6. THE PHONETIC AND PHONEMIC DISTRIBUTIONS OF 'AN', 'Ṣ', 'GW' AND /GH/ IN IFẸ̀ DIALECT

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Abstract

The Ifẹ̀ dialect has linguistic peculiarities that establish it as a dialect of the Yorùbá language. However, many of these linguistic distinctiveness have remained elusive to the literary studies in Yoruba linguistics. This paper discussesd extensively on the phonetic and phonemic distinctive distributions of /an, s, gw and gh/ in phonotatic constituencies in Ifẹ̀ dialect. The paper uses the standard Yoruba as a reference language in each phonological description. This study draws on data collected through field investigations and phonological analyses reported in Adékúnlé (1997, 2018) and Adéwọ́lé (2021), which serve to support various claims across phonotactic constituencies. Data used were descriptively analysedis in tandem withto generative theory's principles. Our findings revealed that vowel 'an' is more extensively used in Ifẹ̀ than standard Yoruba where 'an' and 'ọn' are basically allophone of the same phoneme. The phoneme 'ʃ' as a phoneme, stands for 's' and 'ʃ', in distributive phonological constituencies as occurring in the standard Yoruba in Ifẹ̀ dialect. 'Gh' and 'gw' are allophones of the same phoneme in Ifẹ̀ dialect. The paper testifies that 'gh' is the underlying phoneme because it has larger phonotatic distributions than 'gw'. Basically 'gh' co-occurs with the consonants with plus Advanced Tongue Root feature while 'gw' harmoniseharmonies with the consonants having minus Advanced Tongue Root feature. The study brings to light new observations on the articulation of 'an', showing its distinct phonetic features within the Ifẹ̀ dialect, together with analyses of 's', 'gh', and 'gw'. It also enhances the intuitive phonological understanding of Yoruba speakers.It is hoped that this paper has brought new findings on the phonetic description of 'an', 's', 'gh', and 'gw' in Ifẹ̀ to the fore and as well added to the intuitive consciousness of the native speakers of Yoruba language in general.

Keywords: Ifẹ̀ dialect, Yoruba phonology, phonotactic distribution, allophonic variation, generative phonology

Introduction

According to Abraham (1958), the ancient city of Ilé-Ifẹ̀ "is accepted as the parent-city of all the Yoruba". **Building on the established position of Ilé-Ifẹ̀ in the literature**, Capo (1989) adopts the term "Defoid language as "non-transparent coinage based on èdè + ifẹ̀ + oid. Adéwọ́lé (1996) explains:

> "èdè is the standard Yorùbá term for language", Ifẹ̀ refers to the presumed Cradle and 'oid' is the group suffix, just as Ijoid is adopted

> for the Ijo group and Edod is adopted for the Edo group. This Adewọ́lé's clarification evolved from Capo (1989)".

Also, Capo define 'Defoid language as in;

> "The dialects of the Defoid group occupy a compact geographical area starting as a thin belt in the central part of Togo Republic, expanding towards the sea in the Republic of Benin and covering the whole former Nigeria (Lagos, Ogun, Ondo and Oyo States and parts of Bendel, kwara, and Benue States (Capo 1989).

The aforementioned locations **are home to** different dialectal groups of Yoruba Language. Adekunle's (1997) work was the first major and comprehensive academic work on Ife dialect. Adekunle (1997) torches many phonological aspects of the grammar of Ife dialect such as phonemic distributions and phonological processes as in: deletion, vowel harmony, assimilation, coalescence, and epenthesis. Adekunle (2018) comparatively identifies some phonemic characterisations which defer from the standard Yoruba, he also identifies the phonetic differences in the orthography of Ife dialect and notes that some phonemes are found in Ife dialect but are advertently missing in the standard Yoruba. Adekunle (2018) hints that **/gh/** and /gw/ are not found in the phonetic chart of standard Yoruba. Also, Adekunle stresses that Ife has /s/ and that /ʃ/ is omitted in Ife consonant chart. Another notable contribution on the phonology of Ife dialect is that Ife uses 'an' as a phoneme without any variant. Adekunle (2018) argues for non-occurrence of 'ọn' in the orthographic description in Ife dialect as variant of 'an'. Adekunle (ibid) informs that Ife uses 'an' in all phonological constituencies where 'ọn' is used in standard Yorùbá (SY).

Therefore, the allophonic status of 'an' and 'ọn' in SY do not feature in Ife phonology. Adekunle (2018) hints that Ifẹ̀ has three basic nasal vowels as in "in, un, and an". That means '**an'** and 'ọn' do not occur in Ifẹ̀ phonotactics as phonetically endorsed in the standard Yoruba. This paper therefore tries to present the phonetic distributions of these phonemes in Ifẹ̀ dialect in order to highlight the phonemic distributive differences in the standard Yoruba.

Analysis

This portion of the paper is outlined into four sections for extensive phonetic descriptions of each phoneme in Ifẹ̀ dialect of Yorùbá.

[an]

Bamgbose (2010) and Owólabí (2011) itemise the nasal vowels in standard Yoruba as in;, ẹn, un, ọn, and an. These five nasal vowels are considered to be four phonemes; in ẹn, un, ọn/an, while "ọn/an" are considered to be allophones of the same phoneme. Earlier works on Yoruba phonology have agreed that "ọn" is the underlying phoneme while 'an' is the allophone. However, Pulleyblank (1988) queries the phonemic status of "ọn" based on the fact that vowels ('i', 'u' and 'a') occur in all languages of the world. Pulleyblank (ibid), therefore, advises the Yoruba linguists to re-examine the phonemic status of 'an' because the occurrence of the three oral vowels-'i', 'u' and 'a' in the other languages serves as a proof that their nasal varieties should be the basic nasal vowels in Yoruba.

Olumuyiwa (2013) informs that Mọba dialect does not have "ọn", he therefore, advises that Yoruba researchers should try to reconsider the "ọn/an" allophonic status. The protagonists of "ọn/an" allophonic status claim that 'ọn' co-occur with consonants with labial features within a syllable or a word boundary as in:

1. i. ọgbọn (wisdom)
ii. Ìmọ̀ (knowledge)
iii. ẹ̀gbọ́n (senior)
iv. Ìbọn (gun)
v. ẹ̀fọn (mosquito)
vi. ọmọ (child)
vii. ọpọ́n (trail)
viii. àgbọ̀nrín (antelope)

Owólabí (2011) hints that 'h' can occur with 'ọn' or 'an' as in ahón (tongue) and 'hàn (appear). This aforementioned school of thought agrees that "an" occurs with other consonants within a syllable or a word boundary as in;

2. i. ìtàn (story)
ii. ọ̀sán (noon)
iii. ọ̀ràn (problem)
iv. àdán (bat)
v. okàn (heart)
vi. ọ̀nà (road)
vii. ọyàn (breast)

viii. ìgàn (bundle)

ix. ìṣàn (as in running water)

The latest examples vividly show that the number of consonants that co-occur with 'an' within a word boundary is higher than the number of consonants that co-occur with 'ọn' within a syllable or a word boundary. Adékúnlé (2018) hints that 'ọn' does not occur in Ifẹ̀ dialect. **Adekunle (2018)** argues that 'an' occurs with all consonants in Ifẹ̀ dialect. **Adéwọlé (1996)** also hints that Ifẹ̀ has in, an, and un, and that "an" occurs in the following examples;

3. i. ìban (gun)

ii. ọpan (trail)

iii. ẹ̀fan (mosquito)

iv. ọ̀sán (noon)

v. ọ̀gwán (scarcity)

vi. ọ̀ràn (problem or issue)

vii. ọkàn (heart)

viii. ẹ̀gbán (senior)

ix. àgbànrín (antelope)

The only consonant that violates the rule is 'm', as 'm' co-occurs with "ọn" as in "mọ́ ọ̀n tîi re ilé rẹ̀" (don't go to his house yet) and "ọmọ" (child). Adékúnlé (ibid) argues that it is labial feature assimilation which changes 'má' to 'mọ́' as it occurs in the phonological constituencies.

The underlying phoneme between 'ọn' and 'an'

Adékúnlé (2020) highlights the phonetic status of 'ọn' and 'an'. Having established the fact that 'ọn' is missing in Ifẹ̀ dialect. Adékúnlé (ibid) uses four points to support 'an' as an underlying phoneme of 'ọn'. The four points are;

4. i. The historic status of Ifẹ̀ as the cradle of Yoruba race. Ifẹ̀ has 'an' which stands for 'ọn' in all phonological or phonotatic constituencies.

ii. The three basic vowels in the universal language vowel chart is 'i, u, and a' as informed by Pulleyblank (1988). Pullybank (1988) hints that the nasal varieties of 'i, u, and a' should be considered as the three basic nasal vowels in Yoruba. This position is supported in Adékúnlé (2020).

iii. The total number of consonants that co-occur with 'an' within a syllable or a word boundary is larger than the number of consonants that co-occur with 'ọn' within a syllable or a word boundary as exemplified in the aforestated examples 2i-ix.

iv. It is very easy and straightforward to establish labial homorganic assimilation as a direct influence that changes 'an' to 'ọn' at phonotactic constituencies where 'ọn' occurs.

The aforestated factors, without mincing words, convincingly support the phonemic status of 'an' as the underlying phoneme while 'ọn' stands as the allophone.

/S/

Bamgbose (2010) identifies /s/ and /ʃ/ as two phonemes in standard Yorùbá. The /s/ is alveolar fricative while /ʃ/ is palatal alveolar fricative. The two phonemes occur at different phonotactics.

5.Constituencies as in; /s/ in;

i. iṣu (yam)
ii. ọ̀sẹ̀ (week)
iii. ọ̀sán (noon)

6. /ʃ/ appears in;

i. iṣẹ́ (work),
ii. ṣùgbọ́n (but)
iii. ìṣẹ́ (poverty).

Orthographically writing as 's' and 'ṣ' sequentially. Ifẹ̀ does not have 'ṣ'. Orthographically Ifẹ̀ uses 's' to represent 'ṣ' in all phonotatic constituencies as follows:

7**. Orthographically written as 's' and 'ṣ' sequentially, Ifẹ̀ does not have 'ṣ'.**
Instead, it uses 's' to represent 'ṣ' in all phonotactic constituencies, as shown below:

i. iṣẹ́ (work)
ii. ìsẹ́ (poverty)
iii. ọ̀sán (noon)
iv. ṣùgbán (but)
v. ọ̀sẹ̀ (week)

Another significant phonotatic difference between 's' in Ifẹ̀ and 's' in standard Yoruba is that 's' in Ifẹ̀ cannot co-occur with 'in' (front high nasal vowel) within a syllable and word boundary as reflected in the examples below;

Ifẹ̀ dialect standard Yorùbá Gloss.

8. si òkú sin òkú (buried the dead).
ii. esi ẹsin (horse)
iii. esisi esinsin (flies)
(Adékúnlé 2018, p. 157).

However, such denasalisation of 'in' in Ifẹ̀ does not affect 'ẹran osin' (rearing animals), reason for this exception is yet to be known. We believe further and future research findings will look into that. Now, I will like to expand upon /gh/ and /gw/ in Ifẹ̀ dialect.

/gh/ and /gw/

These two phonetic representations do not occur in the standard Yoruba, and SY replaces them with 'h', 'y' or 'w' as variantly occurring in the following examples:

Ifẹ̀	SY	Gloss
9. i. ẹ̀ghin	ẹ̀yin	you (pl.) 2nd person
ii. oghó	owó	money
iii. ìgha	àwa	we (pl) 1st person
iv. àghàn	àwọ̀n	net
v. aghán	ahọ́n	tongue
vi. agháringhán	awọ́nrínwọ́n	(a type of iguana lizard)
vii. àghò	àwo	plate
viii. baghìn-ín	bayìí	like this
ix. ghìn-ín	yìí	this-like this shoe
x. ẹ̀ghọ̀n	ẹ̀wọ̀n	chain
xi. ẹghùrà	ewùrà	water yam
xii. ẹgwà	ẹwà	beauty
xiii. ẹ̀gwá	ẹ̀wá	ten
xiv. ẹghúrẹ́	ewúrẹ́	goat
xv. ẹghùrà	ewurà	water yam

(these examples are copied from Adéwọlé (2021).

The latest examples show that ‘gh’ and ‘gw’ frequently change to ‘w’ in S.Y, and this is reflected in examples-ii-iv, vi-vii, x-xv. While ‘gh’ changes to ‘h’ in ‘v’, ‘gw’ also changes to ‘h’ in ‘v’, ‘gh’ also changes to ‘y’ in examples ‘viii’ and ‘ix’. There is another evidence from a deitic song for Mọ́rèmí that shows how ‘gh’ changes to ‘f’ as in ‘…Eghúrẹ́ ọ ghún mi; mọ́ mọ̀ gbà á o’. (…Do not take the goat you gave me). The SY version would read…"Ewúré o fún mi, má mà gbà á o" (…Do not take the goat you gave me). Awóbùlúyì (1998) agree that ‘gh’ is very common in the south Easten Yorùbá dialects like Ọ̀wọ̀, Ìkálẹ̀, Ìlàjẹ, Ìjẹ̀bú etc. Also, **Ajọ̀ngọ̀lọ̀ (2005**) claim that ‘gw’ occurs in “Ao” dialect of Akoko.

Phonetic Analysis of ‘gh’ and ‘gw’ in Ifẹ̀ dialect.

Adékúnlé (2018) discusses extensively on the occurrence of ‘gh’ and ‘gw’ in Ifẹ̀ dialect. It is noticed that previous literatures on the phonological studies of Ifẹ̀ dialect recognise ‘gh’ as the variant of ‘w’ (see Adéwọlé 1996) in the S.Y. Adékúnlé (2018) presents the next examples to show the occurrence of ‘gw’ in CV and VCV sequences in Ifẹ̀ dialect.

Examples are;

Ife Dialect	Gloss
10.i. gwẹ̀	to bathe
ii. ìgwà	behaviour or attitude
iii. ẹ̀gwà/àdìn	beans
iv. ẹgwà	beauty
v. gwọ̀	enter as in ‘gwọ ilé’ (enter the house)

These foregoing words are used in the dialect in the examples below;

11. i. Olú ù tí i gwẹ̀ (Olú has never taken his bathe)

ii. ìgwà/àdìn rẹ̀ rè mí rárá (I don’t like his/her attitude)

iii. Èló ni abọ́ ẹ̀gwà lọ́jà (how much does a measure of beans cost in the market)

iv. Ọmọ̀bìnrin ni ti ẹ̀ lẹ́gwà (that lady is not beautiful).

v. Olú gwọ asọ tuntun (Olú wears new dress/garment)

The major constraint on the phonetic distributions of 'gh' and 'gw' in Ifẹ̀ dialect is that 'gh' occurs with vowel 'a' as in; gha ún beé (come over here) and ìgha (we-1st person plural pronoun). Also, the study observes that 'gh' mainly co-occur with tense vowels such as "i, e, o, u, in, un' as in;

12.i. Òghú (cotton)

ii. oghó (money)

iii. òghe (proverb)

iv. ghù (sprouted)

v. ghí (to say)

As pointed out in 11i-v, the recondite issue is how to account for the occurrence of 'gh' with 'a' and 'an' as in;

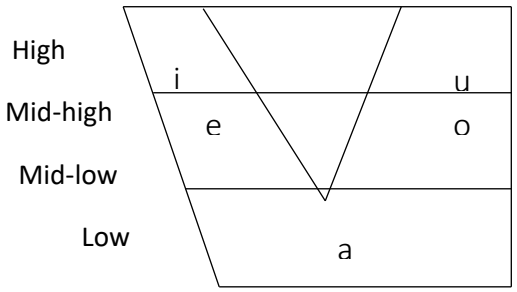
13. i. gha (come)

ii. ìghan (they-3rd person, plural pronominal).

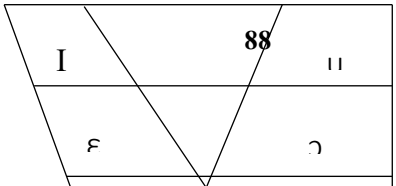
Bamgbóṣé (2010), Adéníyì (2005) and Ìkọ̀tún (2017) hint that the vowel charts (oral and nasal vowels) in the S.Y do not represent the full numbers of the vowels in the Yorùbá language. Bámgbóṣé (ibid), Adéníyì (ibid) and Awóbùlúyì (1998) suggest nine (09) oral vowels (i, I, u, U,e, o, ẹ, ọ, and a) and seven (07) nasal vowels (in, In, un, Un, ẹn, ọn and an). Ìkọ̀tún (2017) argues for ten oral vowels and eight nasal vowels. Ìkọ̀tún (ibid) urges for variants of 'a' in both oral and nasal vowels to make a total number of ten oral vowels and eight nasal vowels.

Premise on Ìkọ̀tún's suggestion, the vowels charts of the Yoruba language could be graphically demonstrated as reflected in the diagrams below;

Tense Vowel



Lax Vowels



High

Mid-high

Mid-low

Low

The latest diagrams show that variant of 'i' 'u' and 'a' occur in both diagrams. This is an indication that we cannot use the occurrence of 'gh' and 'gw' with 'i, u, a' to judge the distributive pattern in Ifẹ̀ dialect. Adopting the aforestated clarification, the study considers the next examples as template to account for the distributions of 'gw' and 'gh' in Ifẹ̀ dialect as in;

'gw'

15. i. ẹ̀gwà (beans)

ii. ọ̀gwọ́ (hand)

iii. ẹgwà (beauty)

iv. gwọ̀ (to enter)

'gh'

16. i. òghú (cotton)

ii. òghe (proverb)

iii. ighe (kidney)

iv. ghù (spouted)

It is noted that vowels in '15' possess minus (-) Advanced Tongue Root feature, while examples in '16' have plus (+) Advanced Tongue Root Feature (Pulleyblank, 1988). Based on the aforementioned conclusion, it is evident that 'gh' occurs with 'plus' Advanced Tongue Root feature vowels in Ifẹ̀ dialect, while 'gw' occurs with 'minus' Advanced Tongue Root feature vowels. These clarifications advertently show that the phones 'gh and gw' occur in Ifẹ̀ dialect as allophone of the same phoneme. However, using the productivity distribution, it vividly shows that 'gh' is more productive and hereby accorded the underlying phoneme of the '**gh',** while 'gw' is the allophone

The two phones are missing in the standard Yoruba orthography, and reasons for their omission could be looked into in the future researches on the Ifẹ̀ dialect. However, Bynon (1996) hints that some phonemes are liable to be dropped in the course of language development over years. Bynon (ibid)

cites an example from Sanskirt language where 'kw' changes to 'k' in the diachronic study of the language. Also, Ifẹ̀ dialect attests to Advanced Tongue Root feature in vowel harmony in many words of VCV and VCVCV sequences as listed in Adékúnlé (2001). Adékúnlé (2001) presents examples in Ifẹ̀ dialect as in;

17. Ifẹ̀	S.Y	Gloss
i. erú	ẹrú	slave
ii. ebí	ẹbí	family
iii. esi	ẹsin	horse
iv. efu	ẹfun	white native chalk
v. ọ̀rìṣà	òrìsà	deity/divinity
vi. ẹ̀lùbọ́	èlùbọ́	flour
vii. òkúta	òkúta	stone
viii. ọ̀ṣùpá	òṣùpá	moon

The aforestated examples are the reflections of basic occurrence of the Advanced Tongue Root feature in word formation of VCV and VCVC formation in Ifẹ̀ dialect

1)

Summary and Conclusion

This paper presented the phonetic and phonemic distributions of 'an, s, gw and gh' in Ifẹ̀ dialect. Our findings reveal that Ifẹ̀ has three nasal vowels 'in, un and an' instead of five nasal vowels as in; in, un, ẹn, an, ọn' in standard Yoruba. The major difference is that 'an' does not have allophone in comparable with what it entails in the standard Yoruba where 'an' and 'ọn' are allophones of the same phoneme.

Ife dialect uses 'an' in all phonotatic constituencies where both 'an' and 'ọn' duly share phonological constituencies in SY. Also, this study informs that Ifẹ̀ has 's' as a phoneme. Meanwhile, its palatal counterpart 'ʃ' or ṣ does not **feature in** Ifẹ̀ dialect. The alveolar fricative 's' is used in all phonological constituencies where **palatal fricative** /ʃ/ does occur in the standard Yoruba. Another notable contribution of this research work is that it presents clinical phonetic representations of 'gw' and 'gh' in Ifẹ̀ dialect. This study shows that 'gh' occurs with vowels with 'Plus' Advanced Tongue Root feature while 'gw' co-occurs with 'minus' Advanced Tongue Root Feature. Meanwhile, 'gh' also occurs with 'a' and 'an', our explanation for this **inconsistency** is that variants of 'a' and 'an' are present in the

basic phonetic representation in Yoruba language. A variant of the two phonemes have 'plus' Advanced Tongue Root feature while another variant of the two phonemes have 'minus' Advanced Tongue Root Feature as suggested in Ikotun (2017, p. 5).

The paper concludes that Advanced Tongue Root feature of the vowels in Ifẹ̀ dialect influences the occurrence of the two phones ('gh' and 'gw') within a syllable or word boundary. The paper buttresses the opinions previous works on the extension of the number of the basic vowels in the language to nine or ten to allow full vowel harmony patter in the Yoruba language. It is hoped that if this vowel extension proposition is conventionally endorsed, Yoruba language would maintain two sets of vowel charts patterning base on Advanced Tongue Root feature as in;

Tense

/I, u, e, o, a/ oral vowels

/in, un, an/ nasal vowels

Lax

/I, U, ẹ, ọ, a/ oral vowels

/In, Un, ẹn, ọn, an/ nasal vowels

References

Abraham, R.C (1958). *Dictionary of Modern Yoruba.* London: University of London.

Adékúnlé, M.A (1997). "Àfiwé Fonọ́lọ́ji Ẹ̀ka-Èdè Ifẹ̀ ati Yorùbá Àjùmọ̀lọ̀. Unpublished M.A Dissertation, Department of Linguistics and Nigerian Languages, University of Ilorin, Ilorin, Nigeria.

Adékúnlé, M.A (2001). "The Advance Tongue Root Feature in Vowel Harmony in Ifẹ̀ Dialect of Yorùbá. IHAFA: Journal of African Studies IV(i): 46-56, Department of African and Asian Studies, University of Lagos, Lagos, Nigeria.

Adékúnlé, M.A (2018) "Àwọn Àbùdá Àdáni Èka-Èdè Ifẹ̀". Research in Yorùbá language and Literature. 13:65-94.

Adékúnlé, M.A (2020). "Ìṣàfiwé Ìpele Àká-ọ̀rọ̀ Èka-Ède ati Olórí Ẹ̀ka-Ède Yorùbá", Journal of Linguistics Association of Nigeria (JOLAN) 23(i): 204-217.

Adéníyì, H. (2005). "Àwọn Ẹ̀ka-ede Yorùbá". Adéníyì, H. and A Òjó (eds) Ìlò-èdè àti Ẹ̀ka-èdè-Àpá Kejì, Trenton, USA: African World Press.

Adéwọ́lé, L.O (1996). "Ifẹ̀ Pronouns in Polylectal Grammar" Journal of Nigerian Languages and Literature. 2:56-63.

Ajọ́ńgọ́lọ̀, T.O (2005). "Negation in the Ào Dialect of Yorùbá", Unpublished PhD. Dissertation, Department of Linguistics and African Languages, University of Ibadan. PP.10-11

Awóbùlúyi, O. (1998). "Àwọn Ẹ̀ka-èdè Yorùbá". Paper presented at Annual conference of the Yorùbá Studies Association of Nigeria (YASN) held in Ìbàdàn pastoral institute, Ìbàdàn (Nov.9).

Bámgbóṣé, A. (2010). *Fonólọ́jì and Gírámà* Yorùbá (Reprinted). Ìbàdàn: University Press.

Bynon, T. (1996). *Historical Linguistics.* Cambridge: University of Cambridge Press. P.56.

Capo, H.B.C. (1989) "Defoid" in the Niger Congo Languages" John Bendor Samuel (ed) PP. 275-290. Lehnham: University Press of America.

Ìkọ̀tún, R. (2017). "Pronouns in Ijẹ̣sa Dialect", *Inquiry in Languages and Literatures*. 10:1-14. Department of Linguistics and Languages. Adékúnlé Ajásin University, Àkùngbá-Àkókó, Onàdó State.

Ogunsina, B.A (1997) "The Phonology of Ifẹ̀ Dialect, Unpublished B.A. Long essay. Department of Linguistics and African Languages, Unviersity of Ibadan, Ibadan.

Olúmúyìwá, T. (2013). Tense/Aspect and Negation in Mọ̀bà (A Yorùbá Dialect). Research on Humanities and Social Sciences, 3(1).
https://www.iiste.org/Journals/index.php/RHSS/article/view/4107

Olúmúyìwá, T. (2006). "Àwọn Wúnrẹ̀n Onítumọ̀-Gírámà nínú Awọn Ẹ̀ka-Èdè Àárun Gbùngbún". Unpublished Ph.D. Thesis, Department of Linguistics and Languages, Adékúnlé Ajásin. University, Àkìngbó-Àkókó, Òndó State.

Owólabí, K. (2011). *Ìjinlẹ̀ Ìtúpalẹ̀ Èdè... Fónẹ́tíkì àti Fonọ́lọ́jì Èdè Yorùbá. (Àtúnṣe Keji).* Ìbàdàn:Akada Publishers.

Pulleyblank, D. (1988). Vowel deletion in Yoruba. *Journal of African Languages and Linguistics, 10*(2), 117–136. https://www.degruyter.com/document/doi/10.1515/jall.1988.10.2.117/html