1. **IGBO TONEMARKING: RICH IN THEORY, POOR IN PRACTICE**

Tonemarked Igbo texts are as rare as ákpùrù ezé dí ọnu ọkùkọ, but why? Before the British Empire’s *Anschluss* captured 9ja (the “Niger area”), various Igbo-speaking communities and their neighbors deployed ńsibidi, an ideographic (non-phonetic) code of gestures and graphic designs which by its nature had no need to represent minimal lexical contrasts of F0, perceived laryngeal pitch (alias *tone*). Then with colonial government and mission schools came alphabetic literacy and no less than four tonemarking techniques, all of which remain in use for different purposes today. This affluence of means fits the proverbial norm of *igwebu*íke, a watchword of strength in numbers in the SE angle of 9ja’s geopolitical hexagon, but excess methodological diversity is not about to be simplified by a non-existent central planning office, and there’s no imminent prospect of speakers or linguists spontaneously agreeing on a one way to encode linguistically significant Igbo prosody that’s unrecoverable from context. As a first step, let’s review the clashing strengths and weaknesses of each style of tonemarking for various legitimate purposes. An exit from the present muddle needs a more adequate theoretical approach to Igbo prosody than linguistic science can offer now, and a greater practical commitment to public education and media than is possible in the currently collapsing political economy of a vanquished province of a neoliberal neocolony.

2. **THE EXPLICIT TONE CONVENTIONS COMPARED**

Igbo can boast of two explicit scientific tonemarking conventions, plus two spontaneous, amateur workarounds inherited from colonial days, ọgè Ǹdi Ọcha. Such enduring and abundant pluralism is not unfamiliar from other domains of life in the SE 9ja area, and won’t be abolished by decree. More achievable may be to assess the technical strengths and weaknesses of each notation system for a given task, so as to encourage the evolution of Igbo literacy in formal education and standardization in mass media. The amateur systems are discussed in §3 below. The scientific systems—based on different applications of the classical phoneme concept—can be briefly contrasted as follows:

(i) a *paradigmatic* convention, applied by Green & Êgwè (1963) and continued in theoretical and applied works by Williamson (1972), Éménanjọ (1978) and their students. The idea, on the explicit analogy of segmental phonemic contrast (Chao 1930, Pike 1948), is to mark each syllable individually as H or L, economising by leaving
ordinary H unmarked, and reserving a special mark for the first H after a downstep juncture. The èzinàúlò of this tradition is Ìbàdàn — both the University itself and what was once called Oxford University Press Nigeria. The theoretical apogée of this taxonomic idea was autosegmental phonology (Goldsmith 1976), a direct formalization of Green & Ìgwè (1963) in new notation. But recently, autosegments have lost their old élán, leaving top experts to wonder “Do tones have features?” (Hyman 2010) and “Do we need tone features?” Clements & al. 2010). And if autosegmental theory is passé (cf. Archangeli & Pulleyblank 2015), its bygone àkadá prestige is no longer available to prop up the paradigmatic convention for the present generation of Ígbo spellers.

(ii) a syntagmatic convention, invented for Twi (Àkan) by Christaller (1875) and applied to Ígbo with minor variations by Swift & al. (1962), Welmers & Welmers (1968) and Nwáchukwu (1976) — non-Ìbàdànites all. The idea is to mark all contrastive pitch junctures encountered throughout a phrase, economising by leaving unmarked any syllable whose pitch prolongs the level of its predecessor. In this way, a downstepped H is simply a marked H, because an unmarked H logically can’t bear a pitch contrasting with the preceding syllable. This view received theoretical backing from Clark’s (1978) framework of “pitch change markers” which was itself inspired by McCawley’s (1964, 1965) pitch accent theory of Japanese (cf. Liberman 1995). After a sharp rebuke by autosegmental bigmen (Clements & Goldsmith 1980), Clark recanted her heresy and rejoined the mainstream (1989). However, pitch accents are back in play for prosodic theorists (e.g. Sietsema 1989, Akinlabí & Liberman 2001, Duanmu 2004, Dilley 2005) and rest on a solid theoretical foundation in phrasal linearization/spellout.

Nwáchukwu (1995, 3, 5) illustrates the respective outcomes of these approaches with the following examples among others. He labels convention (ii) in the second column as PAN.¹

¹Excerpts copied directly from source. Nwáchukwu’s cover symbol S stands for “step” i.e. the H that follows a downstep juncture. The fourth example can be glossed ‘killer of the brave’. The last four examples give two pairs of dialect alternates.
Looking past notation, the concept of lexical minimal pairs underlying system (i) is the foundation stone of taxonomic structuralism, whereas phrasal phonology, the basis of (ii), flourished mainly in the generative/derivational era, therefore one way to compare the two approaches is to evaluate their theoretical adequacy. By definition, structuralist (i) is better suited to languages with richer, more stable, classically minimal lexical pitch contrasts, a circumstance obtaining more in Yorùbá than in Ìgbo, whereas the generative system (ii) is more apt for languages with extensive morphosyntactic i.e. phrasally conditioned pitch alternations (alias ‘non inherent tones’), as are much more extensive in Ìgbo than in Yorùbá.²

The theoretical advantage of system (ii) for Ìgbo is, however, counterweighed by the fact that phrasal pitch contrasts are non-minimal (are redundant) whenever morphosyntactic and pragmatic context are taken fully into account—a situation which in Ìgbo is very often encountered (Manfredi in press). But still, minimal pitch occurs in many personal and place names that tend to be opaque to outsiders (see below). This point is noted by Ìgbo scholars who recommend that only “where context or natural order of words cannot remove ambiguity the tones will be marked… Marking all the words in a sentence or passage would be unsightly and an unnecessary waste of time” (Ọgbálú 1974, 19, emphasis added). The relative benefits of (i) and (ii) from a psycholinguistic standpoint can be tested comparatively and experimentally, to learn whether Yorùbá-type versus Ìgbo-type prosodies are easier to parse apart from syntax, as assumed by (i), or in tandem with it, as with (ii).³

System (i) suffers from an irremediable internal contradiction: downstep is inherently syntagmatic i.e. it encodes a pitch juncture between successive tokens of nonlow, so system (i) must smuggle in a little bit of system (ii), tacitly embracing the inconsistency. Some scholars respond to this problem by redefining non-automatic downstep as a “derived… mid tone” (ányaanwú 1998, 77), but mere denial doesn’t make a problem go away.⁴ Downstep is admittedly marginal in Yorùbá, hence Bámígbósé’s proposal of full stop [.] to mark “assimilated low tone” in phrasal nominals like Oló.dùmarè (1966, 1972) may be the only time when his unequalled academic authority did not prevail on his compatriots to comply. By contrast, the downstep phenomena of Ìgbo are not so easily swept under the mat. Naive or wishful reinterpretation of the Ìbádàn macron as an Ìgbo “mid tone” (derived or otherwise) leads straight into the spelling snare that trapped this published example:

ákwá üfọdụ ‘some clothes’ (Ọgbóînàyá 1975, 111)

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²This Ìgbo/Yorùbá contrast generalizes to the typological difference between the BK1/BK2 sectors of the Benue-Kwa branch of Niger-Congo, and to a homologous bifurcation of Sinitic and Romance (Manfredi 2009, 2012). Obviously, tonemarkings not hotly debated for Sinitic’s nonphonetic orthographies.

³Alleged psycholinguistic demonstrations of the uselessness of tonemarking (Bernard & al. 1995; Bird 1999) failed to consider type (ii) systems at all, not to mention the fuller range of possibilities (Roberts 2011), none of which can be excluded apriori.

⁴K. Williamson’s amazement at the 5th (1985) LAN conference at Ñsúká, when C. Êkêekwú declared the death of Ìgbo downstep and the resurrection of Ìgbo mid tone, was priceless to behold.
According to the given spelling, how is this phrase supposed to be pronounced? In reality it contains only two pitch drop junctures, not four as the four macrons should mean, but the mistake is natural if the “mid tone” expedient is taken at face value. A possible way out is to ignore downstep entirely, writing only lexical/isolation tone and appealing to morphosyntactic context, but this can’t suffice in general, as shown by Welmers’ contrast in (1) or my hypothetical in (2) illustrating tonally distinct options of phrasal modifier attachment. [Apologies if my invented (2a) is ungrammatical—corrections invited.]

(1)a. Há wù-ru ālọ átọ.
3P set-AFF house three
‘They built three houses’
{háwùrùúlọ átọ}
b. Há wù-ru ālọ átọ.
3P set-AFF house three
‘They built (a/the) third house’
{háwùrùúlalátọ}

3P froth-AFF cloth AFF-remain
‘They did the laundry sometimes/for a little while’
{hásùrù ńkwațụfọdụ}
3P froth-AFF cloth AFF-remain
‘They washed some clothes (…but it took a long time)’
{hásùrù áńkwațúfọdụ}

Besides downstep, a structural property of the language, two purely graphic considerations also count against system (i). Anyone who’s tried to write a macron with a pen (or read it in a bluebook) knows that a level line is hard to distinguish in handwriting from a grave (L) mark. Secondly, reading proper names in bilingual English-Ịgbo text while assuming system (i), a word without a mark is ambiguous unless strict consistency of marking can be confidently guaranteed. Under system (ii) however, strict tone marking is unambiguously assured as soon as an initial accent is encountered. Consider a few names from Ąnoká’s list:

in system (i), the town of Ogbu is unambiguously {ọgbú} a place in Ėdhà, but only if marking is strict, otherwise it could also be {ọgbú} a place in Mbaisén; the town of Uturu is unambiguously {útúrù} a place in Ìkwúanọ only if marking is strict, otherwise it could also be {útúrù} a place in Ìsúkwuático.

in system (ii), the town of Ogbu is unambiguously {ọgbú} Ėdhà; the town of Uturu is unambiguously {útúrù} Ìkwúanọ.
Reducing the tonal ambiguity of proper names and other isolated Igbo words is not trivial, given the importance of English-Igbo bilingual text, not just in “Igbo literature” as defined by Éményú (1978, 189), but also in accurate historical and cultural reference books as well as in maps, registers or other indexes relied upon by the general public. I would carry this a step further, to suggest that proper (personal and place) names are the most strategic point for introducing (selling) tone marking in Igbo, and for breakthroughs in effective instruction in the school system. If so then the non-ambiguity of system (ii) is a significant advantage.

3. THE COLONIAL TONE CONVENTIONS COMPARED

As for the two residual, haphazard colonial tone-marking formats mentioned at the outset, these remain viable in the present policy mix, thanks to the near-abdication by government and private schools and institutes (NINLAN?) from the task of inculcating Igbo literacy.

(iii) biscriptalism, the coexistence of multiple orthographic technologies. This is standard in East Asian languages (Mair 2014), but not rare in SE 9ja either (Oriental Bros!). Igbo had not only the medieval Cross River ́sibidi ideograms, which by design were not language-specific (Daryell 1910), and a neo-Pitmans script of the Ọm récupala [“Anambra”] river basin (Nwàọga & al. 1990), but also two pre-Ọnwụ alphabetizations (cf. Nwààkuńmà & al. 1961). A semi-roman system (Westermann & al. 1927, Ward 1936), still found in vestiges like Aro (Árù), was called “New” because it replaced an older set of rough-and-ready rules to mark the Lepsius-Crowther “dotted” vowels — phonetically describable in terms of unavanced tongue root or narrow pharynx (Stewart 1967, Lindau 1975). Instead of a dot, they used a consonantal coda whose presence is inferrably diacritic in a language whose syllable template lacks a regular non-nasal coda slot. Such letters cheaply do the work of the typographically costly subdot in family names like Anih (Àni) and Orji (Ójì) and in place names like Obba (Ọba) and Nsukka (Nsíká). Similarly, Awka (Ọka) uses a further aw>ọ coda convention. What makes fake coda consonants relevant to tone is that they can accidentally create a tonally-specific ideogram. Nobody would ever try to spell the HH word for ‘kolanut’ as orji, because that 4-letter spelling is already ‘owned’ by the HL item for ‘iroko tree’. Independent proof of this point is provided by proper names like Okey, whose junk final consonant is not needed for vowel harmony but whose LL version meaning ‘creature’ is conveniently distinguished from the LH item meaning ‘rat’ that’s not spelled with -y. Unfortunately, like any convenient crutch, this handy old expedient has served to discourage Mààzi Ọnwụ, the 56 year old limping civil war veteran camped out by Oji River (not Orji River), from ever walking upright on his own two feet. But it’s not advisable to try and take an elderly person’s walking stick away by force!

(iv) representational parallelism — effectively, autosegmentalism avant de la lettre. This device, first popularized in Igbo by Ward with the impressionistic pitch tracks copied below (Adams & Ward 1929, 61, 69), remains useful as a visual aid but is impractical in running text. Échèrúó (1998) also resorts to ungainly parallel pitch representation, because his Goldie-style (1874) umlauts make accent marks impossible.
4. CONCLUSION

My kóbò abúó contribution here is that theorists should get our own ụlọ in order. Is tone a phoneme (autosegment) or a pitch accent, in Igbo and in general? The persistent failure of the Ìbadan convention to find acceptance with the Ìgbophonic masses and even with a critical mass of ńdị nkuzi may be due to broader societal failures of pedagogy and governance, but the fault could be more specifically its formal mismatch to the characteristic prosodic patterns of Ìgbotype languages, as briefly indicated above. At the very least and at long last, the alternative (Nwáchukwu) convention deserves to be fairly tested in the classroom, alongside any other imaginable approaches to linguistically significant prosody. (For example, written English would be impractical without the interrogation mark “?” which is purely a tonemark in English yes-no questions.) In keeping with this optimistic strategy, the Nwáchukwu convention has been applied as consistently as possible throughout the body text of this paper, apart from the actual examples published in other orthographic systems and cited here for purposes of illustration. Meanwhile, the organically amateur workarounds of colonial times remain available and Igbo speakers will continue to avail themselves of them. As the gwóngworó slogan says: ⁵

Ndé onye ọsụ à!
Ndé onye ọsụ á!

⁵To everyone, the one that pleases them.
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