

A PHONOLOGICAL DESCRIPTION OF THE ENGLISH LANGUAGE OF SELECTED 2-6 YEAR OLDS IN EDUCATED FAMILIES IN LAGOS

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Abstract

This study describes the phonological features of the English language of selected two-six year old children from educated families resident within the Lagos metropolis. Ten children – four between the ages of two and four and six children between the ages of four and six, were investigated. Five of the subjects were male while five were female. Most of the subjects had parents who spoke Yoruba as their first language. The subjects between age 2-4 were in nursery schools (i.e. pre-primary schools) while those between age 4-6 were in primary one or two. Subjects were asked to pronounce words on a word list, recite any known poem or read a short paragraph (depending on the age of the subject) and also respond to some questions for about five minutes. The findings show that 2 – 6 year olds in educated families in Lagos, like other children in different parts of the world have the tendency to simplify their speech by making use of what Ingram (1986) calls phonological processes. Some of the methods of simplification used are: substitution, voicing, cluster reduction, deletion of final consonants, reduplication etc. The study also shows that 2 -6 year olds from educated families in Lagos are more likely to acquire or learn the variety of English known as Nigerian English rather than the Received Pronunciation (R.P) since most people (parents, neighbours, and teachers) in the immediate environment from where English language is first encountered, speak Nigerian English.

Keywords: language acquisition, phonology, phonological processes, Nigerian English

Introduction

A child from a very early age learns to respond to the sounds and tunes which his elders habitually use in talking to him; and in due course, from a need to communicate, he will himself begin to imitate the recurrent sound patterns with which he has become familiar. In other words, he begins to make use of speech; and his constant exposure to the spoken form of the language together with his need to convey increasingly subtle types of information, leads to a rapid acquisition of the framework of the spoken language. Nevertheless, with all the conditions in his favour, a number of years will pass before he has mastered not only the sound system used in

this immediate environment but also has at his disposal a vocabulary of any extent or is entirely familiar with the syntactical arrangements in force in his language system.

No child is born being able to produce all the sounds and sound patterns of his/her language. As a child begins to learn how to speak, (s)he will simplify sounds and sound patterns of his/her language. In the course of acquiring a language, children are likely to employ some strategies of simplification known as “Phonological Processes”. For instance, a young child may simplify the word “corn flakes” to “corn corn”, “fis” for “fish”, “baun” for “brown”. Just like articulation skills, children develop their phonological skills at different rates. However, there are certain ages when a child should stop using different phonological processes.

Stages of Phonological Development in Children

0-3 MONTHS	3-6 MONTHS	6-9 MONTHS	9-12 MONTHS
<p>Birth cry-undifferentiated.</p> <p>Reflexive sound making produces glottal, catch and vowels (ah,eh,uh).</p> <p>Some variety in non-crying sounds.</p> <p>Differentiated cry (true vocal communication begins).</p> <p>Cods and gurgles.</p> <p>Produces single syllables.</p> <p>Begins blowing bubbles.</p>	<p>Babbling begins.</p> <p>Double syllables-vcv aga.</p> <p>Puts lips together says “m”. Nasal tone is heard.</p> <p>Vocalizes pleasure and displeasure.</p> <p>Stops vocalizing when adult enters.</p> <p>Self-initiative vocal play.</p> <p>Coos, chuckles, gurgles and laughs.</p> <p>Babbling show pitch and inflection change.</p> <p>Vocally expresses</p>	<p>Uses m, n, t, d, b, p, y, in babbling multiple syllables.</p> <p>Babbles tunefully-singing tones.</p> <p>Uses wide variety of sound combinations including non-English sounds.</p> <p>Inflected vocal-play intonation patterns heard.</p> <p>Initiates intonation and speech sounds in his/her own repertoire.</p> <p>Reduplicative babbling begins- bababa.</p>	<p>Vocalizes during play.</p> <p>Vocalizes to mirror.</p> <p>Jabbers loudly-wide variety of sounds and intonations.</p> <p>Uses most sounds (C&V) in vocal play- beginning of phonetic drift.</p> <p>May acquire first true words -0-18 months.</p> <p>Variegated babbling begins-combines different</p>

	eagerness.		syllables in vocal play.
<p>Uses sentences like intonations (jargons). Some echolalia.</p> <p>Uses most vowels and consonants and some initial consonants.</p> <p>Basically unintelligible with exception of a few words.</p> <p>Quits final consonants and some initial consonants.</p> <p>Words produced with VC structure (bo / boat emerge).</p> <p>Accurately imitates some words.</p>	<p>Words increasing in frequency – jargon almost gone by 2 years.</p> <p>Asks questions by raising intonation at the end of a phrase.</p> <p>Improvement in intelligibility –how approximately 65% intelligible by 2 years.</p> <p>Appearance of words produced with CVC structure (hot).</p>	<p>Approximately 70% intelligible.</p> <p>May omit final consonant, reduce consonant blends; substitute one consonant for another.</p>	

3 – 3 ¹ / ₂ Years	3 ¹ / ₂ – 4 Years	4 – 4 ¹ / ₂ Years	4 ¹ / ₂ – 5 Years
<p>Uses final consonants most of the time.</p> <p>Phonological processes disappearing by age 3;</p>	<p>Becoming very intelligible in connected speech.</p> <p>Continued refinement</p>	<p>Should be few omissions and substitutions of consonants.</p>	<p>Most consonant sounds used consistently and accurately, though</p>

consonants assimilation, diminutization, doubling, final consonant, deletion, prevocalic voicing, reduplication, unstressed syllable deletion, volar fronting.	of articulatory skills taking place. Consonants mastered; b, d, k, g, f, y. Phonological processes continuing after age 3; cluster reduction, depalatalization, epenthesis, final devoicing, gliding, stopping, vocalization.	Very intelligible in connected speech.	may not be mastered in all contexts. More errors present in difficult blends.
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5 – 6 Years old	6 – 7 Years old
Consonants mastered; t, ing, r, l.	Consonants mastered; voiceless th, sh, ch, j. (by 8 years, voiced th, v, s, zh, are mastered).

(Adapted from Speech and Language Development Chart (2nd Ed.) by Addy Gard, Leslea Gilman, and Jim Gorman (Pro-Ed))

Evolution of Language Acquisition Studies

Language acquisition is the term used to describe the process whereby children learn to speak their native language (first language) or children or adults learn to speak a second language (second language acquisition). The earliest recorded study of first language acquisition was carried out by the German biologist Tiedemann as part of a general study of child development. However, the founding father of the study of child language is perhaps the German psychologist, Preyer, who made detailed daily notes throughout three years of his son's development. Preyer's study fell within the period of diary studies (1876-1926). During this period, the preferred data-collection method was the parental diary, in which a linguist or psychologist recorded their own child's development. Also, during this era, very few studies focused on the development of language alone. The first published work to be devoted to the study of a child's language alone was C. and W. Stern's *Die Kindersprache* published in 1907. It was from this book that the notion of stages of language acquisition was derived (Malmkjær, 2002).

As behaviourist psychology became more popular after World War I, longitudinal studies which focussed on the development of one child over a long period of time, came to be considered insufficient to establish what a “normal behaviour” amounted to. This is because different accounts described children at different intervals and focussed on different aspects of their behaviour. As a result, it was difficult to make clear comparisons between subjects. Instead, large-sample studies which observed/described large numbers of children of the same age, engaged in the same type of behaviour over the same length of time was preferred. It was believed that several such studies, focussing on several age-groups, would provide evidence of what was normal behaviour for each particular age. Studies such as: Smith’s 1926 and Templin’s 1957 studies carried out during the period of large sample studies between 1926-1957 concentrated mainly on vocabulary growth; mean sentence (calculated by counting and averaging the number of words in each sentence a child produced) and pronunciation (see Ingram, 1986, 1989; Campbell and Wales, 1970).

Chomsky’s *Syntactic Structure* published in the same year as Templin’s study however, brought about the end of the reliance on pure empiricism and behaviourist psychology in linguistic studies and ushered in the period of longitudinal language sampling. The work of Chomsky and his followers emphasized the rule-governed nature of language and the main focus of many linguists working on language acquisition since then has been the acquisition of syntactic rules. From a post-chomskyan vantage point therefore, the major shortcomings of the large sample studies seemed to be their neglect of syntax and of the interaction between the different linguistic units. Although, large sample studies which concentrate solely on vocabulary growth, mean sentence and pronunciation may produce information about the age at which particular nouns or verbs or particular sounds are acquired, they however do not reveal which grammatical or phonological rules are at work for an individual child (Ingram, 1989).

Theories of Language Acquisition

According to Thorne (1997), there are four major linguistic theories that attempt to explain the ways in which children acquire language.

Behaviourist Approach

The behaviourist approach posits that children learn to speak by imitating the language structures they hear from adults. As children continue to learn to speak, their utterances are automatically reinforced and corrected by their parents. These activities form the bases of a child's knowledge of language. However, there is a major challenge with this theory of language development. Imitation plays important role in learning a pronunciation and new vocabulary. However, research such as the so-called "fish-phenomenon" (see Berko and Brown, 1960) show that children do not automatically use the standard forms just because they hear adults use it. They tend to over-extend the patterns or rules they already know. For example, because it is laugh-laughed hence it is take-*taked. Also, children seem unable to learn adult corrections. These pieces of evidence show that child language acquisition cannot be based solely on imitation and reinforcement. In addition, this approach fails to explain how children are able to pronounce structures that they have not heard before.

Cognitive Approach

The Cognitive Approach claims that language acquisition is directly linked to intellectual development. According to Jean Piaget, a Swiss psychologist who did extensive work on children's intellectual development, children can use certain linguistic structures only when they understand the concept involved. For instance, children will only understand the future tense when they understand the concept of future time and children have to be able to recognise and conceptualise visual and physical difference before they can begin to talk about shapes and colours. However, this approach has been found to be most effective in describing linguistic progress during the first one and a half years. Even at this stage, it is still difficult to make precise connections between cognitive and linguistic developmental stages.

Nativist Approach

The Nativist Approach assumes that children are born with a natural ability to acquire language. As the brain is exposed to speech, it automatically begins to receive and decode utterances because it has been "wired" to do so. Noam Chomsky, an American linguist and the major proponent of this approach suggests that the human brain has a Language Acquisition Device (LAD) which enables children to automatically pick up the language around them and sort out what is and what is not linguistically acceptable. The device also gives children an innate knowledge of the underlying grammatical rules that govern language usage. It is assumed that the programmed rules are general and through trial and error, the child begins to learn language

specific rules. The approach believes that the LAD explains why children are able to understand new sentences and constructions without having any prior knowledge or experience of them. The major shortcoming of this approach is that it does not recognize the importance of input, the critical age aspect and the role of imitation and reinforcement.

Interactive Approach

In the interactive approach, adults usually change the way they speak to children and give them opportunities to participate in the conversation. This includes the use of “motherese” or “caretaker” by simplification of utterances, use of distinctive intonation patterns, provision of additional information for clarification and introduction of questions that trigger direct participation. Studies have shown that the interactive approach is rewarding because the children receive attention as a direct result of their attempt to communicate. The method is believed to help build a strong bond between children and their parents which in turn is likely to form the basis for future meaningful communication. While the benefits of the interactive approach are obvious, it is difficult to establish a direct link between the language structures that parents use and their appearance in the child’s language.

Theoretical Framework: Natural Phonology:

Considering that this paper is interested in looking at the acquisition of phonology by children between the ages of two and six, it is important to situate it within a particular phonological theory. Natural phonology, a phonological theory propounded by Stampe (1969, 1979) and later expounded by Donegan and Stampe (1979) is found to be appropriate for this study. When children are learning to speak, there is the tendency to assume that the errors of omission and substitutions in their speeches are random errors. Several studies (Stampe, 1979; Donegan and Stampe 1979; Ingram, 1986; and 1989, Dziubalska- Kolaczyk, 2001, etc.) have however, shown that children specific principles and patterns when learning to speak their language. Natural Phonology, considered to be particularly useful for interpreting second language phonology, presupposes that there are phonological processes which constitute the natural responses of human vocal perceptual systems which are used to adapt to the difficulties likely to be encountered in the production and perception of speech. Children are believed to be born with the ability to simplify the pronunciation of their early words in either first or second language by regulating all multi-syllabic words, reduplicating syllables, harmonising consonants, etc. (Ingram, 1986; Villers de and Villiers de, 1997) It is assumed that children are born with the

capacity to assess the immediate shortcomings of their apparatus of speech and then respond to these limitations by initiating remedial substitutions in speech. Many of these processes are not only innate but also universal as they have been found to be widespread among children and across languages with all children demonstrating one or more of them. These processes used by the child, adapts his or her intentions to his or her capacities and also enable the listener to decode the intentions from the speech uttered. Natural Phonology takes into consideration the fact that second language learners have to acquire the ability to produce and perceive new sounds that do not exist in their first language (Archibald 2000:126).

Review of Empirical Literature

Salami's (2004) study of his child's acquisition of English consonants sounds showed that the child employed substitution strategy such as:

1. Stopping: [+ fricative] → [+stop] in sounds such as [f, v, s, ð, θ, and t].
2. Fronting: velars [k, g] → [t, l] as in *carry* [tari] and *garage* [lalaj].
3. Consonant cluster simplification/reduction: CC → C (e.g [gl] → [l]; [sp] → [p]; [lk] → [k]).
4. Approximant gliding: [r] → [w,j]. (e.g bred- bjed).
5. Vowel epenthesis: [æpl] → [apu] (for repair after deletion of /l/).
6. Consonant harmony: place harmony – velar, alveolar and labial.

A short-term longitudinal study carried out by Carroll, et al (2003) on a group of 67 pre-schoolchildren over a 12-month period to measure their syllable, rime, and phoneme awareness, speech and language skills and letter knowledge showed that children's rime skills and syllable awareness developed earlier than their phoneme skills. Like previous studies (Miler, et al 1998; Foy and Mann, 2001), Carroll, et al 2003 also provides evidence that rime awareness and phoneme awareness are separable skills and fundamentally different processes which correlate differently with a range of language and reading measures. While rime awareness was linked with speech perception and short-term memory measures, phoneme awareness correlated with reading and letter knowledge. Studies like Bradley and Bryant (1985), Bradley and Bryant (1991), and Brady, et al (1994) show that intensive phonological awareness training can have a positive impact on the reading and spelling abilities of kindergarten children.

Alqattan's (2015) study of early phonological acquisition by Kuwaiti Arabic children revealed that children showed a preference for some consonants (for example: /l, m, ʔ, h, k, f) which resulted in those sounds being used more frequently than other consonant sounds. In contrast, the same children showed less preference for consonants such as /j, n, x, ʃ, and ʕ/. This means that the children were selective about which consonants they used frequently in spontaneous speech. Alqattan (2015) opines that children's apparent selectivity may be due to personal preferences (for instance, affection for specific named objects or people), the articulatory or perceptual strengths of the individual child, or ease of articulation of the consonant sound. Alqattan illustrates this by giving the example of the dental emphatic sound /ðʕ/ produced accurately by one child only once in the word *lizard* /ðʕab/ possibly owing to the fact that the family had a pet lizard. This is similar to Salami's (2004:608) observation that children have phonological preferences and they tend to select distinct patterns. Children use different processes and there is very little uniformity in terms of what they find difficult and how they solve the same problem.

In general, most studies on acquisition of phonology by children usually focus on a specific aspect of child language data ranging from cluster reduction (Ohala, 1996; Jongstra, 2003), phonological awareness (Bradley and Bryant, 1985; Bradley and Bryant, 1991; Brady, et al, 1994) to consonant harmony (Vihman, 1978; Goad, 1997; Pater and Werle, 2003). However, there are very few studies that adopt a holistic approach in studying child language acquisition by looking at the whole developing phonological system.

Features of Nigerian English Phonology

Nigerian English, according to Adetugbo (1977) is the brand of English spoken by Nigerians just as American English is that type of English spoken by Americans. Nigerian English, like American English should be regarded as a dialect or a group of dialects of the English language which may be at par with any other dialect of English. It has long been recognized that the English language in Nigeria has certain features that set it apart from other varieties of English. Many factors are said to be responsible for the emergence of the Nigerian English lect. Some of them are: inevitable dialect differentiation resulting from a language spoken over a very wide geographical area; interference features on English from Nigeria's many primary languages; the

mode of acquisition of English by Nigerians either through text book or from teachers who are themselves non-native speakers of the language.

Many believe that there are probably as many Nigerian varieties of English language as there are primary Nigerian languages because features of native language interference on English are seen as the main characteristic of Nigerian English. Strevens (1965), for instance, sees two varieties of English in Nigeria whose isogloss parallels the old division between North and South. Awonusi (1987), while examining the Nigerian English situation enumerated a number of studies which have attempted to identify the varieties of English spoken in Nigeria:

Christopherson (1953) identifies spoken varieties, which he claims shade into one another. They are: i. Pidgin English – used mainly by illiterates and semi-literates to communicate with European traders/officials; ii. Educated West African English – marked by occasional though fairly systematic deviation from Standard English in vocabulary and phraseology and iii. West African Native-Speaker English – spoken by Europeans born and/or working in West Africa, and characterized by an accent which is different from accents in U.K. The local accent may be defined geographically and it has own distinct flavour.

Brosnahan writing in 1958 uses education as the yardstick for delimiting varieties and consequently standards in Southern Nigerian English. He identifies the following varieties:

Level I - Pidgin – used by the illiterates.

Level II - English as used by high School graduates (it is characterized by some degree of communication fluency and a wide range of lexical items)

Level III - Primary School English – English as used by people with primary school education (the great number of users); and

Level IV - University English – English used by university graduates and characterized by linguistic features close to Standard English.

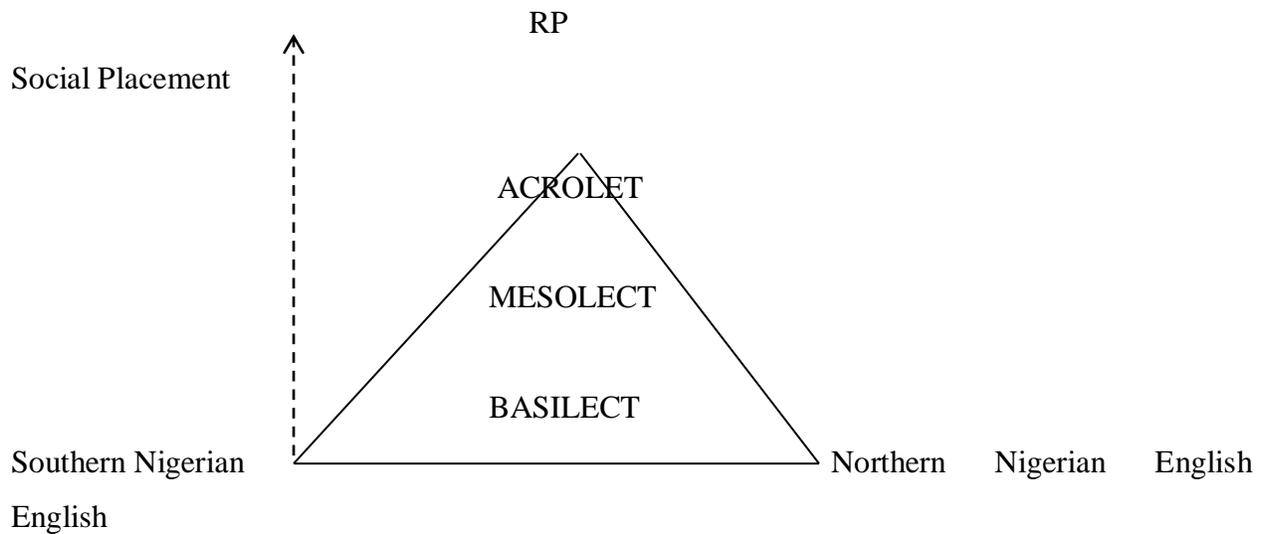
Strevens (1965), while discussing English pronunciation in West Africa, identifies regional varieties (North and South) of West African English, West African Pidgin which he says is ‘a sort of formalized basic English with a highly limited vocabulary and structure’ General West

African English and Educated West African English. He regards the last variety as internationally intelligible and spoken by a handful of people. Walsh (1967), in his fairly complex delimitation, identifies lects along a spatial dimension e.g. Yoruba English, Hausa English etc. he further distinguishes between Standard Nigerian English and Non-Standard Nigerian English. Banjo's (1969) attempt at describing the varieties of spoken English rests on the use of the criteria of local acceptability in Nigeria and international intelligibility. He identifies four varieties which are:

- I English, as used by people with an imperfect knowledge of the language Linguistically, it is characterized by a near-total transfer of the linguistic features of the Niger-Congo languages into English.
- II This variety is marked by high social acceptability – The English is used by 75% of Nigerians, Linguistically, it is syntactically close to Standard British English (SBE) but maximally different from it at the phonological and lexical levels.
- III This variety marked by high social acceptability and high international intelligibility, it is the English used by 10% of Nigerians, which syntactically and lexically is close to SBE, but maximally differs phonologically. Banjo describes such English as having RP deep structures and Nigerian surface structures.
- IV This variety of English is characterized by low social acceptability and high international intelligibility. It is the English used by a handful of Nigerians who are privileged to have English as their first language (L1) either because they were born by native-speaker parents or were brought up in native-speaker environments Linguistically it equates Standard British English.

Todd (1982) and Jibril (1982), building on Christopherson's (1953) attempt, are of the view that the varieties of English in Nigeria constitute a continuum. Jibril, (see also Adetugbo (1987) for a comprehensive catalogue of the features of Nigerian English phonology) describing mainly the Standard Nigerian English accent, proposes a continuum that is pyramidal in shape (similar to what had been proposed for British English). It has at its apex RP, and its base Northern Nigerian English at one end and Southern Nigerian English at the other. Given the nature of a continuum, the pyramid captures both standard and non-standard forms but remains a useful phonological model for describing Nigerian English pronunciation.

Awonusi (1987) also subscribes to the view of a Nigeria English continuum which is pyramidal in shape, socially and geographically motivated, having at its apex, acrolectal Nigerian English, and its maximally broad base, basilectal Nigerian English. Mesolectal Nigerian English, he says, lies between the two extremes



Awonusi describes the Acrolectal Nigerian English as the lect which may also be known as Standard English. Phonologically, the accent is marked by medium, local, social acceptability and medium to high international acceptability. It closely approximates but is not RP. At the segmental level, it minimally differs from R.P phonetically. For instance, the use of assimilation rules such as: *at the* [ad di] instead of [ət ðð] and *is shy* [iʃ ai] instead of [izʃai]. Devoicing of voiced fricatives may also be tolerated: the /ʒ/ → /ʃ/ in *pleasure*. Socially, this lect can be associated with the Nigerian upper class and upper middle class (characterized by economic power, e.g. the ability to fund children's education in native speaker communities and high status schools in Nigeria, high degree of social mobility or exposure, high education etc). Mesolectal Nigerian English is described by Awonusi (1987) as General Nigerian English. It is highly socially acceptable locally and has medium international intelligibility. Phonologically, substantial variation from R.P is allowed, thus making the phonetic realization of the segmental sounds a hybrid of RP sounds and the sounds of some Nigerian languages e.g. the use of velar

devoicing rules, variation in the articulation of morphologically controlled segments like the optional rule:

e.g. mixed [migzd ~ miksd]

looked [lugd ~ lukd]

Other features include: /ʌ/ vocalization e.g. the use of /ʌ/ for the dark /ʌ/ in pre-consonantal positions in words such as *milk*; rare cases of dissimilation e.g. *disturb me* [dis'tɒp mi] instead of [dis'tɜ:b mi]; cluster reduction, the rule changing /ks/ to /s/ in ex-words like externally, except, extreme, etc.; and monophthongization of diphthongs which results in the reduced number of vowels in Nigerian English, e.g. /eɪ/ → /e/ in words like day, take, raise etc. Socially, this lect can be associated with the Nigerian middle class (minus the upper middle class). Awonusi (1987) describes Basilectal Nigerian English as the Sub-Standard or Non-Standard Nigerian English. Phonologically, it has a low to medium social acceptability and very low international intelligibility. Its phonetic and phonological patterns approximate those of Nigerian languages. For example, segmentally, it is characterized by a six to seven vowel system, and the absence of dental fricative, most palato-alveolars, and the velar nasal. Suprasegmentally, it has syllable timed rhythm and exhibits high tonal influence.

Jibril (1979) also believes there are regional varieties in Nigerian spoken English. He says Yoruba speakers of English tend, generally, to be easily identified by their common ways of pronouncing certain English consonants and vowels and by the rhythm of their speech. Speakers of Edo, Tiv, Efik, Igbo and other languages spoken in the areas below the Niger and the Benue each have their own distinguishing characteristics in spoken English. Similarly, as one moves up North one notices a great deal of similarity in the English spoken by members of the numerous ethnic groups who inhabit the area – Kanuri, Fulanis Hausas etc. at the consonantal level, says Jibril, the Northern and the Southern accents diverge in the realization of the dental fricative /θ/ and /ð/. While careful or well trained speakers on both sides of the Niger and the Benue would give the phonemes their full value, speakers in the North would generally tend to realize /θ/ as /s/ and /ð/ as /z/ and even where some dentality is introduced in the realization of those sounds, it tends to be over-whelmed by the friction. Most speakers in the south on the other hand, would tend to realize /θ/ as /t/ and /ð/ as /d/. Concerning the English vowels, the North-South

divergence is marked most prominently in the realizations of /æ/, /ʌ/ and /ɒ/. In the North, /æ/ is often given its full value, but when it is not, it is realized as /e/, whereas in the South, whenever there is a deviation from RP value of this phoneme, it shifts towards cardinal /a/. The central vowel /ʌ/ is generally realized as a cardinal /a/ in the North and as an /ɔ:/ in the South. The long central vowel /ɜ:/ is generally realized in the North as a long /ɔ:/ and in the south as an /ɔ/ or an /e/, depending on whether the spelling is 'or' or 'ur' on the one hand (in words like work,, further) or 'ir' or 'ear' on the other (as in word's like firm, earn). The reason for the divergence between the North and the South pronunciation of English, Jibril attributes to bad language teaching. Even though most observers tend to rate the Northern accent much higher than the Southern accent as regards international intelligibility, Jibril (1979) believes that in the next twenty or so years, the distinction between the Northern and Southern accents is likely to disappear, both having by then merged into one accent which will be predominantly Southern and it is likely that the posh accent of Nigeria Television announcers will in due course, gain currency among Nigerian elites regardless of their ethnic group. When these two predictions materialize says Jibril (1979), we will then be able to speak of a 'General Nigerian Accent' and a 'Standard Nigerian Accent'.

Adekunle (1979) is of the opinion that the more important source of trouble in the second language situation like Nigeria is the tendency to substitute rhythm of the mother-tongue for that of the English language. The English stress, pitch and intonation patterns should be those characteristic of the native English language. Since these elements are basic to language and to meaningful communication, any modification is likely to result in deficiency in the speech produced. Any variety of spoken English that shows traces of the tone or stress pattern of the local languages is therefore considered by Adekunle (1979) as being substandard.

A number of language specialists – Adetugbo (1987), Jibril (1979), Bamgbose (1971) agree that interference is not the only and major reason for the deviation in the phonology of Nigerian English from RP. Though interference features are phonologically significant in Nigerian English, the features are yielding to the establishment of a standard. Bamgbose (in Adetugbo1977) notes that most Yoruba speakers of English do not make in speech the distinction between bit and beat, because it does not exist in their first language. But the

distinction exists in both Hausa and Igbo, even though it is not made in their English. Bamgbose therefore concludes that there seems to be the emergence of a standard local variety. A comparison of Nigerian English vowel phonemes with those of Yoruba, Edo and Efik done by Adetugbo (1987) shows that there is a striking similarity between the two and there is a tendency to want to conclude that Nigerian English phonology is based on the phonology of any or all of these languages. This Adetugbo says, is because western education started in those areas. Adetugbo however points out that interference phenomena not culled from a seven vowel primary system usually give way to the standardized form of Nigerian English phonology.

Methodology

In typical studies of this kind, it has been suggested (see Ingram 1989) that at least three carefully selected talkative children just learning to use multi-word utterances be observed and recorded. This is because if one is chosen, it is difficult to determine if the child is typical or not. If two children are chosen, one cannot tell which of the two is typical and which is unusual. But if at least three children are used for the study, one can at least have a majority that can be used as a basis for make statements about general language acquisition. It is for this reason that ten children – four between the ages of two and four and, six between the ages of four and six, were investigated. Five of the subjects were male while five were female. All the subjects were randomly selected from educated families resident within the Lagos metropolis. Most of the subjects had parents who spoke Yoruba as their first language. The subjects between age 2-4 were in nursery schools (i.e. pre-primary schools) while those between age 4-6 were in primary one or two. Subjects between ages 2-4 were asked to pronounce words/expressions such as cockroach, Bournvita, popcorn, cornflakes, thank you; recite a poem such as:

I love Jesus

He is my friend

He will never leave me

He is my friend

They were also engaged in an informal discussion of about five minutes with picture stimulation such as:

Who is that? (Referring to a father or mother)

What is that? (Referring to a bottle on the table)

What is this? (Referring to an animal in a picture book)

Subjects between ages 4-6 were asked to read words/ expressions such as driver, teacher, cornflakes, television, etc.; and read a short paragraph culled from Unit five of *Macmillan Primary English Course Pupils Book three* by Taiwo O. et al (page 23). They were also engaged in informal discussions.

Each of the four subjects between age 2 – 4, in their different homes were asked to do the following:

- i. Produce each word on the word list once or twice after the researcher
- ii. Recite any known poem or sing any known song
- iii. Respond to various questions asked by researcher with the aid of visuals or pictures.

Each of the six subjects between age 4 – 6 in their different homes were asked to do the following:

- i. Pronounce each word on the word list once or twice
- ii. Read a short paragraph
- iii. Respond to few questions from researcher for about five minutes.

All responses by the ten subjects were tape recorded.

DATA ANALYSIS

The Nigerian Child learns English in a second language environment therefore the variety of English he is likely to acquire is the type known as Nigerian English (some of the basic features of Nigerian English have already been discussed in the preceding paragraphs and it is against this background that data collected from children between ages two and six will be analysed).

Analysis of Data from 2 – 4 year olds

The five children investigated within this age bracket are expectedly still undergoing the language acquisition process therefore they tend to devise means of simplifying speech thereby making use of several phonological processes. However, their productions of most monosyllabic words were quite close to that of adults. For instance, all the children between the ages of two and four had the same pronunciation for six out of ten words which they were asked to pronounce. The children's pronunciations of each of the six words were also quite close to adult pronunciation of these words in Nigerian English.

		RP	NE	Subjects
1.	Thank you	θæŋkju	təŋkju	təŋkju
2.	Flower	flaʊə	flawa	flawa
3.	Apple	æpl	apu	apu
4.	Paper	peipə	pepa	pepa
5.	Dress	dres	dres	dres
6.	Spoon	Spun	Spun	Spun

The table below shows children's production of multisyllabic words indicating the number of children whose pronunciations were similar to adult production.

	RP	NE	Children's Pronunciation	
Cockroach	kɒkrəʊtʃ	kɒkrotʃ	k]krotʃ	3
Bournvita	bɔnvɪtə	bɔnvɪtə	bɔnvɪtə	2
Popcorn	pɒpkɔn	pɒpkɔn	pɒpkɔn	3
Cornflakes	kɔnfleɪks	kɔnfleks	kɔnfleks	1
Elephant	ɛlɪfənt	ɛlifant	ɛlifant	1
Smiling	smɑɪlɪŋ	smɑɪlɪn	smɑɪlɪn	2

In order to simplify adult speech, the five subjects who were between the ages of two and four made use of several phonological processes.

- i. Substitution: By comparing the Child's word to the adult model one notes that some sounds do not correspond.
 - a. An approximant replaced with a liquid (i.e. /l/ instead of /r/).
Bolu 3;8
[ples] instead of [preis] (praise)

Biola 3

[li] instead of [wil] (will)

- b. An alveolar nasal /n/ is replaced with a liquid /l/.

Ayo 4;4

[il] instead of [in] (in)

- c. A liquid /l/ is replaced with an alveolar nasal /n/.

Ayo 4;4

[ɛnivant] instead of [ɛlɪfənt] (elephant)

Ayo 4;4, Biola 3, Daniel 4.

[smainɪ] instead of [smaɪlɪŋ] (smiling)

- d. An alveolar nasal /n/ is replaced with a bilabial nasal /m/.

Ayo 4;4

[pɔpkəm] instead of [pɔpkən] (popcorn)

- e. Labiodental fricative /v/ which ought to be in the second syllable is brought to the initial position to replace the bilabial stop /b/ and the bilabial stop is moved to the medial position which ought to be occupied by the labiodental fricative.

Abiodun 4;5

[vɔnbɪtə] instead of [bɔnvɪtə] (bournvita).

- ii. Assimilation process such as voicing. Consonants tend to be voiced when preceding a vowel and devoiced at the end of a syllable.

Bolu 3;8

[lɔt] instead of [lɔd] (Lord)

Bolu 3;8, Biola 3, Daniel 4

[ɛlivant] instead of [ɛlɪfənt] (elephant)

- iii. Syllable Structure Processes: These are processes motivated by the tendency of young children to simplify syllable structure.

- a. Cluster reduction: A Consonant cluster is reduced to a single consonant

Ayo 4;4

[Kɔkot] instead of [kɔkrɔt] (cockroach)

Bolu 3;8

[Klɔnflɛs] instead of [Kɔnflɛiks] (cornflakes)

Ayo 4;4, Biola 3, Daniel 4

[Kɔnflɛt] instead of [kɔnflɛiks] (cornflakes)

b. Deletion of final consonant

Ayo 4 ; 4

[lɔ] for [lɔd] (Lord)

[gɔ] for [gɔd] (God)

Biola 3

[dʒizɔ] for [dʒizəs] (Jesus)

[frɛn] for [frɛnd] (friend)

Abiodun 4;5

[wɔ] instead of [wɔl] (wall)

c. Deletion of initial or medial sounds

Bolu 3;8

[ɛs] instead of [raiz] (rise)

[smalin] instead of [smaɪlɪŋ] (smiling)

d. Reduplication: In a multisyllabic word, the final syllable is reduplicated.

Biola 3.

[KɔnKɔ n] instead of [pɔpkɔn] (popcorn)

e. Reduplication of consonants in multisyllabic words.

Bolu 3;8, Daniel 4

[bɔnbɪtɔ] instead of [bɔnvɪtɔ] (bourvita)

Bolu 3;8

[krɔkrɔtʃ] instead of [kɔkrɔtʃ] (cockroach)

[Klɔnflɛs] instead of [kɔnflɛiks] (cornflakes)

Analysis of Data from 4 – 6 years olds

The table below shows the performance of 4-6 years olds at pronunciation exercise.

Pronunciation which differed from NE

RP	NE	No. of children		Inioluwa	Ugonma	Ogechi	Debbie	Promise
		Whose pronunciation tallies with NE						
draɪvə	draɪva	(driver) 5						
tɪtʃə	tɪtʃa	(teacher) 4					tɪtʃa	
tɛlɪvɪʒn	tɛlɪvɪʒn	(television) 1		tɛlɪvɪʒn		tɛlɛvɪʒn	tɛlɪʃɪʒn	tɛlɛvɪʃɪʒn
kɔnfleɪks	kɔnfleks	(cornflakes) 1		kɔnfles	kɔnflet	kɔnfles	kɔnfle	
bɑɪsɪkl	bɑɪsɪku	(bicycle) 4					bɑɪzɪku	
bənənə	bɑnɑnɑ	(banana) 5						
tʃɔklət	tʃɔkɔlet	(chocolate) 4					ʃɔkɔlet	kændl
kændl	(candle) 5							
ɛərəpleɪn	ɛrɔplɛn	(aeroplane) 3					hɛrɔplɛn	ɔrɔplɛn
fʊtbɔl	fʊtbɔl	(football) 5						
ðə	ði	(the) 5						
pɪktʃə	pɪktʃɔ	(picture) 0	pɪtʃɔ	pɪtʃɔ	pɪtʃɔ	pɪkʃɔ	pɪtʃɔ	
wɒz	wɔs	(was) 4					wɔz	
dɛsk	dɛsk	(desk) 0	dɛks	dɛks	dɛks	dɛks	dɛks	dɛks
lʊkt	lʊkd	(looked) 5						
wɜ:k	wɜ:k	(work) 5						
stʊd	stʊd	(stood) 5						
bɪsaɪd	bɪsaɪd	(beside) 4					bɪzɑɪd	
brʌðə	brɔdɑ	(brother) 5						
krɔlɪŋ	krɔlɪn	(crawling) 2			krɔrɪn	krɔlɪ	krɔlɪ	krɔlɪ

In nine out of twenty words, all the children between age four and six had pronunciations that were similar to Nigerian English pronunciations of those words.

The data clearly shows that children between age 4-6 have almost completely overcome the tendency for simplifying their speech by making less use of phonological processes though there are still very few cases of simplification such as follows:

- i. Cluster Reduction:
four out of five children pronounced [kɔnfles] or [kɔnflet] instead of [kɔnfleiks] (cornflakes). Four out of five children pronounced [pɪtʃ] instead of [pɪktʃə] (picture).
- ii. Difficulty with consonant cluster production all the children pronounced [dɛks] instead of [dɛsk] (desk).
- iii. Substitution: There is only one case of substitution related to the tendency of children to simplify speech. One out of five 4-5 year olds replaced a liquid /l/ with an approximant /r/ in [krɔrɪŋ] instead of [krɔlɪŋ] (crawling).
- iv. Deletion of final consonant: There is the outright deletion of the velar nasal /ŋ/ or its replacement with the alveolar nasal /n/
Two children pronounced [krɔli] instead of [krɔlɪŋ] (crawling)
Two others pronounced [krɔlin] instead of [krɔlɪŋ]

This, of course, is not surprising as many Nigerian speakers of English often find it difficult to produce the velar nasal. Where the velar nasal is produced in the final position in Nigerian English, it is usually followed by a velar consonant.

Some features in the data are indicative of the existence of regional dialects. One of the subjects Debbie (aged six), made the following substitutions which suggest that she has acquired a regional variety of Nigerian English:

- i. /tʃ/ instead of /t/ in words like [tɪʃə, ʃɔkolet and pɪkʃə] (teacher, chocolate, picture).
- ii. /z/ instead of /s/ in words like [baɪzɪkʊ, bɪzɪd] (bicycle, beside).

The tendency for this type of substitution must have influenced the same subject in producing [wɔz] (was) instead of [wɔs] like other children of the same age.

- iii. /f/ instead of /v/ in [tɛlfɪʒn] (television).
- iv. Hyper correction – the insertion of /h/ before [ɛərəpleɪn] (earoplane) hence pronouncing [hɛroplɛn].

The substitutions above are peculiar to Yoruba speakers of English. This finding concurs with that of Jibril (1979) who states that there are regional varieties in Nigerian spoken English. He says Yoruba speakers of English tend, generally, to be easily identified by their common ways of pronouncing certain English consonants and vowels and by the rhythm of their speech.

Two other subjects aged five and six also made some substitutions which tend to indicate that they have acquired a regional variety of spoken English.

Ogechi (5)

[tɛləvɪʒn] instead of [tɛlɪvɪʒn] (television)

Promise (6)

[tɛləvɪʒn] instead of [tɛlɪvɪʒn] (television)

[tʃɔkolet] instead of [tʃɒklət] (chocolate)

[ɔroplɛn] instead of [ɛərəpleɪn] (aeroplane)

The above data shows that the two subjects have the tendency to harmonize their vowels. Since vowel harmonization is peculiar to Igbo speakers of English, one is prone to believe that these children have acquired a regional variety of English peculiar to the Igbos of Nigeria. This again agrees with Jibril (1979) that explains that ‘Speakers of Edo, Efik, Tiv, Igbo and other languages spoken in the areas below the Niger and the Benue each have their own distinguishing characteristics in spoken English’.

Conclusion

In studying a young child’s speech, one is constantly confronted by the fact that the system being observed is one that is constantly under change. That is, it is not static but dynamic, at any time, showing both older and newer developments. One of the striking of these consequences is the phonetic variability that children show in their pronunciation of words. Children, will often show a variety of production for the same words. According to Ingram (1986) phonetic variability occurs possibly because of phonetic complexity and novelty of some words. That is how

complex a word is and how recently it has been acquired appear to contribute to higher variability in pronunciation.

This study has shown that children sometimes have preferences for peculiar classes of sounds such as fricatives or nasals, or a particular kind of syllable structure. For instance, a subject (Bolu, 3;8) has the tendency to reduplicate her consonants as in words like [bɔnbɪtə (bournvita), krɔkrotʃ (cockroach), klɔnfles (cornflakes), etc]. Another subject (Ayomide, 4;4) also has the tendency to replace liquids /l/ with alveolar nasal /n/ in words like [ɛnɪvənt (elephant), smaɪni (smiling)], when /l/ occurs inter-vocally.

It also reveals that 2 – 6 year olds in educated families in Lagos, like other children in different parts of the world have the tendency to simplify speech by making use of what Ingram (1986) calls phonological processes. Some of the methods of simplification used are: substitution, voicing, cluster reduction, deletion of final consonants, reduplication etc.

This study agrees with earlier studies such as that of Menyuk et al (1986) and Salami (2004) on the belief that normal children can vary widely in the age at which they become able to produce the various sounds of English, and in the order in which they acquire the ability to produce each of those sounds. For instance Ayo (4;4) still substitutes her liquid with alveolar nasal /n/ when /l/ occurs intervocally but Bolu at 3;8 does not make such substitutions.

This study has shown that 2 -6 year olds from educated families in Lagos are more likely to acquire or learn the variety of English known as Nigerian English than the Received Pronunciation (R.P) since most people (parents, neighbours, teachers) in their immediate environment from where this language is picked, speak Nigerian English. Closely related to this is the fact that there are strong reasons to believe that there are regional varieties of English in Nigeria today.

According to Crystal (1987) language acquisition has long been thought of as a process of imitation and reinforcement. Children learn to speak, in the popular view, by copying the utterances heard around them, and by having their responses strengthened by the repetitions, corrections, and other reactions that adults provide. In recent years, however, it has become clear

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