## High Tone Lowering in Ìgbòmina-Yorùbá

Kolawole ADÉNÍYÌ Department of Linguistics and African Languages Obafemi Awolowo University, Ile-Ife, Nigeria kola.adeniyi@daad-alumni.de

## Abstract

This article reports that, in Ìgbòmina-Yorùbá, the High tone is lowered to Mid tone when it is preceded by a Low tone and followed by a floating Low tone. It is argued that although the preceding Low tone is the direct trigger of the High-lowering, the Low tone following the High must lose its segmental host for the lowering to be effected. This same lowering is attested in High tones wedged between the future tense marker  $\acute{e}$  "will" and a following floating Low tone. It is then argued that the future tense marker in Ìgbòmina bears a High-Low tonal sequence where the High appears on the surface but the Low tone exists as a floating tone. It is this floating Low tone that triggers the lowering of following High tone once the High tone is itself followed by a floating Low tone.

## 1. Introduction

Yorùbá is a West Benue-Congo language spoken in South-western Nigeria as well as in other countries such as Togo, Sierra Leone, the Republic of Benin, Brazil and Cuba (Oyetade 2011; Fabunmi 2013). Although the standard form of Yorùbá (SY) has been extensively studied, a lot is still yet to be fully understood about its sound system. One of such is the mechanism of hiatus resolution in the language. It has also been demonstrated that studies of the dialects of Yorùbá have the potential to deepen the knowledge of the language significantly at both diachronic and synchronic levels. The Ìgbòmina dialect of Yorùbá is spoken in about 112 towns and villages spread across Ifedayo and Ila-Orangun Local Government Areas of Osun State in South-Western Nigeria and Irepodun, Ifelodun, Isin, Ilorin East and Ilorin South Local Government Areas of Kwara State in North-Central Nigeria (Adeniyi 2004:3)<sup>8</sup>. This article reports that the Ìgbòmina dialect of Yorùbá has an unusual tone lowering phenomenon that is not reported for SY. It reports further that while the lowering may appear similar to downstep (DS), its facts are at variance with those reported for DS in SY as well as the standard conceptualisation of the DS phenomenon.

<sup>&</sup>lt;sup>8</sup> Data for this research were drawn from speakers in Ila-Orangun and environs and Omu-Aran

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The article opens with a brief summary of the tone system of SY before going on to present data on the High tone lowering phenomenon in Ìgbòmina-Yorùbá in the following section. This is followed by a discussion of the High tone lowering triggered by the future tense marker in the dialect.

#### 2. Background on Yorùbá Tone System

Yorùbá operates a three-tone system (Courtenay 1968, Connell & Ladd 1990), having (H)igh tone (marked with a superscript acute accent "'" on the vowel), (M)id tone (marked with a superscript macron "¬" on the vowel)<sup>9</sup> and (L)ow tone (marked with a superscript grave accent "'" on the vowel). The three tones are contrasted after initial M in the examples in (1a-c).

- (1) Three-way tonal contrast in SY
  - a. īgbá"calabash"
  - b. īgbā "two hundred"
  - c. īgbà "rope for climbing palm tree"

The language has a tone spreading process by which L spreads to a following H thereby making the H realised as a phonetic  $\widehat{LH}$  rising tone (2a), while H spreads to a following L thereby making the L realised as a phonetic  $\widehat{HL}$  falling tone (2b).

- (2) Tone spreading in SY
  - a.  $igbá \rightarrow igbå$  "garden egg"
  - b.  $olóyè \rightarrow olóyê$  "chief"

Non-initial L in Yorùbá triggers the downdrifting of following tones. Also, M is clearly downstepped when preceded by a low tone that is no longer phonetically visible. The H is also downstepped in this environment, but the spreading of the L to H makes its lowering less significant (Adeniyi 2009).

Two other key findings on the Yorùbá tone system are high tone raising (Laniran 1992, Laniran & Clements 2003) and the Assimilated Low Tone (ALT) (Bamgbose 1967). Laniran (1992) reports that a word-initial H is consistently higher before L than before any other tone and this goes on to exert significant effect on the scaling of Yorùbá pitch. Bamgbose (1967) describes the concept of ALT in Yorùbá where by a lost L continues to exert effects on following H. This is because such H continues to be realised as a LH rising tone even after the L has been deleted.

## 3. H-Lowering in Ìgbòmina

It is usual to have L-H-L tonal sequence where the first L either occurs on a monosyllabic word or is on the final tone-bearing-unit (TBU) of a disyllabic noun, the H is on a monosyllabic verb and the last L is on the prefix of a disyllabic noun in Ìgbòmina-

<sup>&</sup>lt;sup>9</sup>The mid tone is most often left unmarked

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Yorùbá. In such cases, H gets lowered to M once the L following it loses its host TBU as a result of vowel sequence reduction (3a-d). Notice specifically that in example (3a) the relevant environment includes the L on  $k\dot{e}$ , H on din and L on the first vowel of  $\dot{a}k\dot{a}r\dot{a}$ . Notice further that in the output, the H on din has changed to M and the prefix vowel of  $\dot{a}k\dot{a}r\dot{a}$  has been elided, with its L tone set floating. The argument is therefore that for this lowering of H to M to take place, the H (i) must be preceded by L; and (ii) followed by a de-linked L (that is, underlying L that is floating in the phonetic form due to the loss if its segmental host).

(3) H lowering in Ìgbòmina-Yorùbá

a.	Kèdín àkàrà $\rightarrow$ Kè dīndīnNEGfry bean cake"he didn't fry bean cake"
b.	Kè gbé ògèdè → Kè <b>gbō</b> gèdè NEG carry banana "he did not carry banana"
c.	Kè fó àgbōn $\rightarrow$ Kè $\mathbf{f}\mathbf{a}^{+}$ gbōn NEG brake coconut "he did not break coconut"
А	Pā ghāghā ālávà ní àlā -> Pā ghāghā ālávà lā <sup>+</sup> lā

d. Pē gbōgbō ōloye ni olā  $\rightarrow$  Pē gbōgbō ōloye l**ō** lā Call all chief at tomorrow "summon all the chiefs tomorrow"

If the lowering of the H to M in this environment were to be triggered by the L on its right, then we will have a case of regressive tone lowering, which is itself a rare phenomenon. Besides, if the lowering is indeed caused by the L to the right of the H, then one should expect it to happen regardless of the tone to the left of H. But in actual fact, there is no lowering in utterances in which the H is preceded by non-L tones (4a-d). Examples (4a-d) follow the paradigm used in (3a-d), except that in (4a-c) the H (on the verbs) is preceded by H while it is preceded by M in (4d). Notice that there is no lowering in any of the utterances. This affirms that although the L to the right of the H is lost, there has to be another L preceding the H for it to be lowered to M in Ìgbòmina.

- (4) Absence of H lowering after non-L
  - a. Ó dín àkàrà  $\rightarrow$  Ó dínkàrà (\*Ó dīnkàrà) SBJ fry bean cake "he fried bean cake"
  - b. Kúnlé gbé ògèdè →Kúnlé gbógèdè (\*Kúnlé gbōgèdè)
     Kunle carry banana "he carried banana"
  - c. Ó fó àgbộn  $\rightarrow$  Ó fá<sup>+</sup>gbộn (\*Ófā<sup>+</sup>gbộn) SBJ brake coconut "he broke coconut"
  - d. Pē gbōgbō ēlérān ní òlā → Pē gbōgbō ēlérān lộ<sup>+</sup>lā (\*Pē gbōgbō ēlérān lộ<sup>+</sup>lā)

Call all meat vendor at tomorrow "summon all the meat vendors tomorrow"

Using reduplication of L-toned nouns, Ajiboye, Dechaine, Gick, & Pulleyblank (2004) argue that a similar process to this in SY is a case of simplification of the adjacent H and L. Their examples include  $\partial w \partial k i - \partial w \partial k \bar{e} w \partial k \bar$ ògèdèkōgèdè (Akinlabi 1984 also made a similar proposal). First, it is doubtful that SY really uses these forms, but Igbomina does because the structural conditions for the lowering are met. More importantly, this process is essentially a case of lowering, and not simplification as Ajiboye et. al. termed it. This is because the M that now stands where the underlying H-L sequence was has a feature reminiscent of ALT. This feature is what Adeniyi (2009:86) describe as "a final fall on the F0 of the non-L preceding lost L" and it is an ever present trace of L synchronically lost in Yorùbá. Since this trace is still present, it cannot be claimed that the L has merged with the preceding H to form a surface M. A more empirical approach remains to claim that the preceding L triggers the lowering of the H once the L following it is set afloat. The lost L now accounts for the final fall of the derived M. This is because the L preceding the M cannot be excluded without arriving at a wrong answer. Consider the reduplication  $\dot{a}gb\dot{a}d\bar{o}-ki-\dot{a}gb\dot{a}d\bar{o}\rightarrow\dot{a}gb\dot{a}d\bar{o}k\dot{a}gb\dot{a}d\bar{o}$  and not \*àgbàdōkāgbàdō "any corn" where we still have the H-L sequence which is not simplified to M because it is not preceded by L. This then proves that it is a case of a preceding L lowering H to M once a L immediately following that H is set afloat. It is noteworthy that when H is preceded by L in Yorùbá, that H is realised as LH rising contour (Cf. 2a); but the fact that this does not happen in the cases in focus is proof that the lowering of H to M is ordered earlier than tone spreading. Once the H has been lowered to M, the structural condition for spreading is no longer met, and thus spreading is not attested. More striking instance of the lowering of H to M in Igbomina where grammar plays an important role is discussed in the next section.

#### 4. H-Lowering after the Future Tense Marker $\acute{e}$

The Ìgbòmina dialect of Yorùbá marks the future tense with the morpheme  $\acute{e}$  "will" which always bears a surface high tone.<sup>10</sup> On the surface, this morpheme is ordered between the noun and the verb. Whereas Standard Yorùbá uses  $\acute{a}$ ,  $y\acute{o}\acute{o}/y\acute{o}/\acute{o}$ ,  $m\acute{a}a/m\ddot{a}$  (Bamgbose 1990:169), Ìgbòmina uses only  $\acute{e}$  to denote future. This future-marking morpheme of Ìgbòmina is phonologically considered as a clitic, as it has "a phrasally-defined distribution" and contains only "one vowel" (Akinlabi & Libermann 2000).

- (5) É as future tense marker in Ìgbòmina-Yorùbá
  - a. Şégūn é lộ → Şégūn é lộ
     Şégūn FUT go "Şégūn will go"

<sup>&</sup>lt;sup>10</sup> This future marker is regarded as a morpheme using similar parameters that Ajiboye (2011:59) used to argue that the High-Tone-Syllable (HTS) of SY is a "genitive morpheme."

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b.	Mì é jẹ àgbàdō → Mè é jẹ̀gbàdō
	1SG FUT eat corn "I will eat corn"
c.	Kábíèsí é gbà ādé → Kábíèsí é gbādé
	King FUT receive crown "The king will be crowned"

When this morpheme is followed immediately by a sequence of H-toned verb and L-tone-initial noun, the high tone on the verb gets lowered to mid in exactly the same way outlined in examples (3a-d) once the L on its right is lost. This is illustrated in the paradigm in examples (6a-e) where the morpheme is followed by different high-toned verbs. The verbs are in turn followed by L-initial nouns. It should be noted that the outputs of all the utterances have M on the verbs in place of the H underlyingly on them. Also notice that in (6a-b, d) the Ls to the immediate right of the high-toned verb, being the tones on the initial vowels of the nouns are set floating by the elision of their TBUs; (6c, e) also involve vowel sequence reduction but while it is the vowel of the verb that is lost, it is essentially the L on the noun prefix that is set floating. This is because the H of the verb re-links to the available TBU (the vowel in the prefix position of the following noun) adjacent to it, delinking the L underlyingly on that TBU<sup>11</sup>.

(6) H- lowering after  $\acute{e}$ 

a.	Kémī é fó $\dot{e}$ ko $\rightarrow$ Kémī é $fo^{+}$ ko
	Kemi FUT brake pap "Kemi will dissolve pap"
b.	$\dot{A}$ é gbé ìyàwó $\rightarrow$ à á <b>gbē</b> yàwó <sup>12</sup>
	1PL FUT carry wife "we will get married"
c.	$\overline{O}$ lú é gé àr $\overline{O}$ $\rightarrow$ $\overline{O}$ lú é $\mathbf{g}\overline{\mathbf{a}}^{\star}$ r $\overline{O}$
	Olu FUT cut funnel "Olu will cut funnel"
d.	Ēégún é jệ èjệ → ēégún é <b>j</b> ệ <sup>+</sup> jệ
	Masquerade FUT swear vow "the masquerade will make a vow"
e.	$\dot{E}$ é jó àdán $\rightarrow$ è é <b>jā</b> <sup>+</sup> dán
	2PL FUT burn bat "you will burn bat"

It is necessary to emphasise that in the cases outlined in (6a-e) the lowering of H is effected without any overt L to its left. This is supposed to be a violation of the structural conditions for such lowering since the input string is H-H-L and not the required L-H-L. The future tense marker  $\acute{e}$  "will" is however the only segmental H-toned element that can trigger such lowering of H to M once the L following that H loses its segmental host. As shown in examples (7-10), any other non-L preceding the H-toned verb violates the

<sup>&</sup>lt;sup>11</sup>It is still not known what determines whether it is V1 or V2 that is elided during vowel sequence reduction in Yorùbá. But the handling of the tones after the reduction follows a clear pattern: H dominates M and L, while L dominates M (Bamgbose 1965:23).

<sup>&</sup>lt;sup>12</sup> The morpheme usually assimilates to the vowel immediately preceding it, such that it is realised as  $\dot{a}$  after *a*,  $\dot{e}$  after *e*,  $\dot{o}$  after *o* etc.

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structural condition.<sup>13</sup>In examples (7a-e) containing utterances in the past tense, this lowering process is not attested. It is suggested that this is because the target H in the utterances is preceded by neither L nor  $\acute{e}$  "will" and so the structural conditions are not met.

(7) Past tense

a.	Kệmī ′ fộ ệkō → Kệmī-ín <b>fộ⁺</b> kō
	Kemi SMHT <sup>14</sup> brake pap "Kemi dissolved pap"
b.	À ′ gbé ìyàwó → à ā <b>gbé</b> yàwó
	1PL SMHT carry wife "we got married"
с.	$\overline{O}$ lú ′ gé àr $\overline{O}$ $\rightarrow$ $\overline{O}$ lú <b>gá</b> <sup>+</sup> r $\overline{O}$
	Olu SMHT cut funnel "Olu cut funnel"
d.	È í jó àdán → è ē <b>já</b> ⁺dán
	2PL SMHT burn bat "you burnt bat"
e.	ēégún í jệ èjệ → ēégún <b>jệ</b> ⁺jệ
	Masquerade SMHT swear vow "the masquerade vowed"

Also in the serial verbal constructions in examples (8a-e) where the word  $f \dot{e}$  is used to denote "wish", the lowering is not attested. Again, it is suggested that this is because in these utterances the target H is preceded by neither L nor  $\dot{e}$  even though an expression of wish can sometimes be regarded as similar to one in the future tense.

(8) Expression of wish

a.	Kémī í fé fó $k\bar{q} \rightarrow K$ émī-ín fé <b>fó</b> $k\bar{q}$
	Kemi SMHT want to brake pap "Kemi wants to dissolve pap"
b.	À ′ fệ gbé ìyàwó → àā fệ <b>gbé</b> yàwó
	1PL SMHT want to carry wife "we want to get married"
c.	$\overline{O}$ lú í fé gé àr $\overline{O} \rightarrow \overline{O}$ lú fé <b>gá</b> <sup>+</sup> r $\overline{O}$
	Olu SMHT want to cut funnel "Olu wants to cut funnel"
d.	· · · · · ·
	2PL SMHT want to burn bat "you burnt bat"
e.	$\bar{e}$ égún í fệ jệ èjệ → $\bar{e}$ égún fệ $j\bar{e}$ †jệ
	Masquerade SMHT want to swear vow "the masquerade wants to
	make a vow"

<sup>&</sup>lt;sup>13</sup> While any of the three tones of Yorùbá can occur to the left of the H-toned verb, only L and M are allowed after it because H does not occur on the prefixes of disyllabic nouns in the language.
<sup>14</sup>SMHT stands for Subject-Marking High Tone which marks agreement between the Subject and the verb (Akinlabi & Libermann 2000). It is a clitic whose phonetic host is the preceding Noun Phrase and is usually realised on a copy of the final vowel of that NP once that vowel bears a non-H tone. If the vowel bears H, the SMHT is not phonetically realised (7a, e). This SMHT is generally regarded as High Tone Syllable (HTS) in Syntax-oriented literature on Yorùbá. In Igbomina, it is phonetically marked H when it is preceded by M and as M when preceded by L (7b, d).

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Examples (9a-e) contain the same set of utterances from (6a-e) but in the present continuous tense. They contain H immediately followed by floating L, but since this H is preceded by neither  $\acute{e}$  nor by another L, the lowering is not attested.

(9) Present continuous tense

a.	Kệmī ń fó ệkō → Kệmī ń <b>fó⁺</b> kō
	Kemi PRS.PROG brake pap "Kemi is dissolving pap"
b.	$\dot{A}$ ń gbé ìyàwó $\rightarrow$ à ń <b>gbé</b> yàwó
	1PL PRS.PROG carry wife "we are getting married"
c.	$\overline{O}$ lú ń gé àr $\overline{O} \to \overline{O}$ lú ń $\mathbf{g} \mathbf{a}^{\dagger} r \overline{O}$
	Olu PRS.PROG cut funnel "Olu is cutting the funnel"
d.	È ń jó àdán → ệ ń <b>já</b> ⁺dán
	2PL PRS.PROG burn bat "you are burning bat"
e.	ēégún ń jệ èjệ→ ēégún ń <b>jệ</b> ⁺jệ
	Masquerade PRS.PROG swear vow "the masquerade is making a
	vow"

It has been said that the final L of the relevant L-H-L or  $\acute{e}$ -H-L sequence has to be phonetically lost (floating) before the H can be lowered to M. Examples (10a-e) show that in the event that an utterance has the  $\acute{e}$  morpheme to the immediate left of H and a linked L to its immediate right (meaning there is no vowel elision), the lowering still does not take place. This usually happens in slow, deliberate speech. This absence of the lowering in (10a-e) shows that the M showing up in the place of the H in instances of lowering is not just an agreement marker, because if it were, one would expect it to be there whether there is elision or not.

(10) Utterances without vowel elision

a.	Kệmī é fó ệkō → Kệmī é <b>fó</b> ệkō
	Kemi FUT brake pap "Kemi will dissolve pap"
b.	À é gbé ìyàwó → à á <b>gbé</b> ìyàwó
	1PL FUT carry wife "we will get married"
c.	$\overline{O}$ lú é gé àr $\overline{O} \rightarrow O$ lú é <b>gé</b> àr $\overline{O}$
	Olu FUT cut funnel "Olu will cut funnel"
d.	È é jó àdán → è é <b>jó</b> àdán
	2PL FUT burn bat "you will burn bat"
e.	e e g u n é jé èjé → $e e g u n$ é jé èjé
	Masquerade FUT swear vow "the masquerade will make a vow"

The lowering of H to M seen in examples (6a-e) therefore suggests clearly that the morpheme  $\acute{e}$  must underlyingly bear a H-L sequence where the H is usually marked on the tone-bearing unit (TBU) but the L is left floating. It is this floating L that becomes active once the L to the right of the H is set floating. This means the underlying floating L that comes with  $\acute{e}$  manifests its presence by triggering the lowering of the H to its immediate

right. An insight provided by the slow deliberate speech forms outlined in (10a-e) is that the H on the verbs contains perceptual rises in pitch reminiscent of ALT, which is supposed to be an effect of a preceding L.

This tone lowering can further be conceived as a sort of prohibition on the presence of two floating L tones in the same utterance; thus the setting afloat of a linked L forces an underlyingly floating L to become active in the phonology. The analyses of examples (6ae) are sketched in (11a-e) with the Floating Low Tone (FLT) included between  $\acute{e}$  and the verbs in each case. In the representations, the distinction between the two types of floating tones is indicated thus: underlyingly floating tone is written just like every other underlying tone, while a tone set afloat by vowel elision is circled.

# (11) INPUT VOWEL-ELISION TONE LOWERING/ PHONETIC FORM

#### (DS INSERTION)

"We will get married"

<sup>&</sup>lt;sup>15</sup> This stage involves an additional process where the H set afloat by vowel elision re-links to the host of the L at the other side of the juncture such that it is the L that is the eventual floating tone. This is shown in the next stage of the derivation where the H now shows up as M on the vowel "a" as a result of the lowering by the preceding floating L. This is similar to (11e).

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- (DS INSERTION) d. E e jo adan  $\rightarrow$ Ee j  $E e \quad j \quad adan \rightarrow e e jadan$ adan  $\rightarrow$ / | LHLH LH L HL M/∆⁺H LH M<sup>+</sup>H LHLARLH "You will burn bat"

This floating tone argument is not completely strange in West Benue-Congo languages. Elugbe (2001) proposed the same for Ghotuo when he argues that genitive relation is marked by a floating H tonal morpheme (H-Tomorph) which sometimes combines with the word  $s\dot{\epsilon}$  "of" which appears to its right. Elugbe proves the existence of the H-Tomorph by arguing that in utterances like (12a) below it is the H-Tomorph that spreads its influence leftward to raise the tone to its immediate left to H, whereas in (12b) H-Tomorph appears without  $s\dot{\epsilon}$  and still scans leftward, raising every L along its track to M. The reader is referred to Elugbe (2001) for a fuller discussion of this phenomenon in Ghotuo.

(12) Floating tonal morpheme in Ghotuo

a. ōtà ´ sé ghèrà → ōtá sé ghèrà wood H-Tomorph of fire "firewood"
b. ghòvò ´ mhè → ghōvō mhè leg H-Tomorph my "my leg"

The tone lowering after  $\acute{e}$  in Ìgbòmina may be argued to be a result of an Obligatory Contour Principle (OCP) prohibition of 'H-floating L sequence' after  $\acute{e}$  (\*é-H-FLT). This is because  $\acute{e}$ -H-L sequence in which the L is not set afloat does not result in lowering. A violation of this \*é-H-FLT sequence is therefore resolved by converting the H to M. But the conditioning behind this prohibition still has to be explained in the phonology. As of now, I know of no satisfactory alternative explanation to the underlyingly floating L proposed in this article.

#### 5. Conclusion

This article has reported an H-lowering phenomenon in Ìgbòmina-Yorùbá. This phenomenon is triggered by either a linked L or an underlyingly floating L to the immediate left of the affected H, but the triggering is only activated when the H is immediately followed by a synchronically floating L. The complexity of the phenomenon coupled with the fact that it is not attested in the standard form of Yorùbá makes the data and

accompanying arguments a contribution to understanding of the Yorùbá sound system. The question of where Ìgbòmina dialect got this phenomenon from is not attended to in this article, but it is considered a line of research that will interest scholars on the Yorùbá language.

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