reluctant to acquire a near-native accent of English for fear of ridicule outside the classroom or that the Nigerian environment interferes with, rather than reinforce, the standard of English teaching in the school. It is surprising, therefore, that the West African Examinations Council and the schools should continue to assume that Nigerian pupils wish to be taught R.P. and to examine them as if they had been.

The West African Examinations Council test in oral English (see sample in the Appendix) examines both oral production (including oral composition, reading) and listening comprehension (including the ability to distinguish between R.P. phonemes by listening to minimal pairs and the ability to correctly interpret "contrastive stress"). Anyone who has had the privilege to observe the quality of teachers who are recruited to administer this test (and who are

therefore the better teachers of oral English in schools), or, worse still, the test being administered to candidates who have not had the remotest preparation for it would realize how misguided and fruitless the whole venture is.

Nor are these inadequacies remedied by adequate text-books and cassettes. The standard text-book for oral English in Nigeria is Banjo and Connell (1971) which concentrates more on the teaching of fluency and vocabulary than pronunciation. It is not even accompanied by a suitable tape.

A solution to these problems lies on two fronts. First, the cultural context must be taken into account in teaching Nigerian students a model of English pronunciation. Instead of teaching R.P., a suitable Nigerian model - such as one of those described in this study - should be used. If the intention behind teaching oral English in schools is merely to stop Nigerian English drifting farther away from international intelligibility, then only those students who are interested should be made to learn it because most of the function of English in Nigeria is in internal communication. The West African Examinations Council recently made a pass in oral English a pre-requisite for awarding the teachers' Grade II certificate (i.e. the primary school teachers' certificate) in spite of the socio-cultural constraints and constraints on resources outlined above.

Even assuming that qualified teachers and adequate teaching materials were available, the compulsory learning of oral English could only lead to students learning it but never actually using it outside the classroom, since,

as we have seen, the socio-cultural context does not favour near-native accents of English. What is called for, therefore, is the bidialectalism approach to the teaching of oral English in Nigeria. It should be taught only to those who are interested and the teaching should take the form of a systematic explication of the nature and details of divergence between the students' accents and the model accent being taught. Students should be encouraged to learn to switch from their normal accent to the near-native one - e.g. when speaking to a native speaker.

Teachers should be re-trained for this job. This could take the form of a sandwich diploma course spread over two or three summer or other vacations. Teaching materials, especially tape-recorded material should also be produced to cover the syllabus and guide not only the pupils but also the teachers. Emphasis should be placed on learning to read phonemic transcriptions from pronouncing and other dictionaries.

7.4.0. Directions for Future Research

It would be useful to explore the following questions:

7.4.1. How do other accents of Nigerian English not described in this study (e.g. Efik English, Kanuri English, Edo English) fit into the model of the continuum proposed in this study? Can they be accommodated in the present model or is a revision necessary?

7.4.2. What would be the pattern of sociolinguistic variation when speakers are stratified according to education or occupational levels in each mother-tongue area? For example, would a stratified sample consisting of Igbo office messengers, clerks and managers/permanent secretaries respectively show a pattern of co-variation between phonological variables and these social variables?

7.4.3. How widespread is the use of the intonation system outlined in Chapter Six? Does each ethnic group have its own sub-system or has a common-core system already taken shape based on Yoruba intonation?

7.4.4. At what rate are the two major accents (Northern and Southern Nigerian) merging? In particular, is it only young Northerners who are influenced by Southern speech or are older Northerners also gradually changing in the direction of Southern Nigerian English?

7.4.5. Finally, it would be necessary to explore the extent to which a common continuum can be established to encompass Nigerian, Sierra Leonean, Ghanaian and Gambian Englishes. Liberian English, which appears to be American, rather than British-oriented, should also be defined in relation to these other Englishes. We should then venture farther afield to relate these West African Englishes to West Indian, East and Southern African Englishes.

Appendix A

Speaker Profiles

(1) Hausa b. 1954 female, attended Mission Schools in Kano, Kaduna and Mubi, secondary education only, trained as a broadcaster; responded to questionnaire

(3) Yoruba b. 1952 female, Mission primary and secondary school in Kaduna, secondary education only, was trained as a broadcaster; responded to questionnaire

(5) Igbo, male, trained broadcaster; did not respond to questionnaire

(8) Hausa b. c 1921 male, primary and middle schools in Kano, Katsina College, holds Teachers Higher Elementary Certificate; did not respond

(9) Hausa b. 1953 female, primary school in Lagos, secondary school in Ilorin, teachers' college in Zaria, holds Nigerian Certificate in Education, was trained as a broadcaster; responded to questionnaire

(10) Igbo b. 1917 male, primary and secondary schools in Ozubulu and Onitsha, Cambridge University M.A. (1948), lived in England 1944-48, retired civil servant, now chairman of a manufacturing company; responded to questionnaire

(11) Yoruba, female, broadcaster, born and educated in Britain; did not respond to questionnaire

(18) Yoruba b. 1949 male, primary school in Ogbomoso, secondary school in Oyo, lived in the U.S.A. 1969-1978, holds degrees from Central State University,

Indiana State University and Loyola University, University lecturer, PhD; responded to questionnaire

(19) Yoruba, b. 1938 male, primary and secondary schools in Oyo, University of Ife (BA), Columbia University (MA, PhD), lived in the U.S.A. 1969-73, university lecturer; responded to questionnaire

(20) Yoruba b. 1942 male, primary and secondary schools in Ibadan, BEd, MEd and PhD from University of Ibadan, university lecturer; responded to questionnaire

(21) Yoruba b. 1947 male, primary and secondary schools in Ijebu-East, University of Ife (BSc) and University College Cardiff (PhD), lived in Britain 1972-77, university lecturer; responded to questionnaire

(24) Yoruba, male, B.A. (Lagos), newspaper journalist; did not respond

(27) Yoruba b. 1933 female, primary and secondary schools in Ibadan, Ilesa and Cambridge, took a course in elocution and public speaking at a girls' school in Cambridge, M.A. St Andrews 1958, took a higher degree from Oxford 1960, lived in England 1952-60, now professor; responded to questionnaire

(28) Yoruba b. 1931 male, primary school in Kaduna, secondary school in Ibadan, University of Ibadan B.A., studied Law in Britain, now an important politician; did not respond to questionnaire

(32) Yoruba, male, holds an MA in Economics, was trained as a broadcaster, now a personnel manager in industry; did not respond to questionnaire

(33) Yoruba b. 1932 male, primary school in Esie, secondary school in Ibadan, BSc University College, Ibadan 1956, PhD Cambridge University 1961, lived in Britain 1956-61, now professor; responded to questionnaire

(37) Hausa b. 1929 male, primary and middle schools in Kano, trained as a teacher at Higher Elementary Teachers College, Zaria after secondary education at Kaduna College (both being descendants of Katsina College), now a politician; did not respond to questionnaire

(40) Hausa b. 1940 male, primary and secondary schools in Argungu and Sokoto, was trained as a broadcaster, including a year's attachment to the Australian Broadcasting Corporation, Sydney;responded

(41) Hausa b. 1944 male, primary and secondary schools in Kano, five years' training as a pharmacist at School of Pharmacy, Zaria; responded to questionnaire

(44) Hausa b. 1940 male, primary education in Kano, teacher training at Wudil and Katsina, BA Ahmadu Bello University 1970, PhD University of Pittsburgh 1974, also lived in England 1964-67 as a Hausa newsreader for the BBC, was a university lecturer at the time he was recorded; responded to questionnaire

(45) Igbo, male, American-educated university lecturer-turned politician; did not respond to questionnaire

(47) Igbo b. 1924 male, primary and secondary schools in Arochukwu, Achimota College, Ghana and London School of Economics (MSc 1949), lived in England 1947-49,

worked as a university lecturer for a time, now a politician; did not respond to questionnaire

(51) Yoruba b. 1948 male, primary and secondary education in Ekiti North, University of Ibadan BSc 1971, University of Ife Msc 1973, University of London PhD 1977, lived in Britain 1974-1977, university lecturer; responded

(56) Igbo b. 1917 male, primary and secondary education in Port Harcourt, Aba, Calabar,Arochukwu and Lagos, Lincoln University BSc, Columbia University MA (1940), won a prize for oratory at Lincoln in 1939, lived in the U.S.A. for 9½ years, now a politician; did not respond

(58) Yoruba b. 1934 male, primary and secondary education in Owo, attended 4 universities in America, holds a PhD, now a university lecturer; responded to questionnaire

(62) Igbo b. 1953 female, primary education in Enugu, secondary education in Owerri, was trained as a broadcaster; responded to questionnaire

(63) Igbo b. 1922 male, primary and secondary education in Umuahia and Uzuakoli, BA University College Ibadan 1955, PhD Harvard University 1963, lived in the U.S.A. 1960-1963, now a professor; responded

(64) Igbo b. 1942 male, primary and secondary education in Eziowelle and Onitsha, BSc University of Ibadan 1967, MSc, PhD University of Illinois 1976, lived in the U.S.A. 1971-1976, now a university lecturer; responded

(65) Yoruba b. 1940? (N.B.: declined to declare her age!) female, primary and secondary education in Lagos, Ondo and Ibadan, University of Durham BSc 1966, Oxford University PhD 1973, lived in England 1961-1973, now a research fellow; responded

(66) Yoruba b. 1940 male, primary and secondary education in Igede-Ekiti, Erin-Ijesha and Ile-Ife, BSc University of Ibadan 1970, PhD University of Ibadan 1975, spent a year each in Britain and the U.S.A., now a research fellow; responded

(67) Hausa b. 1940 male, primary education in Mutumbiyu and Yola, secondary education in Zaria and Kano, B.A. Cairo University 1970, PhD London University 1974, lived in London 1971-74, university lecturer; responded

(68) Hausa, male, civil-servant-turned politician; did not respond to questionnaire

(73) Igbo, female, politician, could not be reached

(74) Hausa, male, civil servant-turned politician, primary and secondary education in Kano, received on-the-job training as a civil servant (executive grade); did not respond to questionnaire

(75) Igbo b. 1934 male, primary and secondary education in Ihioma and Orlu, University of Ibadan BSc 1962, University of Nebraska MSc, PhD (1967), lived in the U.S.A. 1964-71, now a politician; responded

(77) Igbo b. 1946 male, primary and secondary education in Igarra, Oke, Umuahia, Owerri and Oguta, received

professional training as a journalist at the Nigerian Institute of Journalism, Lagos 1972-73; responded

(78) Igbo b. 1946 male, primary and secondary education in Ozintam and Uzuakoli, trained as journalist in London 1963-65 and at Ambassador College, U.S.A. 1966-67, lived in the U.S.A. 1967-75, now a television producer; responded

(79) Igbo, male, politician; did not respond to questionnaire

(80) Igbo, male, broadcaster; did not respond to questionnaire

(82) Hausa, male, lawyer; did not respond to questionnaire

(83) Hausa b. 1948 male, primary education in Kontagora, secondary education in Bida and Lagos, BA Ahmadu Bello University 1970, MA University of Kent at Canterbury 1971, MSc, PhD University of Chicago 1974, lived in the U.S.A. 1971-74; responded

(84) Hausa, male, university lecturer, primary and secondary education in Bauchi and Kano, BSc, MSc Ohio, PhD Howard, lived in the U.S.A. for about eight years, university lecturer; did not respond

(86) Hausa b. 1946 male, primary and secondary education in Minjibir, Dambatta and Zaria, BSc New York Institute of Technology 1977, MA New York School for Social Research 1978?, PhD candidate, Columbia University 1979, university lecturer; did not respond to questionnaire

(87) Hausa, male, Russian-trained medical doctor-turned politician, primary and secondary education in Kano; was inaccessible

(91) Igbo, male, businessman-cum-politician; was inaccessible

Appendix B. Letter and Questionnaire sent to Prospective Informants

Department of English,
University of Ibadan,
Ibadan.

7 May, 1979.

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.....

.....

Dear .....

I write to ask for your permission to use your speech which I recorded from television on ..... during an NT ..... programme "....." for my research on 'Varieties of Nigerian Spoken English'. The purpose of this research is to describe the kinds of English that Nigerians speak and to establish what correlations there are between the kind of English a Nigerian speaks on the one hand and such details of the person's life as the schools he attended, his mother tongue etc. The research is being carried out for the degree of Doctor of Philosophy of the University of Ibadan and it is hoped that its findings would influence the teaching of spoken English in Nigeria positively.

May I assure you that under no circumstances will your name be mentioned or your speech be used for any purpose other than that stated here.

If you have no objection to your speech being used - and I am optimistic that you will not - then kindly fill in the enclosed questionnaire and post it to me in the enclosed stamped and addressed envelope.

If on the other hand you object to your speech being used, then kindly sign the enclosed letter and post it to me in the enclosed stamped and addressed envelope.

Thank you very much for your anticipated cooperation.

Yours sincerely,

Munzali Jibril.

.....

.....

.....

.....

Date: .....197..

Dear Mr. Jibril

I object to my speech being used for your research on 'Varieties of Nigerian Spoken English'.

RESEARCH INTO VARIETIES OF NIGERIAN SPOKEN ENGLISH

PERSONAL DATA SHEET

1. DATE OF BIRTH: .....

2. PLACE OF BIRTH: (A) TOWN/VILLAGE .....

(B) LOCAL GOVERNMENT .....

(C) STATE .....

3. OTHER PARTS OF NIGERIA WHERE YOU HAVE LIVED:

(A) PLACE: ..... FOR HOW LONG: .....

(B) PLACE: ..... FOR HOW LONG: .....

(C) PLACE: ..... FOR HOW LONG: .....

4. MOTHER-TONGUE (i.e THE LANGUAGE YOUR PARENTS SPOKE TO YOU AS A CHILD):

5. OTHER NIGERIAN LANGUAGES SPOKEN: (A) .....

(B) .....(C) .....

6. PRIMARY SCHOOL(S) ATTENDED: (A) NAME OF SCHOOL:.....

.....FOR HOW LONG: ..... (B) NAME OF SCHOOL:.....

..... FOR HOW LONG: ..... (C) NAME OF SCHOOL:.....

..... FOR HOW LONG: .....

7. MEDIUM OF INSTRUCTION:

(A) IN CLASSES 1-3: ..... (B) IN CLASSES 4-7:..

8. NATIONALITY/ETHNIC GROUP OF TEACHERS (A).....(B).....

9. SECONDARY SCHOOL/TEACHERS' COLLEGE/TECHNICAL SCHOOL ATTENDED:

(A) SCHOOL: .....FROM ..... TO .....

(B) SCHOOL: .....FROM ..... TO .....

(C) SCHOOL: .....FROM ..... TO .....

10. MEDIUM OF INSTRUCTION

SCHOOL A: .....

SCHOOL B: .....

SCHOOL C: .....

11. NATIONALITY/ETHNIC GROUPS OF TEACHERS

    (A) OF ENGLISH: .....

    (B) OF OTHER SUBJECTS: .....

12. DID YOU HAVE ANY FORMAL INSTRUCTION IN PREPARATION FOR THE WAEC ORAL ENGLISH EXAM? .....

    PLEASE GIVE DETAILS .....

    .....

13. DID YOU TAKE PART IN PLAYS AT SCHOOL? .....

    AT WHAT STAGE IN YOUR EDUCATION? .....

14. WERE YOU A MEMBER OF A SCHOOL CHOIR? .....

    AT WHAT STAGE IN YOUR EDUCATION? .....

15. POST-SECONDARY/HIGHER INSTITUTION(S) ATTENDED:

    (A) INSTITUTION: .....FROM ..... TO....

    (B) INSTITUTION: .....FROM..... TO....

16. NATIONALITY/ETHNIC GROUP OF TEACHERS

    INSTITUTION A: .....

    INSTITUTION B: .....

    INSTITUTION C: .....

17. HAVE YOU RECEIVED ANY PROFESSIONAL SPEECH TRAINING?

    ..... GIVE DETAILS .....

    .....

18. APART FROM ITEM 12 ABOVE, WAS ENGLISH PRONUNCIATION TAUGHT AT ANY STAGE IN YOUR EDUCATION? .....

19. DID YOU, AS A CHILD, SPEAK ENGLISH AT HOME? .....

    IF YES, WHO WITH? .....

20. HAVE YOU EVER BEEN TO A COUNTRY WHERE ENGLISH IS A MOTHER-TONGUE? .....

    (A) COUNTRY ..... STAYED FROM ..... TO .....

    (B) COUNTRY ..... STAYED FROM ..... TO .....

    (C) COUNTRY ..... STAYED FROM ..... TO .....

21. LIST THE LOCAL AND FOREIGN RADIO STATIONS YOU LISTEN TO:

    (A) ..... (B) ..... (C) .....

    (D) ..... (D) .....

22. LIST THE ENGLISH PROGRAMMES YOU MAKE A POINT OF WATCHING ON TELEVISION:

    (A) ..... (B) ..... (C) .....

    (D) ..... (E) .....

23. NAME A WELL-KNOWN NIGERIAN (NEWSREADER, POLITICIAN ETC), WHOSE ENGLISH PRONUNCIATION COMES CLOSEST TO YOUR IDEAL: .....

Appendix C

Specimen Oral English Test

Printed below is the specimen Oral English test circulated by the West African Examinations Council (Reproduced from Banjo and Connel (1971))

This test will be in two parts. The first part will be a series of sub-tests on tape to test the children's ability to discriminate between English sounds and to understand the language generally. The types of sub-tests used may vary from year to year and the specimen items given are only examples of what the Council may think fit to include. The second part will consist of a short passage which the candidate will be required to read.

PART 1 will consist of approximately eight tests. Specimen items for each test are appended.

Test 1 (about 20 items). To test the candidate's ability to discriminate between consonant sounds in English. The taped voice will say one of the following words from each example and the child will need to be able to choose which one has been said.

EXAMPLE 1: that pat bat vat fat

EXAMPLE 2: mix miss missed mixed mists

Test 2 (about 20 items). To test the candidate's ability to discriminate between vowel sounds in English. The taped voice will say one of the following words from each example and the child will need to be able to choose which one has been said.

EXAMPLE 1: beat bit bet bat bought

EXAMPLE 2: peak pick park pack puck

Test 3 (about 25 items). Similar to Tests 1 and 2 (vowel and consonant discrimination) but this time in the context of short sentences. The taped voice will say one of the following sentences:

Example 1: He's paying
He's playing
He's praying

Example 2: You need a little fun
You need a little fan
You need a little fern

Test 4 (about 25 items). To test the candidate's ability to pick out a rhyming word with the one said on the tape.

Example 1: The word 'rough' will be said on the tape and the child will choose which one of these words rhymes with 'rough':
laugh bough fluff ruffed cough
Correct answer = fluff

Example 2: The word 'style' will be said on the tape and the child will choose which one of these words rhymes with 'style'
rail mile gill still stole
Correct answer = 'mile'

Test 5 (about 30 items). This is virtually the same as Tests 1 and 2. But vowels and consonants are mixed in a five-alternative choice of words which are almost alike in sound. The taped voice will say one of the following words from each example and the child will need to be able to choose which one has been said.

Example 1: witch wish wash watch swithc

Example 2: slime rhyme cream crime climb

Test 6 (about 30 items). See the syllabus under 'Emphasis'. This test will consist of a series of three questions and three answers. The questions will all be different and the answers always the same: that is the emphasis or emphatic stress on the same word. The candidate has to choose the one question which goes with the repeated answer.

	Question	*Answer*
Example 1:	*Who* bought a pen?	*I* bought a pen
	What did you buy?	*I* bought a pen
	What did you do?	*I* bought a pen

Correct answer = *Who* bought a pen?

	Question	*Answer*
Example 2:	What country is London the capital of?	*London* is the capital of Britain
	Is London a city in Britain?	*London* is the capital of Britain
	What is the capital of Britain?	*London* is the capital of Britain

Correct answer = What is the capital of Britain?

Test 7 (about 25 items). See 'Intonation in English' in the syllabus. The tape will record short conversations between two people. The candidates will have to gauge from the intonation patterns used which of the three statements written on the test sheet is correct.

It is not possible to give examples easily as they depend on the *way* things are said. But one can suppose that from a conversation between a man and a woman

a judgment will have to be made as to whether the man is impatient or the woman is impatient or if they are both impatient.

Test 8 (about 25 items). Once again short conversations between two speakers. The passage will be repeated twice and the questions will be purely comprehension questions. Whether the candidate has understood the actual content of the passage will be the relevant fact.

Example 1.

Man: Now that the Mexico Olympic games are over, I see that they have already decided where the next games are to be held.

Woman: Oh yes, where?

Man: Munich in Germany.

Woman: Will that be in 1972?

Man: Yes, that's right; four years after Mexico.

Woman: Why do they decide on the place so soon?

Man: Oh, it requires a tremendous amount of organization and building and many decisions have to be made.

Question 1: Where were the last Olympic games held?

A. Mexico.

B. Germany.

C. Doesn't say.

Question 2: How often are the games held?

A. Whenever they feel like it.

B. In 1972.

C. Every four years.

Question 3: Why do they choose the next place for the games so soon?

A. So the athletes can start training.

B. Because a great deal of planning is necessary.

C. Germany is a long way away.

Example 2:

Man: Did you arrive on time?

Woman: Well, I was just a few minutes late.

Man: I suppose ladies are allowed to be a few minutes late.

Woman: At any rate he didn't seem cross, he just said how pleased he was to see me.

Man: How long did you talk for?

Woman: Oh a minute or two, we didn't even sit down.

Question 1: Was the woman on time?

A. Yes.

B. No.

C. It doesn't say.

Question 2: Was the man cross when she arrived?

A. A little.

B. Extremely cross.

C. He didn't seem to be.

Question 3: How long did they talk for?

A. A long time.

B. A short time.

C. An hour or two.

PART 2 will consist of a short passage to be read by each candidate.

Appendix D

A Note on Measuring Proximity to R.P.

A simple measure of closeness would be the "Euclidean distance": if $\underline{x}_1$ and $\underline{x}_2$ are two speakers' scores - two 'points' in the 9-dimensional space defined by the nine variables, the *Euclidean distance* d_E between them is defined by

$$d_E^2 = (\underline{x}_1 - \underline{x}_2)'(\underline{x}_1 - \underline{x}_2)$$
$$= \sum_{i=1}^{9} (x_{1i} - x_{2i})^2$$

where x_{1i} is the score of the first speaker on the i-th variable, and similarly for x_{2i}. This measure of distance suffers two disadvantages: it depends on the scale in which the variables are measured, and it does not allow for correlation between variables. The scale dependence can be removed by using *standardized* variables: let

$$y_{1i} = x_{1i}/s_i \quad , \quad y_{2i} = x_{2i}/s_i$$

where s_i is the standard deviation for the i-th variable.

The correlation between variables is allowed for by using the *Mahalanobis distance* d_M, defined by

$$d_M^2 = (\underline{y}_1 - \underline{y}_2)' R^{-1} (\underline{y}_1 - \underline{y}_2)$$

where R is the correlation matrix of the variables. Highly correlated variables are automatically weighted less in the calculation of this distance (see Bock 1975 p.399).

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