VOWEL GLIDES AND GEMINATES IN IGBO:
WHY NOT?

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Abstract
Here and there, we are confronted with data that suggest the occurrence of vowel geminates and glides in the Igbo language; but the traditional account of Igbo phonology assumes that they are not attested in lexical formatives. This study revisits the traditional position on the basis of synchronic data and wonders why not! In exploring the phenomena, the study adopts a syllable structure analysis in the framework of multilinear phonology within which it demonstrates that the language attests an intrinsic branching syllable nucleus which licences vowel geminates and glides, and establishes derived and inherent forms thereby. The study thus defines terminologies in its first part, including vowel geminates and glides, to provide a guide to the discourse. It also discusses the multilinear framework in syllable considerations. These are followed by the presentation of data in their classes, and their analysis. Discussions follow after, which underscore the fact of the occurrence of vowel geminates and glides in lexical formatives and derivatives in Igbo.

Keywords: vowel glides; vowel geminates; multilinear phonology; syllable structure; Igbo phonology
Introduction
In general, a segment in a syllable formation may be considered a vowel glide if it comprises two (or more) vowel qualities in successive positions at the systematic phonetic level of a lexical item. In syllable grammar it occupies two consecutive timing positions in the nuclear constituent. The latter structure also defines a geminate vowel. Vowel geminates might, however, have only one vowel quality in the two positions. In other words, whereas two timing positions characterise both vowel typologies, glides are considered to have two vowel qualities*; while geminates have only one; and no hiatus† may be associated with any of these typologies. In the syllable grammar perspective of multilinear phonology (Kahn 1980, Clements and Keyser 1983, Lass 1984, Hogg and McCully 1987, Goldsmith 1990, Kenstowicz 1994, Roca 1994, Urúa 1996, Clements 2000 etc.), vowel glides and geminates are hosted by a branching nuclear node (see also Kenstowicz 1994). Finding evidence for this pattern of the nuclear node in Igbo data may be all there is to prove the occurrence of vowel glides and geminates; and doing this is central to the concern of the present research.

Studies in Igbo linguistics assume that vowel geminates and glides are not attested in lexical formations (Onumajuru 2005, Clark 1990, Emenanjo 1978, Green and Igwe 1963, etc.). In the view of the present study, this position seems unsupported by synchronic data; hence this paper revisits the phenomena, exploring synchronic data; and the outcome demonstrates that vowel geminates and glides rather appear to be well attested in

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* Vowel quality refers to the spectral differences among vowels. It is a factor of tongue height, backness, and roundedness relative to articulatory space and resonance. Each vowel quality presents distinctive spectral characteristics; such that when duration is held constant and spectral patterning is varied, various vowel qualities remain distinguishable; and where spectral patterning is constant and duration is varied, only one vowel quality is distinguished. See also (Velupillai 2012:70).
† That is, they consist of a movement or glide from one vowel position to another in an unbroken stream. A vowel which remains consistent and does not glide may be called a pure vowel. See also Roach (2009:17).
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general – occurring in both lexical items and derivatives. The data† are drawn from cross-dialect samples within which Mbieri, a Central Igbo dialect, is principal. The study would thus provide the groundwork for the research in this viewpoint; and in general contribute to the growing efforts to provide fuller and more accurate accounts of the Igbo language from synchronic regional dialect data, deemed crucial to the development of the language to reposition it to meet the challenges of the new world democratic requirement for language and dialect vitality (cf. Ugorji, 2010).

Our investigation follows current trends in syllable analysis in adopting a multilinear phonology model which provides great insight into syllable structures, being more elegant. In particular, it accesses intra-syllabic constituents more elegantly. Within this framework, we are able to demonstrate that the syllable conditions of Igbo do permit branching nuclear elements in the phonology of the language. In other words, there is nothing about the intrinsic properties of the syllable constitution of the language that prohibits such features; instead, both the intrinsic syllable conditions and synchronic data support the occurrence of vowel glides and geminates. Next we introduce key terms to guide the study. They are syllable structure analysis – in the framework of Multilinear Phonology within which properties of the nucleus which host vocalic elements and syllable count are emphasised – and vowel glides and geminates.

Definition of concepts
As earlier mentioned in the forgoing section 1, we need to introduce the key terms which would be useful in guiding the discussion; and this section addresses that. First, the syllable perspective of multilinear phonology is discussed focusing on the nuclear constituent, to show in particular the structure which may

† Primary data were sourced over a period of two years (2004 – 2006) through ‘action research’ (Wallace 1998:1) defined as “the systematic collection and analysis of data relating to the improvement of some aspect of professional practice”. The secondary data sources are published works, dully acknowledged at their respective relevant points.
be considered the universal requirement for the occurrence of vowel glides and geminates. This answers to the question of whether there is any property intrinsic to the phonological grammar of Igbo which might not permit the occurrence of vowel glides or geminates, or that analysts have simply ignored the phenomena. Second, the formal properties of vowel glides and geminates are discussed. Thus, we commence with discussions on the syllable in the next paragraph.

The syllable may be considered a level of language structure underlying the grouping of speech sounds and prosody (cf. Jakobson and Halle 1968). The term thus refers to an element of phonological structure which consists in segments, organised in permissible intrinsic sonority which might constitute the basis for prosodic statements (see also Ugorji 2002, 2003, 2013). Similar attempts at defining the syllable are made in respect to parts or whole of its nature, structure and function in multilinear phonology (Goldsmith 1990:18; Lass 1984:250; cf. Hammond 1997, etc.). The Standard Theory ignores the definition of the syllable (Hyman 1975:188-94; cf. Sommerstein 1977: 199-203).

Main trends in the analysis of the syllable include the **hierarchical constituent structure** analysis and the multi-tier analysis. Both are unified for the present purpose. In particular, it assumes a unification of the CV-phonology of Clements and Keyser 1983 (see also Kahn 1980) with the notion of “Association” which is more insightfully defined in Auto segmental terms (Goldsmith 1976, 1990; Hogg and Mcull 1987). Accordingly, “tiers” are recognised as independent planes of representations. For instance, there is a tier indicating a syllable constituent or “projection”, say, Nucleus, a CV-tier or ‘Skeleton’, a segmental tier, etc. Tiers are linked by association lines indicating how they may be co-articulated. It is also assumed, in line with Clements and Keyser (1983:27) that syllables are fully syllabified at the lexical level of representation (i.e. not in the course of phonological derivation which constitutes the input to the phonological representation (component) cf. Kahn 1980.
Accordingly, the syllable, σ, consists of three parts; namely, the onset (O), the Peak or Nucleus, N, and the Coda (Co). The σ is binary branching into Onset and Core or Rhyme (also rime). The Nucleus (Peak) and the Coda are dominated by the Rhyme, viz:

1) Syllable
   Onset                  Rhyme
          Nucleus          Coda

At the risk of further reviewing too basic materials, the syllable is thus characterised by a Nucleus (N) or Peak of sonority, which is the obligatory element of the structure. The N node is always occupied by [+syllabic] segments. It may be flanked by [-syllabic] segments which occupy the Onset (O) and the Coda (Co) nodes. The structure in fact is comparable to syntactic tree structures consisting of levels of projections. The syntactic ‘lines’ or branches may be expressed in terms of ‘Association Lines’ in Multilinear Phonology, along with the notion of immediate constituents. Accordingly, elements of phonology occur in tiers or independent planes of representations and the tiers are linked by association lines indicating how they are synchronised. Scholars agree that the better known insights are provided by multilinear phonology (cf. Roca 1984; Clements and Keyser 1983; Kahn 1980; Goldsmith 1990, Clements 2000, etc.). It makes syllable constituents more empirical and observable.

The syllable (N)ucleus is critical to the present study. In particular, research shows that both vowel glides and geminates are hosted by a branching nuclear node in syllable formations (cf. Kenstowicz 1994): the universal conditions require that the N node be filled by syllabic units and that the number of syllables coincides with the number of such syllabic units in a string. Where more than one syllabic or vowel quality occurs, the N node may
branch, as in diphthongs or vowel glides, or a new syllable (σ) is formed. A brief illustration may make it clearer, thus:

![Diagram]

Considering the above scheme, the (O)nset branches into [k] and [r]; the (N)ucleus branches into [a] and [i] vowel qualities, and the (Co)da into [s] and [t]. The point for the nuclear node is that it branches to host the vowel glide, /ai/.

Generally two conditions—(a) and (b) below—properly define a glide:

a. The vowel qualities glide one into the other in pronunciation without hiatus;

b. None of the vowel qualities in a) is shown apart to mark some different morphological or morpho-phonological information;

c. In tonal languages, the tonal units may, like the vowel qualities, glide one into the other, and may be rising, falling or so.

Similarly the branching N may also define vowel geminates, in which case \( V_1 = V_2 \) or same vowel quality is deemed to extend; cf. Welmers 1973, in 5) below.

**Earlier Accounts**

Earlier studies identify apparent vowel geminates and glides in very general terms. There are cases of geminates derived in constructions, and others which result from phonetic processes, and so on; but lexical cases are regarded as unattested. Accordingly, it appears useful for clarity that the occurrence of
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geminates and glides be considered in terms of whether they are derived or non-derived formatives. We continue this review guided by this dichotomy. Stated roughly, the derived forms may simply be those forms whose trace may not be lost; and the non-derived forms may be defined as a minimum of those whose trace is lost; but as earlier noted, what the present study considers remarkable is the occurrence of non-derived formatives, for obvious reasons.
Clark (1990:18) recognises the occurrence of (apparent) vowel geminates at word boundaries and argues for an assimilation of features, not of nodes, in a feature hierarchy model. Some of the examples appear in (3), below:

3) ùdè ‘cream’ + isi ‘head’ → ùdísì ‘hair cream’
áhà ‘name’ + ńhè ‘thing’ → áhíihe ‘the name of something’

The data aptly demonstrate some vowel ‘gemination’, in an interesting process of derivation in which vowel geminates are formed in associative constructions. While this is nonetheless some support for the occurrence of vowel geminates in Igbo, they occur beyond lexical items. This remains the fact whether the vowel geminate in udiisi ‘hair cream’ for instance, is analysed as involving two Os (syllables) or two Ns or a branching N.

Another apparent vowel geminate formative derived in constructions involves lengthening certain vowels in given phonological contexts. Consider the following:

4) àlà # dʒí → àlàádʒí ‘portion for cultivating yam’
ùgò # tʃí → ụgòọtʃí ‘personal name’
tʃí # dì → tʃídì ‘personal name’
egó # dì → égòọdì ‘personal name’
tʃí # ɲwɛ → tʃíɲwɛ ‘personal name’
Following Ugorji (2008:5) the relevant phonological conditions for the formation of vowel geminates in (4) above may be stated thus:

\[
\text{a word boundary involving a final vowel to the left; and, to its right, another vowel preceded by a consonant; and that the tones on those relevant vowels contrast:}
\]

\[
\begin{align*}
\text{XV} & \ # \ \text{CVX} \\
\text{[αT]} & \ \text{[βT]} \\
\end{align*}
\]  
\[
\begin{align*}
\text{XV} & \ (#) \ \text{CVX}^\|$ \\
\text{[αT]} & \ \text{[βT]} \\
\end{align*}
\]

Further analytical details and data are available in Ugorji 2008; see also Nwachukwu 1995 for a phono-syntactic analysis.

Whereas the foregoing section discusses apparent vowel geminates derived in constructions, the next section reviews other derivatives within words. More common ones involve the elision of intervocalic consonants, as shown in (5) and (6), below:

\[
\text{5)}
\begin{align*}
\text{ɔhùrù} & \ → \ ‘\text{new’} \\
\text{águù} & \ → \ ‘\text{hunger’} \\
\text{àgbòú} & \ → \ ‘\text{girl/young woman’} \\
\end{align*}
\]

As the above examples suggest, the application of intervocalic syncope accounts for the occurrence of vowel geminates; and accounting for this as some form of branching N constituent would be in want of justification. It therefore suffices to be considered as one evidence of the possibility there is to have a sequence of vowels occurring in lexical formations, which is in consonance with Emenanjo (1978) that such be accounted for in terms of two syllables.

$\$ (where V is vowel, C is consonant, X is any other possible element of the grammar, T is tone, α and β represent contrasting tone values and # is word boundary)
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There is a ‘combination’ which Welmers (1974) refers to as a ‘long vowel’ in Igbo: namely, nà in nà-èrí ‘is eating’ is sounded without the vowel [a]: [à] is elided, and e in èri lengthens. This “combination is a long vowel” (Welmers 1973:34). It is thus another case for derived vowel geminate forms.

Some other forms of derivatives involving non-geminates but glides are presented in 6, below:

6) ákwúkwó → áúkwó ‘leaf/book’
ásósó áósó → ‘speech/language’
ósisí óísí → ‘tree’
òkúkò òkò → ‘fowl’

The apparent vowel glides in the above data appear obviously derived from intervocalic consonant elision. Stated specifically: in lexical formations involving VCVCV or so, C₁ is elided if equivalent to C₂; viz:

C₁ is lost in a lexical formation if C₁ = C₂.

More importantly, the consecutive vowels are analysed as a sequence of two Ôs (syllables), not one; in which case there is no branching N.

Emenanjo (1978) lists the following non-derivative forms:
ôràí ‘a shrine in Onitsha’
áwáí ‘yam porridge’

and explains that the words are trisyllabic, apparently leaning on Welmers (1973: 24); namely, ‘phonemically long vocalic segments can in every known case be readily interpreted as double vowels’.

In his consideration therefore two Ôs are accounted for in /áú/, not one. This view would be in order if hiatus can be shown to occur in

** Better, a type of ‘yam soup’
pronunciation in-between the two vowel qualities in any contextual observation in native speaker intuition; otherwise it lacks justification; and indeed there is want of justification. Failing to recognise the occurrence of glides in the Igbo language experience might be at a cost – certain phenomena might just be inexplicable or at least unclear, as in the case above case. In the view of the present insight provided on intra-syllable constituents, such are better considered as vowel glides and analysed in terms of a single syllable with a branching N constituent. Furthermore, Emenanjo (1978: 2-3) recognises the occurrence of /ta/ and /te/ but analyse the /t/ as an exponent of a phonemic (underlying) /j/, which marks palatalisation on a preceding consonant, thus: C\j; but states ‘We would prefer to treat [h\j] as a sequence of consonant plus vowel because it seems the semi-vowel in [b\j\a] is an exponent of an underlying vowel’. This analysis appears economical in its diachronic leaning, but lacks transparency. In the perspective of the present research the vowel is overt, indicating a vowel glide. In addition positing consonantal glide in these contexts lacks both phonetic and psychological reality. In respect to the former, no physiological gestures correspond to consonantal glides; and for the latter, it appears counter-intuitive to native speakers††.

**Synchronic Data and Analysis**

As earlier noted, a branching Nucleus node in syllable formations plays host to both vowel glides and geminates (cf. Kenstowicz 1994, Clements 2000, Clements and Keyser 1983, among others). Considering this rule of the thumb, only one thing is critical to this study: namely, to provide evidence for the occurrence of branching Nucleus, defined roughly structurally in terms of (7), below:

†† Arising from a tentative research conclusion (cf. Ugorji, in progress)
and this is what we endeavoured to do in this section, using data from Mbieri dialect for the principal evidence and other dialects for further support, but focusing on lexical forms.

4.1 Mbieri Data
The dialect attests lexical items involving different formations of vowels relevant to this consideration. They are categorised according to vowel harmony groups, as in 8a, and 8b, below:

8a) [-ATR] Vowels: Geminates

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Lexical example</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>[ii]</td>
<td>ṅwir, mmmị, n'irọ</td>
</tr>
<tr>
<td>ii.</td>
<td>[ɛɛ]</td>
<td>mmɛɛ, dɛɛ</td>
</tr>
<tr>
<td>iii.</td>
<td>[aa]</td>
<td>thàà, kàà, b’hàà, nààmị, àšàà</td>
</tr>
<tr>
<td>iv.</td>
<td>[ʊʊ]</td>
<td>dọọ, dụụ</td>
</tr>
<tr>
<td>V</td>
<td>[ʊʊ]</td>
<td></td>
</tr>
</tbody>
</table>
8b) [+ATR] Vowels: Geminates

<table>
<thead>
<tr>
<th>Vowel</th>
<th>Lexical example</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>v.</td>
<td>[ii]</td>
<td>Ngwhii</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ókhii</td>
</tr>
<tr>
<td></td>
<td></td>
<td>éwii</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ŋi</td>
</tr>
<tr>
<td>vi.</td>
<td>[ee]</td>
<td>ndéewó</td>
</tr>
<tr>
<td>vii.</td>
<td>[oo]</td>
<td>òólo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>imikóó</td>
</tr>
<tr>
<td>viii.</td>
<td>[uu]</td>
<td>ògbùù</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dùù</td>
</tr>
</tbody>
</table>

8c) Vowel Glides

<table>
<thead>
<tr>
<th>ix.</th>
<th>[ʊɔ]</th>
<th>mmùọ</th>
<th>Spirit Two</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>abùọ</td>
<td></td>
</tr>
</tbody>
</table>

Considering the above data, the geminate vowels occur in the two harmony categories, [+ ATR] and [- ATR]; thus, underscoring their being natural to the Igbo language that operates vowel harmony principles; see also Ugorji (in press). In particular, geminate forms occur in all known Igbo vowel positions, notwithstanding the limited data. Beyond this spade work, however a wider scope of data might be needed to reach a more definite conclusion. Only one case of vowel glide occurs in (ix), above. This might easily be dismissed as an isolated case even when it is exemplified in two lexical items; however, more are revealed in the comparison which follows below in (9), for which it is worth considering.

It seems interesting to observe that vowel glides and geminates are also attested in some other dialects of Igbo. We consider this further evidence next, as shown in (9) below:
4.2 Some comparative data

A comparison of data from other dialects contiguous with Mbieri indicate that there might be much more examples than we have so far noted, and that both vowel glides and vowel geminates might be more widely occurring. In particular, that there exist much more vowel glides and geminates, in spite of earlier assumptions concerning the vowel system of Igbo. Consider the data in 9a and b, below:

<table>
<thead>
<tr>
<th></th>
<th>Mbieri</th>
<th>Uraața</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>mmii mmúa</td>
<td>mmáí</td>
<td>‘(palm)wine’</td>
</tr>
<tr>
<td>ii.</td>
<td>ngw'híi</td>
<td>mb'hëe</td>
<td>mbë</td>
</tr>
<tr>
<td>iii.</td>
<td>ok'híi</td>
<td>ok'híà</td>
<td>okëi</td>
</tr>
</tbody>
</table>

As one may observe, the glides [ia, a, and ei] do occur in the examples in 9a. The name of the dialect understudy, Mbieri, in itself reveals one case of the occurrence of the glide, [ie], as Uraata does of a geminate, [aa]. There are yet more glides in 9b, below, in addition to an isolated case involving three vowel qualities in (xi). It may be noted that apart from Uraata and Oredo, the other dialects may not readily be said to be contiguous with Mbieri.

<table>
<thead>
<tr>
<th></th>
<th>Some Others:</th>
</tr>
</thead>
<tbody>
<tr>
<td>i.</td>
<td>mmá ‘(palm)wine’</td>
</tr>
<tr>
<td>ii.</td>
<td>mmáí ‘(palm)wine’</td>
</tr>
<tr>
<td>iii.</td>
<td>ágbà ‘personal name’</td>
</tr>
<tr>
<td>iv.</td>
<td>ágbà ‘shoes’</td>
</tr>
<tr>
<td>v.</td>
<td>úkpá ‘personal name’</td>
</tr>
<tr>
<td>vi.</td>
<td>iwá ‘money’</td>
</tr>
<tr>
<td>vii.</td>
<td>ikpè ‘money’</td>
</tr>
<tr>
<td>viii.</td>
<td>ána ‘one’</td>
</tr>
<tr>
<td>ix.</td>
<td>ónó ‘personal name’</td>
</tr>
<tr>
<td>x.</td>
<td>úudi ‘place name’</td>
</tr>
<tr>
<td>xi.</td>
<td>ózúá ‘fool(ish)’</td>
</tr>
</tbody>
</table>
In addition to the observations made in respect to geminate vowels, the comparative regional dialect data provide further examples in viii, ix, and x, above. Thus, the occurrence of vowel glides and geminates is putatively realism.

Discussions
Critical to the study is the question of whether or not vowel glides and vowel geminates do occur in Igbo lexical formatives; and what is required, as indicated, is to provide evidence for a branching N(ucleus) node. Lexical formations are fundamental to the evidence, proving the strong point of the study; hence the data listed from (8) to (9), above, naturally demonstrate syllable nuclear constituents which do branch (into two, at least). Putatively, the Mbieri data among others attest branching N constituents, within which the two vowel qualities may or not be equivalent. The logical outcome, specifically speaking therefore, is that Igbo has geminate vowels. The research follows same procedure to provide evidence for gliding vowels based on the same structural template; but the qualities occurring in the branches of the N node are not equivalent. Everything considered so far point to the fact that Igbo does attest a branching Nucleus in its syllable formations as demonstrated in Mbieri data; and the data from other dialects suggest more strongly that it might be more extensive. The essential structures which summarise the points for the existence of glides and geminates may be schemed as follows, using two lexical items for the illustration:
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10) a. \( \sigma \) \( \sigma \)  
\[ \text{O R} \]  
\[ \text{N} \]  
\( \text{w i i ‘rabbit’} \)  
\( \text{a b} \)  
\( \text{ú ‘two’} \)

(b. \( \sigma \)  
\[ \text{N} \]  
\[ \text{O R} \]  
\[ \text{N} \]  
\[ \text{V V} \]  
\[ \text{C V V} \]  
\[ \text{é w i i ‘rabbit’} \]  
\( \text{a b} \)  

(Note: in 10a. \( V_1 = V_2 \); but in 10b. \( V_1 \neq V_2 \))

The data above do putatively demonstrate the occurrence of a branching Nucleus in the syllable formations; and two typologies are shown, namely, 10(a) – where \( V_1 \) is equivalent to \( V_2 \) and 10(b) where \( V_1 \) is not equivalent to \( V_2 \). While the latter accounts for the occurrence of vowel glides, the former accounts for the occurrence of geminate vowels. Accordingly the geminate vowels identified are listed in (11) below. If this research outcome is accepted, then Igbo – including Standard Igbo and the central regional dialects – may be shown to have monophthong vowel qualities, with some appearing in full and in geminate forms, thus:

11. [+ATR] [-ATR]  
a) i e o u \( \text{i e a o u} \) (full vowels)  
b) ii ee oo uu \( \text{ii e e a o o} \) (geminate vowels)  
and the vowel glides include:  
c) ie ei io \( \text{i a i a o u a i} \) (vowel glides)

While considering the data quite convincing and clearly illustrative of the viewpoint of the research, the examples may not be taken to be exhaustive, in view of the scope of data.

It would perhaps be interesting to make statements about the phonemic status of the glides and geminates, but we prefer to
leave that to future research. However, we do envisage they may be largely phonemic as ókèì ‘aged/elder’, for instance, would contrast ókè ‘boundary’. The following data suggest more:

12. Apparent phonemic geminate vowels in Mbieri data:

a. ògbú ‘killer’
   ògbúù ‘envy’
   ògbù ‘deaf-mute’

b. tìá ‘to blame’
   tìáà ‘today’
   tì ‘to punish’

c. káá ‘please’
   ká ‘mature’
   káá ‘engrave’
   ká ‘surpass’

**Concluding Notes**

The study has so far investigated the syllable formations of Igbo. It leaned on the central role of a branching nuclear constituent in defining the structural template for the realisation of vowel glides and geminates, and showed convincingly that synchronic data affirms the occurrence of this pivotal structure. Thus, evidence so far considered indicate that on the basis of Mbieri as the principal source of data among others, Igbo syllable structures do permit a branching nuclear element, a logical host for phonetic instantiations of vowel geminates and glides.

In its systematic procedure, apparent glides or geminates are examined, and ruled out, because they are derived forms not inherent lexical units; such that only lexical formations which involve glides and geminates are admitted in evidence for the establishment of the viewpoint of the research, namely, that Igbo attests vowel glides and geminates in lexical formations.
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Following this outcome of this preliminary account, Igbo phonology needs no more gloss over these phenomena but should pursue more vigorously to present fuller account of this property of the language from more regional dialect data. Thus, while the outcome of this research proves interestingly convincing it might only represent a spade work for the new path which future research should (further) explore to reaffirm or establish or even disprove the present conclusions and the phenomena.

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