GRAPHEMIC VARIANTS OF SCHWA RECEIVED PRONUNCIATION IN EDUCATED NIGERIAN ENGLISH ACCENT

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Abstract

It has been observed that the English language as spoken in Nigeria (even among educated speakers) differ remarkably from that spoken by speakers of inner circle English. Consequently, this paper, from a graphophonemic perspective, examines how speakers of Educated Nigerian English accent (ENEA) phonemically represent six vowel graphemes <ia, ie, io, iou, eo, and eou> appearing in an unstressed final syllable having a palato-alveolar-realizing consonant grapheme as its onset. Using ninety-six lexical items gathered from a word database and via a purposive sampling technique, the study tries to determine if the phonemic realizations of these graphemes in ENEA differ from those of British RP. Sixty final year undergraduate students were randomly selected, from two federal universities, and they cut across speakers from six geopolitical zones in Nigeria. Their pronunciation of the ninety-six words were recorded, played and analyzed as perceived, using Taxonomic Phonology as the theoretical framework. It is found that while all the graphemes are realized as schwa sound in British RP, there are about six variants in ENEA resulting from the type of vowel letters representing the graphemes. The paper then concludes that phonemic realizations of

graphemes in ENEA are usually influenced by overgeneralization of the default sounds of the graphemes. Hence, the study recommends a graphophonemic approach in studying phonemic features of ENEA.

Keywords: Educated Nigerian English accent, graphophonemics, graphemes, palato-alveolar, schwa sound

Introduction

Graphophonemic studies (Carney 1994; Deschamps et al. 2004; Pukli, 2017) have shown that there exist some rules guiding the phonemic manifestations of graphemes in English as represented in conventional English dictionaries designed in line with British Received Pronunciation (RP). These phonemic outcomes are results of interactions among the graphemes that make up words, and the interactions are systematic. Thus, they can be classified as sorts of assimilatory processes. For instance, grapheme <g> which by default realizes a velar plosive sound /g/ becomes a palato-alveolar sound /ʤ/ where it is followed by either grapheme <i> or <e> (except in a few words such as *give, get, gig, geese, giggle, gecko, gimmick, gift,* and *gild*), and where the grapheme <i> or <e> is joined by any other vowel graphemes forming a combination that has <i> or <e> at the initial position—such as the following combinations: <io>, <iou>, <eou>, <ia>, <eo>—the palato-alveolar feature in return influences the entire combined vowel graphemes to coalesce realizing only a schwa sound, as can be seen in words like *re-li-gion /rɪ-ˈlɪ-ʤən/, re-li-gious /rɪ-ˈlɪ-ʤəs/ and cou-ra-geous /kə-ˈreɪ-ʤəs/*. But where these vowel combinations are preceded by any other consonant graphemes that do not realize a palato-alveolar sound (when followed by grapheme <i> or <e>), the grapheme <i> or <e> in the combination realizes a front high lax vowel sound /i/ separately, while the rest of the elements in the combination become a schwa sound, as can be seen in words like *scor-**p**i-on /ˈskɔː-pi-ən/*, per-fi**d**-i-ous /pəˈfɪ-di-əs/, spon-ta-**n**e-ous /spɒnˈteɪ-ni-əs/.

Observably, speakers of Educated Nigerian English accent (henceforth ENEA) appear to separate grapheme <i> or <e> from the rest of the elements that altogether realizes a schwa sound even when they are preceded by any of the palato-alveolar realizing graphemes, thereby producing two different sounds in the environments where only a schwa sound is realized in British RP. In addition, the RP schwa appears to have different variants in ENEA depending on the type of vowel combinations being articulated by Nigerian speakers. It is this observed type of phonemic manifestations in ENEA that this study aims to analyze and describe, with a view to validate the existence or otherwise of the observation as truly characteristic of ENEA. Again, the observation points to the fact that English as spoken in Nigeria differ remarkably from that spoken by speakers of inner circle English, and thus needs to be studied to add to available resources that could aid in codification process of Nigerian English phonological system.

Of course, Nigerian English (henceforth NigE), as one of the globally recognized varieties of world Englishes (Bamgbose, 1998; Eka, 2000), has received a fair share of scholarly attention (Adedimeji, 2007; Adesonoye, 1973; Adetugbo, 1977; Brosnahan, 1958; Christopherson, 1954; Jibril, 1979, 1982; Jowitt, 1991, 2019; Kujore, 1985; Laver, 1968; Odumuh, 1987) since the 1950s, some concentrating on categorizing variations observed in the features based on speakers' educational or ethnic backgrounds, while some on general features without recourse to a particular socio-ethnic background. Research attempts on the spoken aspect of NigE have given birth to what is known today as Nigerian spoken English (NSE), which has been defined as "English the way Nigerians speak it" (Okoro, 2004, p.167). However, despite efforts in the past to describe and delineate this variety of World Englishes, it appears no uniform codified pattern of it has been achieved and widely accepted to guide pedagogy as well as recognized as standard for everyday discourse, especially regarding its phonemic system (Josiah & Babatunde, 2011), and

moreover, the majority of these attempts has been described as descriptive (qualitative and not quantitative) and impressionistic in nature rather than empirical (see Jamakovic & Fuchs, 2019).
Consequently, the need to codify NigE has since remained one of the top agendas of experts describing NigE varieties (see Adegbite, Udofot, & Ayoola, 2014, p. 6; Gut, 2012, Soneye, 2021, Surakat, 2021). And scholars have widely agreed that the variety of NigE that can be adopted as a model for standard should be the Educated Nigerian English (ENE) variety (Bamgbose 1982; Odumuh, 1984), and for the spoken aspect, ENEA. ENEA has been described as constituting the variety of English spoken by the majority of Nigerians who have attained literacy level at both the secondary and university levels (Opara, 2021).

However, while remarkable efforts have been made by scholars to study features of ENEA (see Awonusi, 2007; Bobda, 2007; Ekundayo, 2016; Jowitt, 1991; Oladipupo & Akinola, 2022; Ugorji, 2010), context-specific and field-based studies, approached from a graphophonemic angle, are still lacking, though Ekundayo (2016) and Ozim (2021) have made some attempts. Of course, scholars (Awonusi, 2007; Bobda, 2007; Ekundayo, 2016; Jowitt, 1991; Ugorji, 2010) have acknowledged that aside mother tongue interference, some of the fossilized or institutionalized pronunciation patterns of ENEA emanated from incidences of analogy resulting from spelling pronunciation. This is why we consider that to adequately account for the features of ENEA, graphophonemic approach is essential.

Thus, this study, from a graphophonemic angle, aims to analyse variant realizations of schwa RP in ENEA within contexts where the graphemes that realize the schwa are preceded by palato-alveolar realizing consonant graphemes. This type of analysis is considered significant because it will contribute in providing reliable data that could serve as resource materials for future edition of NigE pronunciation dictionary as an important step towards the codification and standardisation of NigE variety with a view to achieving an endonormative stability of ENEA.

2. Educated Nigerian English Accent and British Received Pronunciation

According to Jowitt (2019), using the term "Nigerian English accent" (NEA), ENEA can be understood in both a wide sense and a narrow sense. In the wide sense, it refers to all commonly occurring phonological forms used by Nigerians in speaking English. To him, these therefore include all the RP forms since all of the features can be found in the speech of some Nigerians. In the narrow sense, it means Nigerian forms that differ from RP forms. The point here is that ENEA is an attempt on the imitation of RP, which as a result of some domestic factors has become nativized and apparently become different in some features from what is obtainable in RP.

The RP, on its own, is one of the varieties of British English, which over the years has been regarded as standard model of spoken British English, though this position has been criticized on the ground that the prestige earlier accorded to the model is already waning as the number of its speakers in Britain is rapidly declining (Jowitt, 2015). However, the accent has remained the pedagogical model in Nigeria, and this attachment to RP cannot be divorced from Nigeria's historical affiliation with Britain as its former colonial master. However, the continued adoption of British RP as a standard model of pronunciation in Nigeria has been criticized by prominent scholars working on Nigerian English (see Jowitt, 2015; Ugorji, 2010). They therefore advocate for adoption of an endonormative and not exonormative model of which ENEA appears the favoured bride. This is why attempts are being made to outline its essential features based on practical findings to determine the features that have become widespread or entrenched, which can be widely accepted. This is the part of the contributions this study aims to make.

3. Graphophonemic Approach to Phonological Description

The linguistic approach that accounts for the relationship between the grapheme and the phoneme has been tagged graphophonemics

(Anderson, 2014; Deschamps et al, 2004, Pukli, 2017; Venezky, 1970). A grapheme as used in this study means an alphabetical letter or a combination of such which represents a phoneme in a word, especially in alphabetic orthographies such as English. It can also be seen as the smallest unit of a writing system of any given language. It spells a phoneme in a word. This is also true for tonal languages even with those that admit direct one-to-one correspondence between graphemes and phonemes because we can liken the bare spelling units as graphemes, and those accompanied by the tonal signs as phonemes. Worthy of mention is that a grapheme, observably, is different from a morpheme. While the latter performs a grammatical function, the former does not, but some morphemes can as well be regarded as graphemes, especially where they represent single sounds. For example, the *s* in *bags* corresponds to phoneme /z/; thus, it is a morpheme performing a grammatical function of indicating plurality, but in terms of its physical structure, it is a grapheme. A grapheme can be categorized into monographs (those made up of one letter), digraphs (those formed by a combination of two different letters realizing single sounds), doublets (those formed by a combination of two same letters realizing single sounds), and polygraphs (those formed by a combination of three or more different letters realizing single sounds).

Graphophonemics (which we may call grapheme-to-phoneme correspondence descriptive approach) is a coinage accounting for the interplay of graphology and phonology in the analysis of pronunciation patterns, especially in languages with deep orthographies. But it must be mentioned at this point that the seemingly continued overshadowing of this approach by morphophonemics in linguistic enquiries has somewhat sidelined it that scholars rarely mention it in phonological discourse. This is to say that graphophonemics has not gained reasonable attention in linguistic analysis. It is occasionally heard of in the field of pronunciation pedagogy where it appears in phrases like graphophonemic awareness or knowledge.

Baroni (2016) observes that many scholars consider graphemics to have an ontogenetic or phylogenetic secondarity in relation to speech, as such, in dealing with linguistics, recourse should be had only to speech. He opposes this view, and states that once speakers live in an environment where they learn and experience reading and writing, this sort of arguments becomes irrelevant. For literate people, speech and writing are just two different expressions of the same faculty. This is therefore an argument for the recognition of graphophonemics as an independent linguistic approach. Of course, this is reasonable because, noticeably, in an L2 environment, spelling to a large extent influences pronunciation. While arguing in favour of graphophonemics as an important aspect of linguistics, Baroni (2016) opines that the medium through which language is expressed affects language itself or at least its analysis. A careful observation will reveal that the majority of L2 users or learners of English rarely pay attention to the stem from which a word is inflected or derived when pronouncing the word; instead, they try to decode a sound which a spelling unit represents within that lexical environment, which is one of the reasons overgeneralization (analogy) often resulting from spelling pronunciation has characterized L2 Englishes (Li, 2010), of which ENEA belongs.

4. Related Studies

As earlier noted, so many scholars have worked on the segmental features of ENEA; however, only a few approached the subject explicitly from a graphophonemic angle. Among these few are Adepoju (2014), Ekundayo (2016), Okoro (2017), and Uba (2015), though Uba engaged a morphophonemic approach, which we consider to differ slightly from graphophonemics. However, explaining our observed differences between the two approaches falls outside the scope of the present paper.

While examining what he called ‘faulty analogy’ that is characteristic of grapheme-to-phoneme correspondences in Nigerian spoken English, Adepoju (2014) hints on the obstruction

of intelligibility as one of the implications of such faulty analogy, noting that such deviations delay comprehension or even derail thought in verbal communication. Though the work examines some incidences of grapheme-to-phoneme correspondences in Nigerian English as occurred in political discourse on radio and TV programmes, it is actually a pragmatic analysis accounting for the infelicity of such usage.

Using the expression, *intraference* (which we consider same as analogy or overgeneralization resulting from spelling pronunciation), Ekundayo (2016) examines the manifestation of this phenomenon in the articulation of graphemes <i> and <y> in ENSE. The study found that grapheme <i> and <y> are articulated as /i/ and /ɪ/ where RP uses /ɑɪ/, and as /ɑɪ/ where RP uses /i/ or /i:/. His study is much similar to the current paper in terms of its graphophonemic and context-specific approach. However, while it focuses on two graphemes (i and y), the current paper examines six vowel graphemes (ia, ie, iou, io, eo, and eou) appearing in similar lexical environments.

Okoro (2017) examines the pronunciation patterns of Nigerian English especially patterns resulting from spelling pronunciation, which the author tags faulty analogy and regards as sub-standard forms. Sourcing data from personal observations and recordings, the paper identifies some of the contexts where phonemic correspondences of some graphemes are transferred to other similar contexts in which they appear, making such realizations different from those of SBE, for example, the realization of 'flour' as /flɔ:/ because grapheme *our* is realized as /ɔ:/ in 'pour' (2017, p. 38). It must, however, be stated that those pronunciation features of Nigerian English, emanating from spelling pronunciation, are no longer seen as errors by many scholars, but idiosyncratic features of Nigerian English (see Bamgbose, 1998; Olajide & Olaniyi, 2013). To Bamgbose, what remains is the codification of the features and their acceptability (1998, p. 4). In fact, available data has shown that digital recognition-cum-acceptability of Nigerian English accent is

growing by the day as its patterns are being acknowledged technologically. For instance, it has been reported that in July 2019, Google announced its new Nigerian English accented voice for Maps, Google Assistant, and other Google products (Kazeem, 2019).

5. Methodology and Theoretical Framework

Six vowel graphemes (digraphs and polygraphs) having either <i> or <e> at the initial position were identified to realize schwa sound in RP within an unstressed syllable when preceded by any of the palato-alveolar realizing consonant graphemes, and ninety-six words, which contain these vowel graphemes were systematically, through a purposive random sampling technique, collected from an online word database (freedictionary.com). The words were used to elicit data from the subjects selected for the study. The selected subjects comprised sixty final year undergraduate students of different disciplines drawn from two public universities, and ten among the sixty subjects represent each of the six geopolitical zones in Nigeria. They were divided into six groups of ten, and the ten participants forming a group were tested individually in informal settings. The collected lexical items were randomly divided into six sets of sixteen words, which were administered to each participant during each contact. The researcher had six contacts with each participant, making it a total of three hundred and sixty contacts with all the subjects, which took thirty-six days to cover. During the contacts, they were asked to pronounce the words. Their articulations of the words were then recorded, played and their renditions of the vowel graphemes in focus were identified and analyzed as perceived.

The collected data were presented in statistical tables showing frequencies of sound occurrences, and in accounting for the participants' pronunciation of the target graphemes, the transcription patterns of International Phonetic Alphabet (IPA), presented audio-wise in University of Kansas' webmaster, 2003, were adopted. The outputs were compared with the RP's versions

as represented in *Longman Dictionary of Contemporary English, 5th Edition* (electronic version).

The methodological framework for the study is the feature-description approach of language's contrastive sounds, which is associated with Taxonomic Phonology. For instance, the various phonemes to which the studied graphemes correspond were described as perceived according to their features, such as the places and manners of articulation (for consonants) and heights and shapes of the tongue (for vowels).

6. Analysis and Findings

In this section, the various phonemic correspondences of the six studied vowel graphemes as obtainable in ENSE within the syllables in focus are analysed and compared with those of British RP.

6.1 British RP and ENSE Phonemic Correspondences of the Studied Vowel Graphemes

The identified phonemic correspondences of the six vowel graphemes as obtainable in ENSE and British RP are presented in statistical tables below, each table accounting for a particular grapheme and its preceding palato-alveolar realizing consonant grapheme.

Table 1A: Perceived Phonemic Correspondences of Grapheme *ia* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	NoR	ENEA2	NoR	ENEA3	NoR	TNoR
1	appre**cia**ble	/ʃə/	/ʃie/	48	/ʃe/	12	-	-	60
2	justi**cia**ble	/ʃə/	/ʃie/	52	/ʃe/	08	-	-	60
3	insa**tia**ble	/ʃə/	-	-	/ʃe/	60	-	-	60
4	nego**tia**ble	/ʃə/	/ʃie/	13	/ʃe/	47	-	-	60
5	so**cia**ble	/ʃə/			/ʃe/	60	-	-	60

RP 1 = British RP form as represented in the dictionary; NoR = number of respondents; ENEA 1, 2 and 3 = phonemic correspondences of graphemes in ENEA; TNoR = total number of

respondents for each word. The graphemes in focus alongside their preceding consonant graphemes are in bold in each word.

Table 1B: Perceived Phonemic Correspondences of Grapheme *ia* in British RP and ENEA

S/N	GLOSS	RP	ENEA 1	NoR	ENEA 2	NoR	ENEA 3	NoR	TNoR
1	statisti**cia**n	/ʃə/	/ʃia/	36	/ʃa/	13	/ʃi/	11	60
2	electri**cia**n	/ʃə/	/ʃia/	33	/ʃa/	16	/ʃi/	11	60
3	phoneti**cia**n	/ʃə/	/ʃia/	43	/ʃa/	06	/ʃi/	11	60
4	techni**cia**n	/ʃə/	/ʃia/	43	/ʃa/	06	/ʃi/	11	60
5	theolo**gia**n	/ʤə/	/ʤia/	49	-	-	/ʤi/	11	60
6	politi**cia**n	/ʃə/	/ʃia/	43	/ʃa/	06	/ʃi/	11	60
7	physi**cia**n	/ʃə/	/ʃia/	44	/ʃa/	05	/ʃi/	11	60
8	musi**cia**n	/ʃə/	/ʃia/	43	/ʃa/	06	/ʃi/	11	60
9	Egyp**tia**n	/ʃə/	/ʃia/	45	/ʃa/	06	/ʃi/	09	60
10	Chris**tia**n	/tʃə, /tiə/	/tia/	51	-	-	/ʃi/	09	60
11	tacti**cia**n	/ʃə/	/ʃia/	43	/ʃa/	06	/ʃi/	11	60
12	opti**cia**n	/ʃə/	/ʃia/	43	/ʃa/	06	/ʃi/	11	60
13	logi**cia**n	/ʃə/	/ʃia/	43	/ʃa/	06	/ʃi/	11	60

Table 1C: Perceived Phonemic Correspondences of Grapheme *ia* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	NoR	ENEA2	NoR	ENEA3	NoR	TNoR
1	fa**cia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
2	so**cia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
3	par**tia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
4	cru**cia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
5	spe**cia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
6	commer**ci a**l	/ʃə/	/ʃa/	60	-	-	-	-	60
7	mar**tia**l	/ʃə/	/ʃa/	60	-	-	-	-	60

8	sacrifi**cia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
9	poten**tia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
10	essen**tia**l	/ʃə/	/ʃa/	60	-	-	-	-	60
11	finan**cia**l	/ʃə/	/ʃa/	60	-	-	-	-	60

Table 1D: Perceived Phonemic Correspondences of Grapheme *ia* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	NoR	ENEA2	NoR	ENEA3	NoR	TNoR
1	absen**tia**	/tiə/	/ʃa/	60	-	-	-	-	60
2	demen**tia**	/ʃə/	/ʃa/	60	-	-	-	-	60
3	iner**tia**	/ʃə/	/ʃa/	60	-	-	-	-	60
4	mili**tia**	/ʃə/	/ʃa/	60	-	-	-	-	60
5	nostal**gia**	/ʤə/	/ʤia/	60	-	-	-	-	60

From Table 1A, it can be seen that grapheme <ia> realizes a schwa sound in British RP while in ENEA there are two variants: the first variant is a high front lax vowel /i/ plus number two primary cardinal vowel /e/, which is close to a closing diphthong /eɪ/; and the second is just sound /eɪ/. What can be observed in ENEA is that the pronunciation of <a> as /e/ in 'able" influences the realization of <ia> as /e/. While some ENEA speakers pronounce the <i> in the combination as a separate sound, some realize both the <i> and <a> as one sound just as it is in British RP, only that instead of realizing a schwa sound they realize some like number two primary cardinal vowel (which a bit similar to a closing diphthong), and this is an outcome influenced by spelling pronunciation. Again, it can be said that two phonemic variants of <ia> exist in ENEA, especially in contexts where it is followed by "ble". Table 1B shows that <ia> combination is also realized mostly as two sounds in ENEA when it has grapheme <n> as the coda of the syllable: a high front lax vowel /i/ plus a low front lax vowel /a/. As can be seen, some speakers realize it as just one sound, but a low front lax vowel /a/. Some other speakers, particularly those from the Northwestern part of Nigeria, articulate

it as sound /i/ in their attempt to produce the schwa sound. In the pronunciation of the word *Christian*, there are two variants in RP. In one of the variants, grapheme <i> and <a> are realized as two different sounds; this is because the preceding consonant grapheme <t> retains its default sound /t/, and therefore cannot influence a coalesce of the two vowel graphemes. This is the variant followed in ENEA, only that where RP realizes a schwa sound, ENEA realizes a front low sound /a/, because speakers of ENEA stress the sound.

In Table 1C, we can see that in ENEA, graphemic combination <ia>, in a syllable that have grapheme <l> as its coda, becomes a single sound just as it is in British RP, only that while in RP the single sound is a schwa sound but a low front lax vowel /a/ in ENEA. Also, as can be seen in Table 1D, the <ia> combination having no coda following it, becomes a low front lax vowel /a/ in ENEA, except in words where the palato-alveolar sound is a voice affricate as can be seen in the word *nostalgia*. What can be observed in the four tables is that the nature of the palato-alveolar onset and the coda following the grapheme, to some extent, influences the phonemic outcomes of the grapheme within ENEA. The difference between RP and ENEA is that while RP realizations are not stressed, ENEA's are stressed.

Table 2: Perceived Phonemic Correspondences of Grapheme *iou* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	NoR	ENEA2	NoR	ENEA3	NoR	TNoR
1	vora**cious**	/ʃə/	/ʃiɔ/	47	/ʃɔ/	13	-	-	60
2	presti**gious**	/ʤə/	/ʤiɔ/	56	/ʤɔ/	04	-	-	60
3	atro**cious**	/ʃə/	/ʃiɔ/	47	/ʃɔ/	13	-	-	60
4	auda**cious**	/ʃə/	/ʃiɔ/	47	/ʃɔ/	13	-	-	60
5	precious	/ʃə/	/ʃiɔ/	14	/ʃɔ/	46	-	-	60
6	obnoxious	/ʃə/	/ʃiɔ/	53	/ʃɔ/	07	-	-	60
7	anxious	/ʃə/	/ʃiɔ/	14	/ʃɔ/	46	-	-	60
8	suspi**cious**	/ʃə/	/ʃiɔ/	53	/ʃɔ/	07	-	-	60
9	conta**gious**	/ʤə/	/ʤiɔ/	56	/ʤɔ/	04	-	-	60
10	nutri**tious**	/ʃə/	/ʃiɔ/	53	/ʃɔ/	07	-	-	60
11	pugna**cious**	/ʃə/	/ʃiɔ/	53	/ʃɔ/	07	-	-	60
12	reli**gious**	/ʤə/	/ʤiɔ/	36	/ʤɔ/	24	-	-	60
13	deli**cious**	/ʃə/	/ʃiɔ/	53	/ʃɔ/	07	-	-	60
14	judi**cious**	/ʃə/	/ʃiɔ/	53	/ʃɔ/	07	-	-	60
15	ambi**tious**	/ʃə/	/ʃiɔ/	55	/ʃɔ/	05	-	-	60
16	avari**cious**	/ʃə/	/ʃiɔ/	53	/ʃɔ/	07	-	-	60
17	loqua**cious**	/ʃə/	/ʃiɔ/	55	/ʃɔ/	05	-	-	60
18	auspi**cious**	/ʃə/	/ʃiɔ/	14	/ʃɔ/	46	-	-	60
19	falla**cious**	/ʃə/	/ʃiɔ/	14	/ʃɔ/	46	-	-	60
20	ficti**tious**	/ʃə/	/ʃiɔ/	55	/ʃɔ/	05	-	-	60
21	gra**cious**	/ʃə/	/ʃiɔ/	55	/ʃɔ/	05	-	-	60
22	cons**cious**	/ʃə/	/ʃiɔ/	14	/ʃɔ/	46	-	-	60

As can be seen in Table 2, grapheme <iou> appears only in an unstressed final syllable with <s> as the only coda. In ENEA, it is realized as two sounds in most words: as high front lax vowel /i/ and as a low back lax sound /ɔ/. This indicates that such realization of two sounds is an entrenched pattern in the variety. As earlier observed, realization of /i/ is triggered by the notion that the initial grapheme <i>, which is a part of the polygraph, is pronounced differently as obtainable in native English where the preceding onset is not a palato-alveolar realizing grapheme. However, in some words, most speakers realize the grapheme as a single sound:

/ɔ/, as can be seen in words like *precious, anxious,* and *conscious*. In these words, ENEA speakers try to imitate the British RP pattern but eventually stressed the corresponding sound to arrive at /ɔ/ instead of the unstressed schwa /ə/. Again, it can be observed that the nature of the vowel grapheme determines its phonemic outcome in ENEA. For instance, grapheme <iou> becomes /ɔ/ because the default sound of grapheme <o>, which is a part of the elements making up the grapheme, is /ɔ/ or/ɒ/.

Table 3: Perceived Phonemic Correspondences of Grapheme *io* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	No R	ENEA2	No R	ENEA3	No R	TNo R
1	locu**tio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
2	ero**sio**n	/ʒə/	/ʃɔ/	46	/ʃi/	14	-	-	60
3	vision	/ʒə/	/ʃɔ/	46	/ʃi/	14	-	-	60
4	promo**tio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
5	deci**sio**n	/ʒə/	/ʃɔ/	46	/ʃi/	14	-	-	60
6	reli**gio**n	/ʤə/	/ʃɔ/	46	/ʃi/	14	-	-	60
7	coer**cio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
8	confu**sio**n	/ʒə/	/ʃɔ/	46	/ʃi/	14	-	-	60
9	commis**sio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
10	colli**sio**n	/ʒə/	/ʃɔ/	46	/ʃi/	14	-	-	60
11	defini**tio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
12	expan**sio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
13	posi**tio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
14	abra**sio**n	/ʒə/	/ʃɔ/	46	/ʃi/	14	-	-	60
15	pen**sio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
16	televi**sio**n	/ʃə/	/ʃɔ/	46	/ʃi/	14	-	-	60
17	exclu**sio**n	/ʒə/	/ʃɔ/	46	/ʃi/	14	-	-	60

As can be observed in Table 2 that only grapheme <s> functions as coda in <iou> final syllable in English, Table 3 also shows that only grapheme <n> functions as the coda in <io> final syllable. And as obtainable in British RP, <io> also realizes only one sound in ENEA, though having two variants triggered by regional idiosyncrasies: back low lax sound /ɔ/ and high front lax sound /i/.

The high front lax sound is common with speakers from the Northwestern part of Nigeria. However, the entrenched pattern in ENEA is sound /ɔ/. As noted, coalescence takes place in ENEA in the articulation of <io> combination, only that in RP, speakers realize an unstressed vowel sound represented by schwa sound, while ENEA speakers realize a stressed low back lax sound /ɔ/ and some unstressed front high lax sound /i/. In addition, it can be observed that the palato-alveolar realizing grapheme <s> becomes a voiced fricative /ʒ/ in RP when preceded immediately by a vowel monograph, but a voiceless fricative /ʃ/ in ENEA.

Table 4: Perceived Phonemic Correspondences of Grapheme *ie* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	NoR	ENEA2	NoR	ENEA3	NoR	TNoR
1.	suffi**cie**nt	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
2	profi**cie**nt	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
3	cons**cie**nce	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
4	effi**cie**nt	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
5	pa**tie**nt	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
6	defi**cie**nt	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
7	quo**tie**nt	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
8	pa**tie**nce	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
9	an**cie**nt	/ʃə/	/ʃɛ/	56	/ʃi/	4	-	-	60
10	tran**sie**nt	/ziə/	/siɛ/	55	/ʃɛ/	5	-	-	60

Table 4 shows that grapheme <ie> is realized as one vowel sound in ENEA just like in RP. There are no cases of two-sound realizations. The only difference between the two varieties is that in ENEA, the entranced realization is the stressed mid front sound /ɛ/, while in RP it is the unstressed vowel sound represented by a schwa sound /ə/. It is also common to hear sound /i/, particularly among some Hausa speakers of English, as can be seen in the table above. This is because the respondents who realized the grapheme as /i/ were all Hausa speakers of English. This further shows that, in ENEA, the sound outcomes of vowel graphemes are usually determined by their default phonemic forms. It is the grapheme

<e> in <ie> that triggers its phonemic representation as /ɛ/, as can be seen in the studied words. It can also be noticed that in *transient*, the palato-alveolar sound is not produced both in RP and ENEA, except by five speakers who tried to maintain the general rule. It can be said that transient's case is that of an exception to the general rule. However, the alveolar fricative realized in RP is the voiced version /z/ while in ENEA, it is the voiceless version /s/.

Table 5: Perceived Phonemic Correspondences of Grapheme *eo* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	NoR	ENEA2	NoR	ENEA3	NoR	TNoR
1.	trun**cheo**n	/ʧə/	/ʧiɔ/	60	-	-	-	-	60
2	stur**geo**n	/ʤə/	/ʤiɔ/	60	-	-	-	-	60
3	lun**cheo**n	/ʧə/	/ʧiɔ/	60	-	-	-	-	60
4	dun**geo**n	/ʤə/	/ʤiɔ/	27	/ʤɔ/	33	-	-	60
5	pi**geo**n	/ʤə/	/ʤi/	60	-	-	-	-	60
6	sur**geo**n	/ʤə/	/ʤiɔ/	49	/ʤɔ/	11	-	-	60

Grapheme <eo> is realized as two different sounds in ENEA, as can be seen in Table 5, except in the word *pigeon* in which <eo> is realized as high front lax vowel /i/. Meanwhile, the entrenched pattern is high front lax vowel /i/ plus low back vowel /ɔ/. In the words, *surgeon* and *dungeon*, some speakers produce <eo> as a single sound /ə/. Noticeably, the coda that usually follows this grapheme is grapheme <n>.

Table 6: Perceived Phonemic Correspondences of Grapheme *eou* in British RP and ENEA

S/N	GLOSS	RP	ENEA1	NoR	ENEA2	NoR	ENEA3	NoR	TNoR
1.	outra**geou**s	/ʤə/	/ʤiɔ/	60	-	-	-	-	60
2	coura**geou**s	/ʤə/	/ʤiɔ/	60	-	-	-	-	60
3	righ**teou**s	/ʧə/	/ʧɔ/	53	/ʧa/	5	/ʧoʊ/	2	60
4	gor**geou**s	/ʤə/	/ʤɔ/	53	/ʤa/	5	/ʤoʊ/	2	60
5	ga**seou**s	/ʃə/	/ʃɔ/	56	/ʃiɔ/	4	-	-	60
6	advanta**geo u**s	/ʤə/	/ʤiɔ/	60	-	-	-	-	60
7	plent**eous**	/tiə/	/tiɔ/	60	-	-	-	-	60

Table six shows that grapheme <eou> in ENEA is realized as two different sounds, especially where it is preceded by voiced palato-alveolar affricate realizing grapheme, as can be seen in words like *outrageous, courageous,* and *advantageous,* except in *gorgeous*. The two sounds are the high front lax vowel /i/ and low back vowel /ɔ/. The realization of /i/ is triggered by the initial grapheme <i> in the combination of sounds that makes up the grapheme while the realization of /ɔ/ by grapheme <o> in the remaining elements. However, where the onset is a voiceless palato-alveolar realizing grapheme, only one sound, just like in RP, is realized in ENEA. Again, in the articulation of grapheme <t> in *plenteous*, it is not realized as a palato-alveolar sound both in RP and ENEA, perhaps, because of its morphological base, *plenty*. Grapheme <y> which changed to <e> when suffix <ous> is added is a syllable on its own and not a part of the <eou> combination. Some of these observed similarities between RP realizations and ENEA realizations support Jowitt's (2019) submission that ENEA is an imitation of RP English.

6.2 Summary of Findings

The analysis shows that speakers of ENEA realize about six different phonemic forms from the studied vowel graphemes: /e, a, ɔ, ɛ, i, oʊ/. However, in some words, sound /i/ appears together with sounds /e, a, ɔ/ producing two sounds, for example /ie, ia, iɔ/. It must not be forgotten that the studied graphemes are those that phonemically become just a schwa sound in RP when they are preceded by a palato-alveolar-realizing consonant grapheme. But in ENEA, even when they are preceded by such consonants, speakers still realize two different sounds and as one sound in some cases, though different sounds from the schwa sound. For instance, in articulating grapheme <ia>, speakers realize sounds /i and e/, /i and a/, or just /a/ alone or /e/ alone and in some /i/ alone. This is to say that in some instances, the grapheme is realized as two sounds, where grapheme <i> is pronounced as a different sound and grapheme <a> as another sound. This is why we have

sounds like /ie/ and /ia/. The /i/ is a different sound triggered by the existence of <i> in the combination, and /a/ or /e/ a different sound triggered by the existence of <a> in the combination. These realizations are influenced by the type of consonant grapheme following the vowel grapheme in the syllable as the coda of the syllable. For example, the realization of <ia> as /e/ is influenced by it being followed by /ble/ combination. This is because grapheme <a> realizes /e/ in "able". So, when it is seen in words like *justiciable*, the grapheme <i> is pronounced as /i/ while grapheme <a> as /e/.

The findings in this study have shown that submissions of previous studies on the equivalents of RP's schwa in ENEA are not completely satisfactory. For example, Adegbite, et al. (2014) have submitted that the equivalents of RP's schwa in ENEA are /ɔ/ and /a/. Adetugbo's (2014) model provides the following as equivalents of RP's schwa: /ɒ, e, ɛ, ɔ/. It is noticeable that Adetugbo's submissions are a bit similar to the findings of this study, just that /i/, /a/ and /oʊ/ are missing, although the /oʊ/ variant in our study is only common among some Hausa speakers who substitute /ɔ/ for /oʊ/. Josiah and Babatunde (2011) also identified and presented four variants of RP's schwa, and they are /a/, /ə/, /e/ and /ɔ/. Again, /i, and ɛ/ are missing in their model. Very similar equivalents to those identified in our study are those provided in Bamgbose's (1995) model: /a, ɛ, i, ɔ, and u/. Bamgbose's model offers five variants. While in our study there is no /u/ sound as a variant, there is no /e/ in Bamgbose's.

What must be noted, as observed from the findings of this study, is that equivalents of RP's schwa can only be identified through a graphophonemic analysis. There is no realization of schwa in ENEA. The nearest equivalent is /i/, which some Hausa speakers produce while trying to attain exact realization of /ə/. The majority of speakers of ENEA realize the default sounds of the graphemes realizing schwa sound in RP. Thus, the /u/ equivalent presented in

Bamgbose's model can be observed in words like *onus*, in which grapheme <u> is often heard to be realized as /u/ by a majority of ENEA speakers, whereas it is a schwa sound in British RP.

7. Conclusion

This paper has examined the phonemic realizations of vowel graphemes <ia, ie, io, iou, eo, and eou> in ENEA with an aim to determine if such phonemic realizations differ from those of RP in which they are realized as a schwa sound when they appear in an unstressed final syllable having any palato-alveolar-realizing consonant graphemes as its onset. It is observed that there are six variants of RP's schwa resulting from the articulation of the studied vowel graphemes by ENEA speakers, and in some instances the vowel graphemes are realized as two different sounds instead of one. It is therefore concluded that the phonemic realizations of the studied vowel graphemes within ENSE differ remarkably from those of RP, and that their phonemic outcomes in ENEA are influenced by the type of letters representing the graphemic combinations. It is, therefore, our submission that approaching the description of ENEA from a graphophonemic angle will facilitate adequate account of its features emanating mainly from incidences of spelling pronunciation. It is our submission also that, while these identified pronunciation patterns of ENSE could be useful to scholars attempting the codification of Nigerian English accent, promotion of such patterns could have some pedagogical implications because our educational institutions still favour the British RP as the pronunciation model in their various English language classrooms. Consequently, we recommend the inclusion of such patterns in existing Nigerian English dictionaries and also swift development of Nigerian English Pronunciation Dictionary as a step to codification of ENEA and its onward adoption for pedagogic purposes in Nigeria.

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