

Nigerian Received Pronunciation

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Introduction

This paper generally lends support to the arguments advanced by Awonusi (1989, 1990, 2004) and others in favour of an endornormative as opposed to an exonormative standard for English pronunciation in Nigeria. They include the fact that the existing, exonormative standard, British Received Pronunciation (RP), has undergone and is still undergoing changes in its homeland, and is not homogeneous. The heightened social mobility of today's world perhaps works against the demarcation and homogenization of language varieties, and this is all the more true of the varieties or lects that have been proposed for Nigerian English when these are related, more or less explicitly, to educational attainment. Major attention is given in the paper to a schema of basilect, mesolect, and acrolect presented by Ugorji (2010), with a focus on his account of vowels and his presentation of a mechanism derived from optimality theory for evaluating vowels in contention. The basilect and the mesolect are found to be so close to each other that they might be combined. There would then be just two varieties. In contrast, the acrolect is close to British RP, albeit with many variants due to the conflict of two standardising forces, i.e. British RP and the basilect-mesolect. The vowel system of an officially adopted endonormative standard - 'Nigerian RP' - would mainly be the same as that of British RP, but the optimality mechanism could be employed to give preference to some of the Nigerian variants for inclusion in it.

Received Pronunciation (RP) in Nigeria: the continuing model

It is obvious that, even in the early twenty-first century, and in spite of much earlier debate on the subject, RP remains the model which is still officially prescribed in Nigeria and which teachers and students make efforts to follow and believe they ought to follow. Of fundamental importance here is the fact that it is the model assumed by the Speech or Spoken English sections of the National Curricula in English for different levels of the school system; by course-books based on its provisions; and by other, 'dedicated' works serving as aids to students such as Jowitt (1996) and Awonusi (1999). Teachers and students of phonology in higher institutions encounter it in such works as O'Connor (1980), Roach (1991), and Eka (1996), and Use of English students find it in textbooks written for them such as the recent Adegbite et al. (2012). Of immense importance for the general English-using public in Nigeria is the fact that the phonetic spellings of the headwords found in the most widely used dictionaries, such as the Oxford Advanced Learners' Dictionary (OALD), are based upon it.

A powerful 'New English' argument advanced against the continued prestige of RP is that, because English has become domesticated or nativised in Nigeria, and because in a sense 'English has become Nigeria's property' (Adegbija 2004), the model for English usage in Nigeria, including pronunciation, should be evolved from within, should be 'endonormative' and not 'exonormative'. The argument does not necessarily imply that an endonormative model would in its content differ from the existing exonormative model. But pragmatic logic leads us to infer that it would be so. An important consideration here is the claim that few Nigerians adhere to the RP model

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(Adetugbo 1993) and few teachers are able to model their own production of English sounds on it, although, as this paper will suggest, its impact on the way many Nigerians speak may be greater than we think.

The trials and tribulations of British RP

Awonusi (1989; 2004) also maintains that it is not realistic to retain British RP as the model for Nigeria and other 'English as a Second Language' (ESL) countries where hitherto it has served this function, especially for teaching purposes. He presents two compelling arguments: RP has been undergoing changes, and RP has been losing prestige even in its homeland. Data in support of the first argument, which can be found in the various editions of A.C.Gimson's monumental work on English pronunciation and Cruttenden's revision of this (e.g. Cruttenden 2001), include changes that were in progress quite early in the twentieth century, such as the coalescence of the one-time diphthongal phoneme /ɔə/ with /ɔ:/ in words like *more*; the coalescence of the voiceless labio-velar /m/ with its voiced counterpart /w/ in words like *when*; more recently the replacement of /oə/ with /ɔ:/ in certain words including *sure* (so making this rarest of English vowels even more rare), and the lengthening (or tensing) of /ɪ/ to /i:/ when it is the nucleus of a final, open, but unstressed syllable, as in *happy*. Still more recent and more controversial data, though relevant to the argument, is discussed below.

The loss of RP's prestige and pre-eminence in its homeland, Awonusi's second point, is a consequence of the decline of the political and social élite whose power it once symbolized and the movement of British society in a more democratic direction. The matter has been discussed by numerous British academics and journalists over the years. Thus Mugglestone (2003) shows that RP has become a stigmatised accent which its 'native speakers' are ashamed to use, with the result that they modify their accent to make it sound less 'posh'. This may be true of Queen Elizabeth herself; it is conspicuously true of younger members of the Royal Family such as the Queen's grandson Prince William, the second in line to the throne; it is not at all true of his father Prince Charles. Outside Britain, those listening to news broadcasts on BBC World Service radio or viewing them on BBC World TV will have noticed a steady decline in the number of newsreaders speaking with this accent.

A third argument that can be advanced here, although it is related to the first and the second, is that RP is not homogeneous. As demonstrated by Wells (1982) and Cruttenden (2001), there are varieties of it, labelled by Cruttenden respectively as 'refined', 'general', and 'regional'; and Jowitt (2007b) suggests that the number of speakers of the latter two is increasing and is much greater than that of speakers of 'refined' RP. The differences between the 'refined' and 'general' varieties, though very salient, are phonetic rather than phonemic: thus refined RP has – or had – a closer realization of /æ/, so that a word like *catch*, /kæʧ/, tends to sound like [kɛʧ] (as still in South African, Zimbabwean, etc. English); its long back vowels are maximally retracted; and its diphthongs have a maximally protracted first element. A 'regional' RP is fundamentally the same as general RP (for example, with the first element of diphthongs not markedly protracted), but contains certain regional features: thus the former Conservative Party leader and current (2012) Foreign Secretary, William Hague, uses a low front vowel, [a], instead of a low back vowel, [a:], in words like path and glass, which is one of the markers of the speech of Yorkshire, where he was born. Sixty years ago he would probably have undergone 'elocution' classes to 'improve' his accent, as the former Conservative Prime Minister Mrs Thatcher is said to have done in order to eliminate traces of her original Lincolnshire accent.

The current British sociophonological scene is further complicated by 'Estuary English', which has caused much controversy since Rosewarne (1984) first wrote an



article that sought to demonstrate its existence; Awonusi (2004) devotes some space to it. It has been described both as Cockney (or popular London speech) modified 'upwards' in the direction of RP, or as RP modified 'downwards' in the direction of Cockney, which suggests that it could also be described as a regional RP; and it is said to have become characteristic of persons who attended not the prestigious independent schools, but State, 'comprehensive' schools and then gone on to university, especially in the London region (around the Thames estuary). Its presence is signaled phonologically by the glottalisation of final /t/, the replacement of final or pre-consonantal [ł] with [w], the diphthongization of the vowels /i:/ and /u:/ (which thus tend to become [əi] and [əu]), and the opening of the first element of the diphthongs /ei/ and /əu/ (which thus tend to become [xi] and [xv]). Partly because some of these features occur in the speech of people who are fundamentally RP speakers, it becomes impossible to say where the one accent 'begins' and the other 'ends'. That is ultimately to say that individuals in the London region, or their speech patterns, could be arranged on a continuum, with RP at one extreme, Cockney at the other extreme, and Estuary in the middle. The continuum could be presented as a cline of three varieties; or perhaps, as Maidment (1994) suggests, Estuary has no basis in sociophonological fact, there is no need to postulate its existence, and it should therefore fall victim to Ockham's razor.

Nigerian English: the problem of varieties

The picture of RP in the early twenty-first century that emerges from this account has many implications for the status of RP in Nigeria and for our approaches to the question of Nigerian English phonology. In the first place, when we say that RP is or should be or should not be the model for English pronunciation in Nigeria, we surely ought to indicate which variety of RP we have in mind. One variety is likely not to prove, or has not proved to be as acceptable in Nigeria as another. Thus it is possible that when Banjo (1971) said that his 'Variety 4' was the same as RP and was therefore not acceptable in Nigeria, and a number of scholars subsequently expressed agreement with him, the variety of RP being referred to was refined RP – of which some decades ago there were many exponents in Nigeria, Nigerian as well as non-Nigerian. Or, to look at the problem from another point of view, it is unlikely that the /t/-dropping which has become fashionable among politicians in Britain is acceptable to or will be operated by their counterparts in Nigeria. In this paper, 'RP' will henceforth refer to general RP unless another indication is given.

Secondly, the uncertainty, the fuzziness that we encounter when we try to identify and demarcate varieties of spoken English in the south-east England region also manifests itself when we seek to identify varieties of Nigerian English, as many scholars have sought to do (Brosnahan 1958; Banjo 1971; Adekunle 1979; Bamgbose 1983; Jibril 1986; Bamiro 1991; Criper-Friedman 1990; Udofot 2003). The methodological problem is that, if we exclude what I have called the 'horizontal' type of differentiation of varieties, i.e. the type related to region or ethnic group (Jibril 1986; Gut 2008), the varieties proposed are developmental. In Britain, an individual might over the course of time move from being a speaker of Cockney to being a speaker of 'Estuary' to being a speaker of general RP, and will add or drop features while moving from one to another. In the same way, in Nigeria a speaker might move from being a speaker of Variety 1 to being a speaker of Variety 2 to being a speaker of Variety 3. But the argument has greater force in the Nigerian context, because the varieties proposed for Nigerian English are more exclusively developmental and so related to education, with mother-tongue influences on English speech gradually being eliminated through formal education and through exposure to the wider Nigerian world. In the British case, the different accents were originally class-related, with Cockney as the speech of lower-



class Londoners and RP as the speech of the upper classes, 'received' by and so acceptable to them. Perhaps in both cases, and throughout the world, the greatly increased social mobility of the last fifty years has worked against the homogenisation of all language varieties.

I first expressed skepticism about a developmental (what I have also termed a 'vertical') taxonomy of varieties in Jowitt (1991). Although Banjo (1995) rightly points out that in that work I still (in practice, and willing to follow convention) assign each item of Nigerian English usage to one of the three varieties proposed by Bamgbose (1982) in his revision of Banjo's original schema, it remains permanently desirable not to assume that the varieties have been or can be reified.

The problem can be presented essentially like this. Let us imagine that we are trying to establish two varieties, A and B. A variety is a set of usages: let us imagine a set of usages, $\{1, 2, 3, \ldots, 8\}$. A variety is at the same time the usages of individuals: let us imagine just three individuals, p, q, and r. Each individual is characterised by a unique set of usages (if not, we would have just one variety). Let us imagine that the sets of individual usages are as follows: p = 1, 2, 3, 4, 5, 6; q = 2, 3, 4, 5, 6, 7; r = 3, 4, 5, 6, 7, 8. If we then wanted to distinguish variety A from variety B, on what grounds would we decide that A = p + q, B = r, or alternatively that A = p, B = q + r? The decision would be arbitrary. We could however say that p and q and r form a continuum or cline, logically in the order p, q, r, and that while q is different from p and r is different from q, p and r are maximally different from each other, they are polarities on the cline; there is greater validity in contrasting them with each other than in contrasting either with q; and A and B cannot be specified, except arbitrarily.

This is of course a statement of the problem in a highly compressed, idealised form. It is compounded when we want to distinguish three or more varieties, when we reckon with a probably unlimited number of usages, and when the number of individuals concerned runs into millions and is also not determinate.

Ugorji's Phonology of Nigerian English

As I point out in Jowitt (2008), it became tempting for some Nigerian scholars to correlate the Banjo-Bamgbose trio of varieties with the 'lectal' taxonomy of 'basilect', 'mesolect' and 'acrolect' originally proposed by Bickerton (1973) for the very different Caribbean context. Since these too are developmental, it is natural to correlate each lect with a degree of competence in English, as Fakoya (2004) does. Like Adesanove (2004), writing in the same volume, he writes from a highly prescriptive point of view and lambasts the inadequacies of much of what passes today in Nigeria for educated English usage, including that of some professors. Fakoya believes that the term 'acrolect' can be applied to the usage of just a very few highly educated people, and that although one would expect the mesolect to have the largest membership of the three, 'many Nigerians (re)lapse into basilectal morphology, syntax, and semantics'. In his critical view, the English spoken by many Nigerians is 'usage that may be said to have gone "awry". It is 'best described as a Mediolect', a term apparently invented by Fakoya that blends 'mediocre' and 'lect'. Embracing both the mesolect and the basilect, it corresponds roughly to my 'Popular Nigerian English' (Jowitt 1991; 2008), although my approach to it is descriptive rather than prescriptive. In effect, Fakoya is proposing just two, not three varieties, as in effect I have done too (since 'Popular' contrasts with the - yet to be codified - 'Standard' Nigerian English).

Fakoya does not discuss phonological examples, but the schema of a trio of lects is taken up and applied to Nigerian English phonology by Ugorji (2010). All three lects are now said to characterise 'educated Nigerian usage': thus Chapter Three, entitled



'Analysis of Sound Segments', begins: 'This chapter provides data and analysis on the sound segments attested in educated Nigerian English in its different varieties' (p. 59). However, at the bottom of the same page, where Ugorji begins his discussion of simple vowels, we read that these are 'presented according to the varieties, from the usage of the little educated to that of the more/highly educated'. There is an ambiguity here, in the adjectival use of the word 'educated', which is discussed by Jowitt (2008). In general, 'educated' can mean either "having undergone some education" or, more often, "highly educated". It is used appropriately in the second sense by, among others, Bamgbose (1982); 'educated Nigerian English' is thus synonymous with Variety 3 (Standard Nigerian English, the acrolect); but Ugorji uses it misleadingly in the first sense in the first sentence of Chapter Three.

This perhaps ultimately does not matter, although the reader has to be warned that the book contains a number of infelicities of expression, and so invites the strictures of Fakoya and Adesanove referred to above. That having been said (among Standard British English speakers today, incidentally, 'Having said that' with the participle 'dangling' has become a very widespread error), the ideas of Ugorji's work are novel, challenging, and so important. Crucially in his Chapter Three he provides a systematic and detailed inventory of what he observes to be the vowel and consonant phonemes of respectively the basilect, the mesolect, and the acrolect of Nigerian English, mentioning where necessary variations conditioned according to region broadly defined, sometimes according to ethnic group (e.g. 'the western region', 'parts of the north'). He uses as his data-base recordings of 405 speakers made over a period of five years and representing a wide range of 'educated speakers' (p. 20). The scepticism about the differentiation of varieties expressed above needs re-statement here too: for Ugorji does not make clear by what procedure the 405 speakers are sub-divided into three groups each speaking one of the three lects. He says that the varieties or lects constitute a continuum '...involving identifiable but non-discrete core centres', but he does not show how the phonological usages of his speakers cluster into these centres – and whether or not they correlate with factors such as level and type of educational attainment.

For lack of space it is not possible to summarise all of Ugorji's findings, and it is necessary to leave aside entirely his account of suprasegmentals; but let us examine his interesting account of vowels, which he treats under two headings, first 'simple' (i.e. pure), then 'complex' (i.e. diphthongs and triphthongs). I am changing a few of his illustrative words. The phonetics symbols employed are those of Giegerich (1992); readers used to 'Gimson' or 'Roach' or the *Daniel Jones Cambridge English Pronouncing Dictionary* perhaps need to be warned that here the vowel of 'dress' is represented by $/\epsilon/$, not $/\epsilon/$, which in the International Phonetic Association (IPA) system is closer than the vowel of 'dress', and does not exist in British RP.

Basilectal usage has just seven pure vowels: 1. /i/ in live, leave, etc., with /ı/ as a free variant; 2. /e/ in wet, weight, etc., with /ɛ/ as a variant in some words (e.g. wet) in some areas; 3. /ɛ/ in fair, wear, etc.; 4. /a/ in about, hat, heart, etc.; 5. /v/ in job, up four, law, etc., with /a/ as a variant in the North in some words, e.g. up; 6. /o/ in bone, goat, etc., with /v/ as a variant in the North; 7. /v/ in do, food, etc., with /u/ as a variant. The complex vowels are /aɪ/ (in eye), /vɪ/ (in oil), /ɪa/ (in ear), /rv/ (in pure), and /av/ (in out); Ugorji says there are four, but he describes five.

In *mesolectal* usage, /i/ and /i/ are now in principle differentiated, though many speakers still use them in free variation. Hence the mesolect contains eight pure vowels. The complex vowels are as in the basilect, but with the addition of ϵ as a variant of ϵ .

In *acrolectal* usage, /i/ and /i/ are differentiated in the same way, i.e. with the same variation, as in the mesolect; /e/ in such words as *day*, *break*, but with /ei/ as a variant – and Ugorji points out that Eka (1985) estimates that /e/ and not /ei/ occurs about 95% of

the time (sc. where RP has /ei/); /ɛ/ occurs in wet, yes, etc.; /3/ occurs in birth, merge, etc., with /ɛ/ as a variant; /a/ is as in the mesolect, but with /æ/ as a variant in words such as that, map, and /a/ as a variant in March, heart, etc.; /v/ is as in the mesolect but with /a/ or / Λ / as variants in luck, love, etc.; /o/ is as in the mesolect, with / θ / as a variant for 'a highly educated minority' – and reference is again made to Eka (1985), who estimates that /o/ occurs 91% of the time as against / θ /0/); /u/ is as in the mesolect, but with / θ / as a variant in could, full, etc. 'among many speakers'. With the variants included, the acrolect thus contains twelve simple vowels. The complex vowels are virtually as in the mesolect, but with the addition of /ei/, / θ 0/, and / θ 0/ replacing / θ 0/, and they include four triphthongs: /ei θ /, /ai θ /, /ai θ /, and / θ 10/, although many speakers realize the middle element as a consonantal glide.

In addition to this 'lectal' framework, Ugorji makes use of optimality theory (Kager 1999) for the evaluation of contending sounds and so for determining which one of several in a group should ultimately belong to the endornormative standard. The evaluative parameters employed here are international acceptance, contrastiveness, frequency, disambiguity, phonetic simplicity, and pedagogic convenience, and they form a hierarchy so that each can be said to 'dominate' the next to the right in the list; and a particular sound may 'violate' one or more of the parameters. In this way a 'winner' in a group of 'candidate' sounds can be identified. For example, Ugorji's account of sounds in his three lects shows that /o/, /əu/, and /v/ are different Nigerian realisations of the vowel of 'goat'; however, while /o/ satisfies all six parameters, /əu/ violates three parameters (frequency, phonetic simplicity, and pedagogic convenience), and /p/ violates four (acceptance, contrastiveness, frequency, and disambiguity); /əu/ is therefore preferable to /p/, but /o/ is preferable to both and is the 'winning' candidate for inclusion in the endonormative standard. At the same time, it need not be assumed that there should be only one such standard: while a winning candidate will belong to the 'inner circle norm', which is the formal standard used for international communication, an unsuccessful candidate would belong to an 'outer circle norm', which 'may bear those regional flavours of educated speech that may not significantly diminish international intelligibility'.

Ugorji's account invites a number of observations, such as the following, which pertain mostly to his account of vowels:

- 1. There is very little difference between the basilect and the mesolect, but a much greater difference between the mesolect and the acrolect. This suggests that we should be thinking, in place of three varieties, of just two varieties of two polarities which could be termed 'high' and 'low'. This point has already been made above.
- 2. The number of 'Northern' variants is so great at each level as to suggest the continuing need for a North-South differentiation as well as a high-low differentiation, as in Jibril (1986).
- 3. The coverage of the 'regional' or 'ethnic' coloration of varieties is restricted. Thus speakers of English in large parts of 'the North' (as it was before 1966), especially those of the Middle Belt, do not manifest the features attributed by Ugorji to 'the North' ('the northern region', etc.); and speakers in the South-South are not considered.
- 4. Ugorji uses /p/ for the vowel of *job*, but /ɔ/ is preferable, being more rounded and less open than /p/ (as these vowels are defined by the IPA), and so closer to the facts 'on the ground'. The substitution of /ɔ/ would also appear in diphthongs such as /ɔɪ/.
- 5. Of the four acrolectal triphthongs identified by Ugorji, only /aiə/ and /auə/ should be accorded phonemic status, as argued by Jowitt (2001).
- 6. None of the lectal inventories includes /ə/, to which Ugorji, like Giegerich (1992), does not accord phonemic status since it is the outcome of reduction and is not



contrastive. This is fair enough, but two important points need to be made. First, where /ə/ occurs in RP it features in Nigerian English at the 'low' (basilect-mesolect) level as some other vowel, and spelling often dictates the choice; hence pronunciations are heard such as [neʃɔn] for *nation*, [lokal] for *local*. Secondly, at the 'high', acrolectal level /ə/ is frequently heard, though often as a variant of the 'low'-level sound suggested by the spelling, and often in the usage of a single speaker, as pointed out by Jowitt (2008).

7. Ugorji's use of the optimality mechanism for the evaluation of sounds is relevant and persuasive. Some of his claims need substantiation: to take the example given above, we would like to know on what basis (statistical or otherwise) we can say that /o/ (his /p/) violates the international acceptance parameter while /o/ does not. Moreover, we would like to know how a particular sound enters the list of candidates. In his 'illustrative tableau' of the evaluation of the consonant (p.58), he includes /zɪŋk/ as a candidate, but the under discussion is the voiceless onset consonant of think, and the only possible candidates are /θ/, /t/, and /s/.

Towards Nigerian RP

Surely the most telling comment that can be made on Ugorji's account, however – and it brings us back to the main concern of this paper – is that, as we move through the lects, we become closer to RP, with its maximal 22 or 23 vowels and 24 consonants. This inescapable fact is made clear by the following summary of Ugorji's account:

	basilect	mesolect	acrolect	RP
simple vowels	7	8	12	12
complex vowels:				
diphthongs	5	5-6	8	8
triphthongs	-	-	2	2
consonants	21	21	24	24

Table 1: The lects of Nigerian Received Pronunciation (Ugorji, 2010)

The 'acrolect' and 'RP' tallies appear to be exactly the same. However, this coincidence hides the fact that the composition of an 'acrolect' tally may differ from the composition of the corresponding 'RP' tally. For example, the acrolectal simple vowels include /e/, but this corresponds to /ei/ among the RP complex vowels (which also appears among the acrolectal complex vowels); among the acrolect simple vowels, /p/ conflates RP /p/ and /p:/; and so on.

It is arguable that the number of variants that appears at the acrolectal level is due to the tension between two standardising forces, RP (for example, when /æ/ is used in hat) and the basilect-mesolect (e.g. when /a/ is used in hat). (This image of contending forces is also used in Jowitt (2008)). Ugorji seems uncertain whether or not to include the 'RP-type' variants as phonemes: thus his summary of acrolectal simple vowels (p.67) includes /a/ and /a/ but not /æ/; /o/ is included, as a variant of /u/, because it occurs 'among many speakers', and /a/ is included because the distinction between it and /a/ is 'observed by a minority of speakers', but /æ/, which is 'consistently' distinguished from /a/ by 'quite few' speakers – but therefore still 'a few' – is omitted.

With regard to consonants, the difference between the 21-member basilect-mesolect and the 24-member acrolect tallies is that in the latter $/\eta$, $/\Theta$ / and $/\delta$ / have phonemic



status (as in RP), with /n/, /t/ and /d/ as occasional variants. Ugorji's approach here seems more valid than that of Josiah and Babatunde (2011), who propose /t/ as the standard Nigerian English sound of <th> in *think*, with $/\Theta/$ (and /s/) as variants of it. (Josiah and Babatunde also propose /d/ in place of what they designate as RP $/\eta/$, presumably representing <th> in a word such as *that*; but $/\eta/$ must be a misprint here for $/\delta/$.)

It would be interesting to know whether the readiness of acrolectal speakers to switch from the 'basilect-mesolect' variant to the 'RP-type' variant has anything to do with such factors as age, travel, mixing with other acrolectal speakers, etc., and whether, with the presence of one or more of these factors a speaker becomes more consistent in the use of 'RP-type' variants. Longitudinal studies would be needed to test these hypotheses, and since his is a synchronic study, Ugorji's data cannot serve such a function.

Assuming that the hypotheses are valid, however, we are brought to this conclusion: RP is already the actual, operative, practical standard for pronunciation in Nigeria, not just the prescribed, official one. Its influence is manifest at all levels, albeit especially and predictably at acrolectal level.

There are one or two exceptions to the generalization that RP is already the operative standard. Their acceptance and 'official' adoption as such would help to make the standard truly endonormative, would make it, in effect, 'Nigerian RP':

- 1. /e/, which phonetically is very similar to /eɪ/ but does not occur in British RP, could be regarded as the standard, 'Nigerian RP' vowel in such words as *day*, *break*;
- 2. /o/ could be regarded as the standard, Nigerian RP vowel in such words as *goat*, while /əʊ/ would be rejected (as Ugorji's application of the optimality mechanism suggests);
- 3. Triphthongs could be treated as two vowel phonemes separated by a glide (i.e. /ajə/, /awə/).

It might be thought that the 'tolerance' of /e/ and /o/ advocated here should also extend to /a/, which would then be the Nigerian RP pronunciation of the vowel of *hat* (instead of British RP /æ/). The difficulty here is that /a/ is phonetically too close to /a/ and to / Λ /; as we know, the words *match*, *March*, and *much* are often confused in speech and writing, and the retention of /æ/ helps us to keep them apart.

In conclusion, I present my monitoring of the sounds used by some Nigerian speakers on two different public occasions in April, 2012. For familiar reasons, personal details are not given.

- (1) The first occasion was, in effect, a lecture lasting over an hour and given by a management consultant whose first language is Yoruba. I would describe his phonemic realisations as 'Nigerian RP' as specified above, but with some predictable variations and a certain predictable lack of consistency. Here are a few details:
- 1. In the words *occasion*, *communication*, *organisation*, etc. the speaker consistently used /ə/ as the vowel of the final –*ion* syllable.
- 2. With regard to other words where /ə/ also occurs in British RP, the speaker sometimes used /ə/ (in *problem*, *particular*, *letter*, *chairman*) but sometimes another vowel (/ε/ in *Who taught them?*, /a/ in 'we keep blaming the leaders', /ə/ in motivator).
- 3. The /h/-dropping characteristic of the Yoruba basilect-mesolect frequently occurred, e.g. in how, happy, happened.
- 4. The 'problematic' (see above) low front vowel (of 'trap') was sometimes a definite /æ/ (transcripts, crash), not /a/, while /a/ was used where British RP has /a/ in staff, pass.
- 5. The speaker used /3/ instead of the /a/ of the basilect-mesolect in *third*, *words*, and *sir*, although /a/ was used in *sir* on another occasion of use.



- 6. There seemed a free variation between /i/ and /ɪ/, i.e. with /i/ used where British RP has /ɪ/, for example in '...not doing it'; but /1/ was used in him in '...passed through him', even though the word received end-stress.
- 7. This paper has not been able to discuss suprasegmentals, but it is worth noting that the speaker used the fall-rise (or rise-fall-rise) tone for $\vee Hi!$: this interjection so uttered serves in Nigerian English to refocus listeners' attention. Jowitt (2007a) points out that, although the tone hardly occurs in Nigerian English speech, it is used in this particular 'formulaic' expression.
- (2) The second occasion was the launching of a book, at which short speeches were delivered from the platform by, among others, (a) a bishop (mother-tongue, Yoruba); (b) an emir (mother-tongue, Hausa or Fulfulde); (c) a barrister ('minorities', Taraba State); (d) a retired permanent secretary ('minorities', Adamawa State), and (e) an educationist (mother-tongue, Igbo). Collectively their speech patterns could again be summarised as 'Nigerian RP, with variations'. That is to say, among other things, that for all five speakers the 'goat' vowel was normally /o/ and never /əʊ/; and that they very frequently, if not always used /ə/ very frequently in unstressed syllables where it occurs in British RP, and /1/ in such syllables where this occurs in British RP. However, 'unreduced' vowels frequently occurred in the speech of (e), with spelling pronunciation being used in place of /ə/ or /ɪ/. In the speech of (a) there were no instances of /h/dropping; in the speech of (b) there was no 'confusion' of /p/ and /f/ characteristic of the Hausa basilect-mesolect, although this speaker did pronounce *honour* with an initial /h/. In the speech of (c), the vowel of *lord* was pronounced as a very tense, long, rounded British RP-type /ɔ:/, and in other words where this vowel is so realised in British RP most of the other speakers made it longer and tenser, so establishing a phonemic difference between it and /ɔ/.

This monitoring of Nigerian speakers speaking on two separate public occasions generally gives support to the conclusions and proposals expressed in the latter part of this paper. Educated, acrolectal Nigerian speakers of English have in their vowel system sounds which are to a great extent those of British RP, although there are a considerable number of variants which are also found in the relevant 'regional' basilect-mesolect. Vowel reduction in unstressed syllables, usually with the use of /ə/, was very commonly but not always operated. A notable exception to this variability, however, is that for the 'goat' vowel speakers always used /o/, and never /əu/. With regard to consonants, the main observation is that sometimes /h/ was 'wrongly' dropped and sometimes 'wrongly' inserted by some of the speakers, a variability also demonstrated in a corpusbased study carried out by Soneye and Gut (2011). None of the speakers used alveolar plosives (/t/, /d/) instead of the corresponding dental fricatives $(/\Theta/, /\delta/)$.

More wide-ranging and more professional monitoring of this kind, especially in the form of a corpus, would surely serve to demonstrate the reality of 'Nigerian RP' and its characteristics.

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Anatomoacoustic Evidence for Obstruents and Sonorants: an Illustration with English Segmental Phonemes

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Introduction

Explanation of aspects of phonetics and phonology often poses relative difficulty to the phonetician because of the inherent internal nature of the organs involved in the production of phones and phonemes. From the point of view of anatomy, certain organs of speech production do not easily lend themselves to the full glare, thereby, barring effective and tangible description (Collins & Mees, 2003, p. 34). In spite of the modern scanning and x-ray machines, and the computer simulations in the phonetics laboratories, vivid and apt description of the mechanisms of speech production is still defied. Thus, the places and manners of the articulation of aspects of the speech sounds do not get adequate explanation supported by empirical evidence.

Defining Key Concepts

Obstruents and sonorants are descriptive distinctive feature terms popularised by the generative phonology theorists such as Jakobson & Halle (1956), Chomsky and Halle (1968), Kenstowicz (1972, 1994), Kenstowicz & Kisseberth, (1979) and Odden (2005). Although obstruction is a 17th Century word, medically meaning obstruction (Encarta, 2009), it is now commonly known to phonetically mean the speech sound produced with non-vocalic airstream flow; Encarta (2009) describes it as "sound produced by cutoff air". A clarification needs to be made here regarding the completeness or correction of this definition. When the air is "cut off", something else happens for any speech sound to be made; for speech sounds are made by the vibration of the vocal folds, when they abduct, the puff of the air, when they adduct, and a combination of both actions in some circumstances. These are the only three ways that speech sound energy or waves are propagated. When the folds completely, and slightly adduct, the air that comes from the lungs rushes into the vocal cavity through the glottis; uninterrupted at the laryngeal cavity, in spite of Reetz and Jongman's (2009, p. 12) "narrow constriction of the larynx". At what point then is the air cut off? The only explanation admissible for this definition is in the various articulatory activities that take place at the vocal cavities (oral and nasal) also called the vocal tract; an important area obliterated in the earlier definitions of obstruents. These happen when the various speech organs and their parts engage themselves in contractile movements to shape or mould the air coming from the lungs through the glottis and pharynx into the vocal cavity. Reetz and Jongman (2009, p. 13) describe the articulatory interventions of the speech organs on the airstream in the vocal tract as "blocked", "impeded" or "diverted". According to the definition earlier stated, these engagements cut off; or disturb the free flow of the airstream, leading to the sounds we describe as obstruents or in the classical phonology parlance, consonants. Agreeing, without conceding, that the articulatory activities at the vocal cavity cut off the air to produce the obstruents, are all the articulatory contacts forceful enough to cut off air? May be on a few occasions such as the production of the plosives (as heard in the first sounds of the following English words: buy, pie; die, tie;

guy, car). But certainly, for several other obstruents, the force of contacts is partial in such English sounds as the affricates (in the first sounds in Chill, Jill), and fricatives (in the first sounds in voile, foil); and barely apparent in many others such as the English semi-vowels /w, /j, /r/ and /l/. These four phonemes are also called "approximant" (See Ladefoged, 2001, p. 71, Ashby & Maidment 2005, p. 57, etc.). A phonetic translation of Maidment and Ashby's (2005, p. 52-53) "Simple Tube and Piston" seems to also negate this (See their Figures 4.1-4.3). To this extent, a clearer explanation or definition should be proffered; one that is based on scientific evidence. This is one major objective of the paper.

The old and most common, and I dare say, fossilised description of the sonorants, known as vowels by the classical phonologists, is little or "no obstruction to the flow of air as it passes from the larynx to the lips" (Roach 2000, p. 10), or that comes out freely. How much correctness or completeness these hold is a matter of where the "little or no obstruction" takes place, and where it "comes out freely"; because every sonorant, anatomically speaking, is a product of an obstruction. This, thus, seems to be in opposition to the former because an obstruction, indeed takes place at the laryngeal cavity. But let me suspend the obstruction at the larynx for now and concentrate on the "little obstruction", "no obstruction" and "comes out freely". It is certain that some actions take place in the vocal tract, especially in the oral tract, which affect the vibrations that send the acoustic sound energy into the vocal tract. The source filter theorists are affirmative on this: that the vocal tract is an acoustic chamber where sound energy is filtered (Clark & Yallop, 1995; Johnson, 2003; and Jolayemi, 2006; you can also read Reetz & Jongman, 2009, p. 162-181). During the filtering processes, resonances are enhanced or attenuated so as to derive the desired sonorant. In order to achieve this, the configuration of the vocal tract is set into perpetually defined motions of expansion and collapse, lengthening and shortening, and height increase and decrease. The major activators of these shapes are: the lower and upper jaws, the two cheeks, the lower and upper lips, the palate and all the parts of the tongue, including the velum. In the production of the sonorants (vowels) during these processes, acoustic waves are pulled, pushed, bumped, narrowed, widened, clamped, enhanced and attenuated; there could be no further obstructions more than these in the vocal tract of the pulmonic egressive supply! In the laryngeal cavity, further and apparent obstructions even motivate the sonorant realisation as shall be seen in the anatomoacoustic evidence to be provided, which is the second objective of the study. To do the two above (discuss obstruents and sonorants), I would like to concentrate on obstruent and sonorant as agents of consonantal and vowel contrasts like Gordon (2007, pp. 61-77), and not as agents of prosodic contrasts like Lacy (2007, pp. 281-307).

In discussing obstruents and sonorants using the English segmental phonemes, it is important to point out a class of phonemes operating what I describe as linguistic moonlighting phenomenon. Let me use some of my earlier examples: buy, die, guy and voile. The first obstruent in each of these four words: /b d g v/ are known as voiced consonants because they have some characteristics of both the obstruents (consonants) and sonorants (vowels). The reason is that the phonemes are products of noises as well as vibrations, anatomoacoustically speaking. Because of a rare term in the literature that reflects this isoanatomoacoustics, this class of phonemes will be termed as obsonorants, a term morphological formed from obstruent and sonorant through clipping and merging processes. The provision of evidence upon which I premise the foregone is the focus of the next sections of the paper.

The paper provides some evidence from anatomy and acoustics for the explanation of obstruents and sonorants using the English segmental phonemes. The data for the paper to provide the acoustics evidence for the explanation of the phonemes were phonemic extractions collected from a female Nigerian speaker of English, which were



recorded, concatenated and analysed with PRAAT Version 5.3.49. PRAAT is computer software developed by Paul Boersma and David Weenink of the Department of Phonetic Sciences, University of Amsterdam, The Netherlands around 2005, which they describe as "doing phonetics by computer". The anatomic evidence was the screen captures of the laryngeal mechanism of real-time vocal folds obtained by stroboscope from Thomas' Voicedoctor net

Anatomoacoustic Evidence for Obstruents and Sonorants

Theoretical explanation in our phonetics and phonology classes is now giving way to practical demonstration in addition to explanation. Even at this, the common practical lessons expose students to a couple of model corpora to be listened to and repeated, all running from a number of cassettes and CDs. The best innovative teacher has hung on the wall of the language laboratory a chart of the organs of speech, which he points at sometimes along the lecture; and often uses his own organs of speech, alongside, to complement. A few has also devised the means of a handy mirror to be obtained by each student. This looks attractive and pedagogically right as the student uses his own mirror to view his own articulators from his own vocal cavity, and be able to describe the points of contact. But this is to the extent of the speech organs that are glaring; a few others are not. What then happens to those organs that we cannot easily see or even see at all? Very vital organs that easily come to one's mind are the twin folds and the glottis housed in the larynx, also commonly called the voice box. The importance of the vocal folds, apart from breathing, in speech making has been unequivocally captured in the nomenclature voice box. They, indeed, determine which phoneme is voiced or voiceless (Ladefoged and Johnson 2011, p. 45).

It is safe to say that the concept of interdisciplinary pedagogy has solved what used to be, in the past, an intractable problem. Thus, a lot of benefits have been derived from the coordination of efforts in anatomy, medicine, engineering, computer science, linguistics, etc. from where research, program and practice have lent a lot to the phonetician. Specifically, the stroboscope has been adequately deployed to give a great insight into the workings of the vocal folds so that every bit of the minutest movements can be seen, monitored and indeed tracked. The pictures below give an expression to this:



Picture.1: Trans-Nasal Fiberoptic Stroboscopy

Source: Chang, C. (2013)