
| RESEARCH ARTICLE

An Analysis of the Production of the Diphthong [ʊə] in Nigerian English

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| ABSTRACT

The work discusses the realization of the diphthong /ʊə/ in contrast with the RP prescription of the diphthong. The study is based on the concepts of interference, which is associated with the concept of contrastive Analysis (CA) and language transfer, which assumes that second language learners have the tendency to transfer the features of their native language to their second language utterances. The study was carried out in Nigeria with educated students from the Department of English, University of Jos, and Nigerian Television Authority College (NTA TVC), all in Jos, Nigeria, as the population of the study. Twenty respondents- fifteen from each of the duo institutions who were between 17 and 25 years old- were purposefully selected. The survey was based on a list of eight words. The students were asked to read the selected words from Roach (2004) on Diphthongs. The researcher carefully recorded their pronunciations on a tape recorder and analysed them accordingly. The analysis led to the observation that Nigerian speakers of English have challenges with the diphthong in question because the schwa [ə] is absent in Nigerian English. The absence of this diphthong makes the realization of this diphthong very difficult and most often results in a complete replacement of the diphthong by a single vowel. The characteristic feature of the centering diphthongs is that the realization starts from the stronger vowels [i], [u], [e] to a weaker vowel, the [ə]. Whereas in the closing diphthongs, the glide starts from the [ə], which is a weak vowel and ends on a weaker [u]. Again, there is apparent and evident difficulty in NigE in realizing these sounds. This is primarily so because the [ə] is not a sound in NigE; as such, the pronunciation of words with a diphthong containing this sound is constantly unstable. The study concluded that Nigerian speakers of English do encounter phonetic problems due to the transfer of their L1 (mother tongue) features into the target language (RP). Some of the factors responsible for this are the lack of correlation between English spellings, pronunciation and mother tongue interference, among others.

| KEYWORDS

Language Transfer, Phonetic Problems, Mother tongue Interference, Received Pronunciation.

| ARTICLE INFORMATION

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1. Introduction

The [ʊə] vowel, according to Cruttenden (2001 p.134), is among the “diphthongal vowel glides”. Diphthongs, according to him, are the sequences of vocalic elements which form a glide within one syllable. Diphthongs may be said to have a first element (the starting point) and a second element, that is, the point in the direction of which the glide is made. In RP, diphthongs have as their first element sounds in the general region of [i, e, a, o, u] and in their second element [u, ə]. Cruttenden (2001) gives five general points about the RP diphthongs as follows: a) Most of

the length and stress associated with the glide is concentrated on the first element, the second element being only lightly sounded;

- b) They are equivalent in length to the long vowel (pure vowel) and are subject to the same variation of quality;
- c) They are particularly susceptible to variation regionally and socially. Even within RP;
 - I. d) no diphthong occurs before [ɔ], except vowel-final [n] is assimilated to [ɔ] in connected speech;
 - II. e) the RP diphthong principally derives from earlier pure vowels with the exception of [ɔi].

The motivation for this research is on the assumption that the English language as a second language in Nigeria is often learned after the native language has been acquired and as a language learned outside its natural setting. This makes English learners develop many linguistic problems, especially in the area of phonology and, in this case, the diphthong in question. Second languages are generally characterized by slower speech speed, lower proficiency and substitution of sounds that are not on their sound system with existing ones. Onose (2010 48) says that "a common word that is heard about learning English is the word interference". He adds that the sound system of English is often highlighted in contrast with those of the local languages. The absence of equivalence between the local languages and the English language might lead to interference regarding second learners of English, especially in the articulation of sounds. The research aims at an analysis of the production of the diphthong [ʊə] in Nigerian English and specifically discusses the diphthong in question in RP and how it is being realized in Nigerian English, and the challenges of the sound among students of the University of Jos and NTA Television College Jos. The theoretical framework and methodology are discussed below.

2. Literature Review

In addition to the basic vowel system of English, Giegerich (2001 p.65) presents that "RP has the [iə] as in here, bear, /ɛə/ in hair, bear, [uə] in sure, cure". He also classifies the [iə], [ɛə] and [uə] as central vowels or centering diphthongs of RP. Giegerich affirms that in historical terms, these originate in most instances from the loss of rhyme [r] and are, therefore, often associated with r-spellings. However, there are instances of these phonemes that are not connected with the historic [r]. They are, for example:

[iə] idea, diarrhea

[ɛə] Eritrea

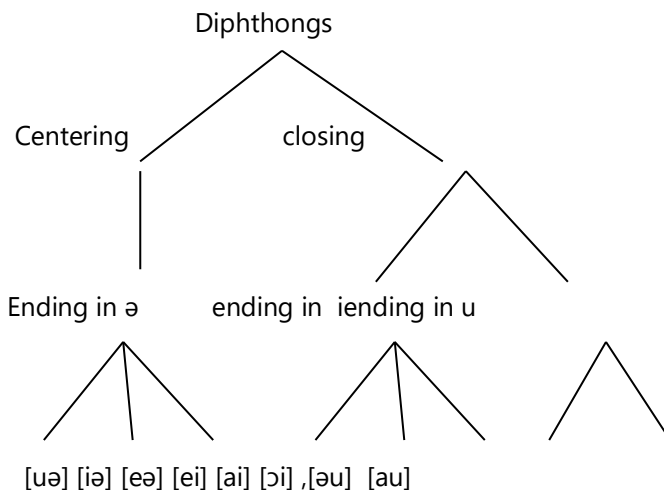
[uə] skoa

The sound [r] in the examples above, Giegerich defines "the diphthong as the result of the contraction of two syllables, which is more common in some words than it is in others.

2.1 Diphthongs and the /uə/ diphthong

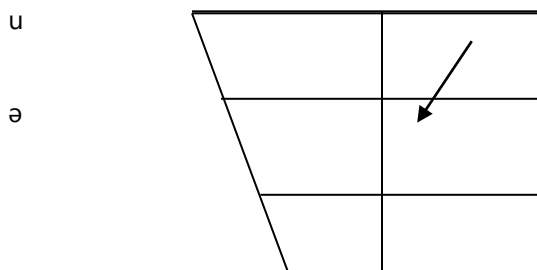
The word 'diphthong' derives from the Greek "diphthongos", literally "two sounds" of two tones. It is also known as a gliding vowel with two adjacent vowel sounds occurring within the same syllable. Roach (1983p.21) defines diphthongs as "sounds which consist of a movement or glide from one vowel to another. He observes that "one of the most common pronunciation mistakes that result in a learner of English having a "foreign" accent is the production of pure vowels where a diphthong should be pronounced. Roach () affirms that diphthongs are like long vowels in terms of length.

The [uə] vowel falls under the centering diphthongs. A centering diphthong is one that begins with a more peripheral vowel and ends with a more central one. They include [iə], [ɛə], and [uə] in RP or [iə] in Irish. Many centering diphthongs are also opening diphthongs like [iə], [uə].



Adapted from Peter Roach(2000): English Phonetics & Phonology.P. 21.

The centering diphthongs glide towards the [ə] schwa vowel. An example is the /uə/ in question and is shown on the diagram below:



In RP, the [uə] glides from a tongue position similar to that used for /u/ towards the more open type of [ə], which forms the endpoint of all three centering diphthongs with a somewhat closer variety of [ə] when the diphthong occurs in word medial position. The lips are weakly rounded at the beginning of the glide, becoming neutrally spread as the glide progresses. Cruttenden (2001 p. 153) observes that “an alternative development of /uə/ in RP is a monophthongization of the diphthong /uə/ to [u:] which is kept distinct from /ɔ:/ several words with /uə/ which has a pronunciation [uə]. This glide may, in turn, be leveled with the realization of [ɔ:], e.g. poor, sore

Spellings of /uə/	Example.
oor	poor, moor, boor
our	four, door, gourd, tournament, bourgeois
ure	pure, endure, cure, sure, abjure, secure
ur	curious, spurious, secondly, insurance, furious
ue, ua	cruel, fluent, puerile, actual, motral, usual, gradual

Adapted from Cruttenden 2001, p. 152

2.2 The [uə] in (Popular) Nigerian English

Roach (1983), as mentioned earlier, describes the diphthong as a “sound which consists of a movement or a glide from one vowel to another” (p.21). Four out of the eight diphthongs in RP contain the schwa [ə]. The [ə] vowel is absent in Nigerian English. The absence of these diphthongs makes the realization of these diphthongs very difficult and, most often, results in a complete replacement of vowel sounds.

The characteristic feature of the centering diphthongs is that the realization starts from the stronger vowels [i], [u], [e] to a weaker vowel, the [ə]. In the case of the closing diphthongs, the glide starts from the [ə], which is a weak vowel and ends on a weaker /u/. Again, there is apparent and evident difficulty in NigE in realizing these sounds. This is so because the [ə] is not in the sound system in NigE; therefore, the pronunciation of words with these diphthongs is constantly unstable. Thus, the meaning of words is derived from the context of [ue], for example:

Word	RP Pronunciation	NigE Pronunciation
Tour	tuə	tua
Home	həʊm	hu'm or ho.m

Roach(1983 p.22) observes that the difficulty of realizing the [ə] by foreign learners of the English language is being encouraged by the lack of consensus in its description. Some scholars see the [ə] as an allophone of /ʌ/, which occurs in strong syllable in English. Others view it as an allophone of several English vowels that occur in real syllables.

According to Cruttenden (2001 pp.70-73), the classical old English sound system, middle English sound system and early modern English sound system do not have the /uə/ vowel on their list of diphthongs. The /uə/ vowel falls under Cruttenden’s “present English sound system”, which has the following in its lists: [ei, əu, ai, au, ɔi, iə], and [uə]. /uə/ is among the seven diphthongs of Bernese German as in *guel* – “good”. Tiddish has three diphthongs but has no /uə/. Others include farose, Noraglan, Icelandic, French, Scottish, Standard English and General American, among others. Irish has four diphthongs with /uə/ in the list; Scottish Gallic also has /uə/ as in four “colo”.

From the empirical review, it is obvious that this study discusses the realization of the diphthong [uə] in contrast with the RP prescription of the diphthong, based on the concepts of interference, which is associated with the concept of contrastive Analysis (CA) and language transfer, which differs from what previous studies have done.

3. Framework and Methodology

3.1 Framework

The research is based on the concepts of interference, which is associated with the concept of contrastive Analysis (CA) and language transfer, which assumes that second language learners have the tendency to transfer the features of their native language to their second language utterances (James 1980, p.14).

The application of the word interference may be traced to several outstanding works by Barry Halle (2003), William Croft (2000), and Ekundayo (2006 and 2014). Croft (2000) opines that “different elements of the same language can interfere with each other if they share enough linguistic substance” and that interference occurs when language items are affected by different dialects, sociolinguistic variants or other structures of the same language (pp.111-165). Ekundayo (2006), on his part, says that interference is “the habit of transferring the rules and dynamics of a language from a section where they have been established and where they acceptably operate to another section within the language where they used not to operate.

Most studies of the phonology of Nigerian English underscore the influence of interference (Ogbulogo, 2005:p.25). Interference here plays a major role, particularly in the articulation of suprasegmental features, spelling pronunciation, and other internal language features, which also largely influence the articulation of segmental in NigE.

3.2 Population of study and sample technique

The study was carried out in Nigeria with educated students from the Department of English, University of Jos, and Nigerian Television Authority College (NTA TVC), all in Jos. Twenty respondents-fifteen from each of the two institutions who were between 17 and 25 years old- were purposefully selected. The students were asked to read the eight selected words from Roach (2004) on diphthongs.

Apart from the use of a stratified sampling technique, which gives each respondent an equal chance of being selected, random sampling was used in the distribution of the wordlist to the students.

3.3 Data collection procedure, instruments and method

The researchers carefully recorded their pronunciations on a tape recorder for analysis. The instruments for this research, therefore, were a tape recorder, transcription tools and earpiece, which helped the researchers to perceive the pronunciation of the students clearly

3.4 Analytical procedure

The researchers employed tables for easy interpretation and examination, where the words were analyzed and discussed accordingly. The columns on the table consist of the word, the RP pronunciation, the students' pronunciation and transcription and comments. The comments section shows the differences between the student's pronunciation and that of the RP.

4. Findings and Discussion

The findings below are derived from students of the University of Jos and those of NTA Television College, Jos, in that order.

4.1 Respondents from the University of Jos

Word	RP Transcription	Voice Transcription of respondents
Fur	[fʊə]	/fɔ:/, /fu:/, /fu:/, /fuə/, /fu:/, /fɔ:/, /fu:/, /fuə/, /fɔ:/, /fuə/
Sure	/ʃuə/ [ʃʊə]	/ʃɔ:/, /ʃuə/, /ʃɔ:/, /ʃuə/, /ʃɔ:/, /ʃɔ:/, /ʃuə/, /ʃuə/, /ʃɔ:/, /ʃuə/
Lure	/ljʊə/	/lɔ:/, /liə/, /lu:/, /lɔ:/, /lɔ:/, /ljʊə/, /lɔ:/, /ljʊə/, /lɔ:/, /lɔ:/
Pure	/pjʊə/	/pju:/, /pjʊə/, /pjʊə/pjiə/, /pju:/, /pju:/, /pjɔ:/, /pjɔ:/, /pjɔ:/
Manure	/mənʃuə/	/mənʃuə/, /manuwa/, /manua/, /manuwa/, /manuwa/manɔ:/, /manuə/, /manɔ:/, /manuwa/, /manɔ:/
Cure	/kjʊə/	/kju:/, /kjʊə/, /kɔ:/, /kjʊə/, /kjʊə/, /kɔ:/, /kjʊə/, /kjʊə/, /kjʊə/, /kɔ:/
Tour	/tuə/	/tɔ:/, /tɔ:/, /tuə/, /tɔ:/, /tɔ:/, /tɔ:/, /tɔ:/, /tu:/, /tu:/, /tɔ:/, /tɔ:/
Poor	/puə/	/pɔ:/, /pu:/, /pɔ:/, /pɔ:/, /pu:/, /pɔ:/, /pɔ:/, /pu:/, /pɔ:/, /pɔ:/S

4.1.1 Results

FUR-3 got it right
SURE-5 got it right
LURE-2 got it right
PURE-2 got it right
MANURE-A person got it right
CURE-6 got it right
TOUR1 person got it right
POOR-None got it right.

The table above reveals that the students only articulated the words "sure" and "cure" fairly because they got 5 and 6, respectively.

4.2 Respondents from NTA College, Jos

Word	RP Transcription	Voice Transcription
Fur	/fuə/	/fuə/,/fɜ:/,/fuə/,/fu:/,/fɜ:/,/fu:/,/fuə/,/fɜ:/,/fu:/,/fɜ:/
Sure	/ʃuə/	/suə/,/sɜ:/,/suə/,/suə/,/sɜ:/,/sɜ:/,/sɜ:/,/suə/,/sɜ:/,/suə/,/sɜ:/
Lure	/ljʊə/	/luə/,/lɜ:/,/liə/,/liə/,/luə/,/lɜ:/,/lɜ:/,/liə/,/lɜ:/
Pure	/pjʊə/	/pi:yɔ/,/puə/,/piə/,/puə/,/puə/,/pu:/,/piə/,/puə/,/puə/,/puə/
Manure	/mənʊə/	/manuwa/,/manuə/,/manɜ:/,/manuə/,manɜ:/,/manɜ:/,/manuə/,/manuə/,/manɜ:/,/manuə/,/manɜ:/
Cure	/kjuə/	/kɜ:/,/kjuə/,/kɜ:/,/kjuə/,/kɜ:/,/kɜ:/,/kɜ:/,/kɜ:/,/kɜ:/,/kɜ:/
Tour	/tuə/	/tɔwa/,/tuwa/,/tɔwa/,/tɔ:wa/,/tuə/,/tuwa/,/tɔwa/,/tuə/,/tɔə/,/tɔwa/
Poor	/puə/	/pɜ:/,/pɜ:/,/pɜ:/,/pɜ:/,/pu:wa/,/pɜ:/,/pɜ:/,/pɜ:/,/pɜ:/,/pu:wa/

4.2.1 Results

The table presents a summary of the performance of the students on the individual words. Here, only three persons got the RP pronunciation of *fur*, while 5 got *sure*. None of the students got the RP pronunciation for *lure*, *pure*, *manure*, or *poor*. Finally, 2 students got the RP pronunciation for *tour* and *cure*.

FUR-3 persons got it right
SURE-5 got it right
LURE-0 rights
PURE-0 rights
MANURE-0 rights
CURE-2 persons got it right
TOUR-2 got it right
POOR-0 rights

The results from the analysis above show that the students poorly articulate the diphthong except for the word "sure".

4.3 Discussion

Barber says that varieties of English used as a second language often differ considerably in phonological system from RP (1993p.28). The situation is evident in that the number of phonemes is often reduced. In one common form of Nigerian English, there is only one phoneme corresponding in RP [i] and [i:], so that *bid* and *bead* are both [bid]. Nigerian English is syllable-timed, unlike RP and American, which are stress-timed. In other words, all the syllables in a phrase seemingly occur at equal intervals, accompanied by a tendency to mark syllable accent by pitch rather than stress.

The tendency to use spelling pronunciation, especially where the replacement of certain phonemes with others in the distribution of vowels, is heightened in this study. The transfer of the rules guiding the production of speech sounds of a dominant language in a speech community to the sound system of a target language (phonic interference) is mostly always realized. Here, it is predominant at the Phonological level as a result of differences between the sound patterns of the mother tongue and that of the RP. The situation called retroactive Interference is prevalent here, which retards the process of acquisition of the target language. An example is the absence of the

[uə] in most Nigerian Languages, the voiced labio-dental and voiced dental fricatives, which are present in RP but absent in Nigerian English. In Tarok Language, for instance, the sounds above are substituted with the labio velar plosives /kp/, /gb/ and the labio velar fricative /ɣ/, among others. Roach (1983 p.22) observes that the difficulty of realizing the [ə] by foreign learners of the English Language is being encouraged by the lack of consensus in its description. Some scholars see the [ə] as an allophone of /ʌ/, which occurs in strong syllables in English. Others view it as an allophone of several English vowels that occur in real syllables.

The characteristic feature of the centering diphthongs is that the realization starts from the stronger vowels /i/ /u/, /e/ to a weaker vowel, the /ə/. Whereas in the closing diphthongs, the glide starts from the [ə], which is a weak vowel and ends on a weaken /u/. Again, there is apparent and evident difficulty in NigE in realizing these sounds. This is primarily so because the [ə] is not a sound in NigE; as such, the pronunciation of words with these diphthongs is constantly unstable.

5. Conclusion

It is evident that Nigerian English language speakers are usually faced with the challenge of English pronunciation since there is no one-to-one correspondence between the spelling of the English language and its pronunciation. There is no consistency between the graphemes and sounds that are actually produced and realized at the phonetic and phonological levels to convey meaning as the native speaker. This is consequent because the English language has 8 diphthongs, each of which is a combination of two single sounds, one gliding into the other. This results in the pronunciation of only one of the letters and not the sounds. In words like "tour", which is realized as [tɔ], the speakers mispronounce most of the English diphthongs by shortening their length. In this case, the first elements of the diphthongs are articulated, while the second elements are not.

It could then be concluded that Nigerian speakers of English do encounter phonetic problems due to the differences between the mother tongue and the target language (RP). Some of the factors responsible for this are the lack of correlation between English spelling and pronunciation and mother tongue interference, among others.

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