# **Exploring Phonetic and Phonological Variation: RP and the Nigerian English Accent**

Kofoworola Adedeji

Department of English, University of Lagos, Lagos, Nigeria.

#### **Abstract**

Although various studies into the intelligibility of speech have been conducted, limitations may be observed in terms of their basic paradigm. Many have focused on the measurement of the intelligibility of non-native English varieties to native speakers, being based on the premise that native speaker speech is inherently intelligible. In contrast, an attempt has been made here to assess the intelligibility of a native speaker accent (RP) from a non-native (Nigerian English) perspective. Involving British and Nigerian undergraduates selected from a British university and a Nigerian university, a hierarchy of the intelligibility of RP vowel phonemes is established. This not only provides evidence that intelligibility is a phenomenon which may be examined from a non-native speaker perspective, it also identifies specific features of RP segmental phonology which presents problems to Nigerians.

Key words: RP vowels, intelligibility, non-native speakers

#### Introduction

This paper explores the issue of phonetic and phonological variation between a native speaker English accent and a non-native speaker English accent. With special emphasis on how language convergence and divergence impinges on a speaker's intelligibility to a listener, we examine how intelligibility is negotiated in the face of accent variation.

Accent refers to the totality of the sound system of a language or language variety, comprising the phonemic contrasts and the tone

group, what is more commonly known as pronunciation. The two accents considered in the paper are RP (Received Pronunciation) and NEA (the Nigerian English accent). Therefore, by RP we refer to the pronunciation features of the Standard British English accent while the NEA refers to the accent of English used in Nigeria. However, proper contextualization must be provided at this point considering the wide variability, which often characterizes accents. Many types of RP accents have been identified. They include Upper-crust RP (URP), Mainstream RP, Adoptive RP, Near-RP (Wells 82) and General RP, Refined RP and Regional RP (Cruttenden 79). We define our RP accent as an amalgam of the features identified in Wells and Cruttenden as constituting Mainstream RP and General RP. This is the least marked type of RP and it comprises the following uncontroversial list of 20 contrastive vowels and diphthongs as stated below:

/ı, iː, e, æ, ɑː, ɒ, ɔ, u, uː, ʌ, ɜː, ə, eɪ, aɪ, ɔɪ, əu, au, ɪə, eə, uə/

In the same way, the Nigerian accent of English is also not homogeneous, as several varieties of it have been identified. Attempts at describing the Nigerian accent of English include that made by Adetugbo, Bamgbose, Jibril, Udofot and Banjo. Of these attempts, Banjo's classification is the most often quoted and represents the most realistic description of the Nigerian accent of English. This is because it is close to present-day realities of language use in the country. Banjo's description identifies Variety One, Variety Two, Variety Three and Variety Four respectively. However, Variety Three is the variety on which this study focuses because this is the accent variety used by the group of Nigerians in which we are interested. These are educated Nigerians at the undergraduate level who speak a brand of English which Banjo refers to as "the variety of Spoken Nigerian English which is internationally intelligible and acceptable...the most appropriate endonormative model" (209).

Generally, intelligibility may be studied across the linguistic levels of grammar, semantics, lexis and phonetics/phonology. However, speech intelligibility is studied at the linguistic level of phonetics/phonology where intelligibility is seen as a construct of speech and "the hearers' response is perceived as appropriate only if the linguistic forms which

constitute the speakers' utterances are selected appropriately" (Catford 2). Therefore, speech intelligibility refers to word/utterance recognition, which involves the identification of vowel and consonant sounds and also intonational and prosodic features.

The utterances of the RP speakers represent the linguistic forms, while the hearers' perceptions of RP speech forms constitute the listener's response in this study. In line with the intelligibility testing framework, both the RP speakers' utterances and the Nigerian listeners' written responses are subjected to critical phonological analysis in order to determine the number of instances of intelligibility failure, identify the RP speech features responsible for instances of intelligibility failure and most importantly, offer phonological explanations as to why intelligibility failure occurs.

Phonological considerations generally involve segmental and suprasegmental sounds. Consonants and vowels constitute the segmentals while the suprasegmental sounds include the features of stress, rhythm and intonation. However, our examination is limited to the realizational qualities of RP segmental vowels, more specifically, the RP monophthongs. This aspect of RP accent phonology is examined in the study with a view to determining their effect on intelligibility.

In order to have a relatively parallel group of Britons and Nigerians, selection was done within certain linguistic, educational and sociolinguistic principles. The principles were set down to ensure a certain level of homogeneity among the informants. The principles employed for the selection of both the Britons and the Nigerians involved in the study are outlined below:

# RP speakers:

- (i) born and bred in Britain, more specifically in England;
- (ii) parents must be educated (at least up to university level);
- (iii) never have been outside England for a considerable length of time;
- (iv) a university undergraduate; and
- (v) attended a public school.

## Nigerians:

- (i) university undergraduate;
- (ii) born and bred in Nigeria;
- (iii) parents must be educated (up to university level);
- (iv) never been outside Nigeria for a considerable length of time; and
- (v) obtained a minimum intelligibility score of 90% with an educated Nigerian speaker.

In this way, 16 speakers of RP (8 females and 8 males) were selected from among the student population of the University of Leeds, England and 160 Nigerians (102 females and 58 males) from among the student population of the Obafemi Awolowo University, Ile-Ife, Nigeria (ratio 1:10). A twelve-item test was designed (see appendix) and presented to the 16 RP speakers. Their utterances were electronically recorded and then presented to the Nigerians. Written responses were provided by the Nigerians as they were instructed to write down in Standard English orthography what they had heard. The intelligibility scores are presented below in a table.

Table: Vowels and level of Intelligibility

		Number of intelligibility	Total number of
S/N	Minimal pairs	failures	utterances
	Vowel Contrast		
1.	□/ʒː;ɔː/	294	320
2.	/e; æ/	256	320
3.	/ʌ; aː/	230	320
4.	/:c ; a/	224	320
5.	/ʊ ; u:/	93	320
6.	/iː□□ ; ɪ/	81	320
	Total	1178	1920

These results show the descending order of vowels and number of times in which intelligibility failure occurred. Out of a total of one thousand, nine hundred and twenty (1920) utterances, intelligibility failure occurred one thousand, one hundred and seventy eight times (1178). Generally, the items that led to the highest instances of intelligibility failure with the vowels were those involving:

- (a) the central vowels
- (b) phonologically absent segments; and
- (c) vowel length

The causes of intelligibility failure for individual phonemes are considered below.

## /31; 31/

Contrasts involving \( \textstyle{1}\)/3:/ and \( \textstyle{1}\)/2:/ were responsible for the highest instances of intelligibility failure. The RP speakers produced these vowels for the pair of words: \( fur \) and \( for \) and many Nigerians responded with devices such as space and omission marks. Other responses included: \( for \) in place of \( fur \) and vice versa, \( from, fun \) and \( fall \). For both vowels, the RP speakers produced qualities articulated with the center of the tongue and with considerable length. Although there were individual variations, all the realizations were between close-mid to open-mid; the only difference between the two vowels being that one is accompanied with lip rounding while the other is not.

The most likely cause for lack of intelligibility for this pair is the absence of these vowels from the phonology of many Nigerians. They are both central vowels and the RP central vowels are known to constitute problems for Nigerians. Awonusi described this pair as 'marginal vowels' in reference to their rarity in the speech of most Nigerians (221). /ɔ,e,a/ may be the closest vowels that most Nigerians use instead of this pair.

## /e; æ/

These contrasts also led to a high number of instances of intelligibility failure. The RP speakers produced the lexical set of

said and sad but the Nigerian listeners could not differentiate between the two words as they responded with one instead of the other. Other responses were even farther off the mark as they included responses such as send and sell. Some of the listeners also responded by writing said twice, probably because both items sounded alike in terms of perception. This may have occurred because the realization of /æ/ produced by the RP speakers was rather more open that the usual RP pronunciation. Rather than the tongue being raised to a position midway just above open, the realization was with a more lowered tongue position and a more open lip position, which was close to Cardinal [a]. This realization sounded similar to RP /a/. The lowering of /æ/ into /a/ is a recent development in RP but it brings this vowel closer to the NEA equivalent of /æ/ which is /a/. /æ/ is also a marginal sound in that it is not used by a majority of Nigerians.

## /\hc, a:/

This pair of vowels was responsible for a high number of intelligibility failures. This may be because  $/\Lambda/$  is also a central vowel and vowels at this position tend to constitute problems for Nigerians. It is also a marginal vowel as only a minority of Nigerians has the vowel in their phonologies. The RP speakers articulated this vowel in the word *cut* with the center of the tongue raised just above the fully open position and with the lips neutrally open. The quality was similar to that of a centralized and slightly raised Cardinal [a], which is perceptively similar to/ $\alpha$ /. Therefore, most of the Nigerian listeners responded with *cat* and *car*. The confusion with *car* may be because syllable final /t/ is usually with no audible release in RP. Thus, to the Nigerian listeners who are accustomed to full release and aspiration of /t/ in this position, it would have sounded as if the consonant was missing.

The lengthening that accompanied /a:/ should have assisted the Nigerian listeners to differentiate between this pair of vowels but Nigerians like most L2 learners of English are not accustomed to using length as a feature for sound differentiation. Lack of differentiation in vowel length is one of the most striking features of

the NEA. Thus, where length is often employed by native speakers for vowel differentiation hardly is this feature used by L2 speakers. Therefore, the responses written by most of the Nigerian listeners for *cart* was *cat* and a few even responded with *can't*.

### /ic; a/

The items for this pair were *often* and *orphan*. The two are very close in phonetic space being articulated by the RP speakers with the back of the tongue. The difference was that while /p/ was articulated with the back of the tongue in the fully open position, /ɔː/ was articulated with the back of the tongue raised between the open-mid and close-mid positions. This closeness in vowel space coupled with the phonologically absent /t/ in often led to a majority of Nigerians responding with *often* and *often* or *orphan* and *orphan*. As with the other long vowels discussed above, the length, which accompanied /ɔː/ did not seem to assist the Nigerians to discriminate between this pair of vowels as non-differentiation of vowel length is a major characteristic of NEA. Moreover, the most common realization of /p/ among Nigerians is /ɔ/. This may have also added to the confusion.

Besides this, it is possible that the phonological absence of [t] in the pronunciation of some of the RP speakers may have further added to the confusion experienced by the Nigerians. The /t/ in *often* has variable realization which led to realizations of the item as [pfən] and[pftən]. However, the realization without 't' was more common among the RP speakers. This was probably responsible for the confusion observed with the two items.

# /ʊ ; u:/

This pair of vowels caused a considerable lower number of intelligibility failures than the others, which have been discussed earlier. They were represented by *full* and *fool*. The RP speakers articulated the short vowel sound in full with a part of the tongue nearer to center than to back raised just above the close-mid position. However, a degree of fronting and lack of rounding were observed to accompany the realization of this vowel and this gave

the articulation a quality similar to Cardinal [ $\ddot{v}$ ]. This may be why some of the Nigerians responded with *fill*. But others responded correctly. /uː/ was articulated by the RP speakers with varying degrees of centralization, lowering and rounding ranging from [ $\ddot{u}$ :] to [ $\dot{u}$ :]. While some Nigerians responded with *fill*, others responded correctly. The relatively fewer instances of intelligibility failure that occurred with this pair may be because these vowels exist in the phonologies of most Nigerians although there is a blurring of the distinction between RP / $\upsilon$ / and / $\upsilon$ :/.

/i:□; ɪ/

The articulation of /i:/ by the RP speakers was with the front of the tongue raised to a height slightly below and behind the front close position with the lips spread. /I/ is somewhat similar with a part of the tongue nearer to center than to front raised just above the closemid position with the lips also loosely spread. The lexical items for these vowels were *fill* and *feel* and most of the Nigerians responded correctly probably because these vowels have similar representations in Nigerian indigenous languages. Thus, the vowels were familiar to the Nigerians. Only a few instances of intelligibility failure were observed with responses such as *feel* instead of *fill* and vice versa. This was probably due to the characteristic of lack of discrimination in vowel length, which is common with Nigerians.

#### Conclusion

This phonetic/phonological study involving speakers of RP and Nigerians has focused on accent variation and how it impinges on intelligibility in interactional communication between educated native and non-native speakers of English. Our corpus of data comprising relatively decontextualized speech provided insights into the dynamics of intelligibility negotiation between educated Britons and Nigerians. The use of both quantitative and qualitative procedures for the analysis of the British speakers' utterances and the Nigerian speakers' responses has equally provided evidence of the phenomenon of accent variation as it occurs between speakers of the Standard British English accent and Nigerians. Our main observation is that the segmental level of RP phonology has great

impact on level of intelligibility. The results on segmental phonemes (vowels) of the Standard British English accent (RP) and the instances of lack of intelligibility in relatively decontexualized speech showed that certain phonemic contrasts are very crucial for intelligibility while some have very little impact. Thus, a hierarchy of intelligibility of RP segmental phonology was established. Constituting the greatest threat to intelligibility were the central vowels, while phonologically absent segments and vowel length were also found to cause confusion for the Nigerian listeners.

#### References

- Adetugbo, Abiodun. "Nigerian English Phonology: Is there any Standard?" *Lagos Review of English Studies*, IX (1987): 64 84.
- Atechi, Samuel. "The Intelligibility of Native and Non-Native English Speech: A Comparative Analysis of Cameroon English, British and American English". Ph.D. dissertation: Technischen Universitat Chemnitz. 2004
- Awonusi, Segun. "Some Characteristics of Nigerian English Phonology". Eds. Segun Awonusi and A.B Dadzie. *Nigerian English: Influences and Characteristics*. Lagos: Concept Publications. 2004, 203 25
- Bansal, R. *The Intelligibility of Indian English*. Hyderabad: Central Institute of English, 1969.
- Catford J. "Intelligibility". *English Language Teaching*". 5: 1950, 7 17.
- Coulmas, Florian. *The Handbook of Sociolinguistics*. Ed. Florian Coulmas. Oxford. Blackwell Publishers. 1997: x xi
- Cruttenden, Allan. *Gimson's Pronunciation of English*. Malta: Hodder Education, 7<sup>th</sup> Ed. 2008.
- Gupta, Anthea. "Inter-accent and Inter-cultural Intelligibility: A study of listeners in Singapore and Britain". *English in Singapore: Phonetic Research on a Corpus.* Eds. David Deterding, A. Brown and E. Low. Asia: McGraw-Hill Education, 2006
- Kachru, Braj. "Models for Non-Native Englishes." *The Other Tongue:* English Across Cultures. Ed. Braj Kachru, Oxford: Pergamon Institute of English, 1985

- Rajadurai, Joanne. "Intelligibility Studies: A Reconsideration of Empirical and Idealogical Issues". *World Englishes*.26 (1) (2007) 87 98.
- Udofot, Inyang. "Stress and Rhythm in the Nigerian Accent of English". *English Worldwide*, 24(2) (2003) 201 220.