# Tonal Counterpoint Revisited: From Yorùbá Pop to American Hip-Hop

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**NAL** counterpoint" is a poetic device in the oral improvisatory tradition of *oríkì* 💄 (praise-singing) first documented by Nigerian professor Ọlátúndé O. Ọlátúnjí in a conference paper in 1969 and later included in his book Features of Yorùbá Oral Poetry (1984). Today, it permeates a range of Yorùbá performance practices. Research on tone language poetry and song has increased in recent years, but no scholars outside of Yorùbá Studies have cited this vital work. It is difficult to know what the tonal counterpoint of the mid-twentieth century that Olátúnjí observed sounded like because recordings do not accompany his book. In this article, we provide substantial new documentation for the continued prevalence of tonal counterpoint in contemporary indigenous and neo-traditional vocal arts. The tradition of *oríki* predates colonialism and there is a continuity of practice up to the present. Elements of the practice have also been adapted to neo-traditional popular music which fuses indigenous and globalized elements (Barber and Waterman 1995). After reading about tonal counterpoint several years ago, we started to notice its permeation of Yorùbá culture. The feature remains prevalent in a variety of Yorùbá vocal styles that exist today, including popular music recorded decades after Olátúnjí discovered tonal counterpoint. Through digital field recordings and computational analysis, a phenomenon first noted fifty years ago may be heard and visualized with commentary for the first time. We address examples from both an ethnographic and formal analytical perspective. The article details examples, either field recordings without instruments or commercial recordings with voiceonly passages, that confirm the continued importance of tonal counterpoint in Yorùbá vocal arts.

Tonal counterpoint enlivens the pitch dimension in what Olátúnjí terms poetry, but others have as music or singing (e.g., Vidal 2012). Because Yorùbá is a tone language, a rigid distinction between speech and song is problematic. As Agawu states, music and language are tied "as if by an umbilical cord" in Africa (2016, 113). Both "tonal" and "counterpoint" are terms used in music, but the meaning here is the linguistic, not harmonic, "tonal," and the rhetorical, not polyphonic, "counterpoint." Yorùbá has been described as having three tone levels, low-mid-high, with a neutral level between high and low since Bishop Samuel Ajayi Crowther first developed an orthography published in 1852 (Carter-Ényì 2018). Olátúnjí describes couplets in which each phrase is parallel if not identical in terms of segmental content (i.e., vowels and consonants) and the first phrase sets up a tonal expectancy for the second (1984, 35).

Yorùbá	Tone Change	English
Labalábá ní í dóraa won létílétí	ММНН / НННН	It is butterflies that mate by the ear
Kòkòrò gìdìgbà ní í dóraa wọn lợrùnlợrùn	LLLLLL / HLHL	It is <i>big insects</i> that mate by the <i>head</i>

Table I. Example of parallelism from Olátunji (1984, 35).

For example, in two parallel phrases, the tonal expectancy for a final low tone (L) is set up by first coming to a phrase boundary on a non-low tone, either high (H) or mid (M). H is countered with L at the end of the following phrase in the most potent form of tonal counterpoint. M is also countered with L in weaker instances. In either case, L has finality. Qlátúnjí (1984) offers examples from his transcriptions as well as from texts that are now out-of-print and rare (such as Túbi 1955). For parallelism between two phrases in a couplet, he offers the text in Table 1. Many H and M tones are changed to L tones in this couplet. The poet accomplishes this counterpoint by replacing words in the first phrase with syntactically congruent and semantically analogous words in the second phrase (Qlátúnjí 1984, 35). Butterflies become big insects, ear becomes the head.<sup>1</sup>

Although phrase couplets are common, the pitch contrast of tonal counterpoint might also be between words within a single phrase, as in Table 2. This example also reveals what may be the richest use of tonal counterpoint: the juxtaposition of tonally contrastive homophones. In Table 2, fuss (or matter, <code>ketekete</code>) is changed to a donkey (<code>ketekete</code>) by inverting the tone from LLLL to HHHH. In this case, the counterpoint is interior to a phrase, and L tones precede the H-tone version. Tonally contrastive homophones are often very distinct in meaning, so it is both vocally and semantically acrobatic to articulate such a counterpoint.

The most common (and perhaps least impressive) form of tonal counterpoint is a non-lexical contrast between the correct tone and the incorrect tone for a word. The meaning is not changed by the transformation if the word is not part of a homophone group (see Carter-Ényì 2016). According to Olátúnjí, the tonal counterpoint (in Table 3) does not change the meaning of *láéláé* (HHHH, ancient tree) because "there is no word like *làèlàè* [LLLL]" (1984, 35).

Yorùbá	Kíni kètèkètè lára kétékété àgùnfesèwólè?
English	What is the <i>fuss</i> about a <i>donkey</i> which, when ridden, makes one's feet drag?

Table 2. Example of homophone change from Túbi (1955, 49).

I. Olátunji unfortunately does not cite or describe a source or give further interpretation (outside of the tonal counterpoint analysis). In the preface, he states that examples from published collections have citations and those that do not have citations are from his personal collections (1984, 4).

Yorùbá	Tone Change	English
Igi <i>bàbáà</i> mi kan <i>láéláé</i>	LHL/HHHH	My father's very ancient tree
Igi bábáà mi kan làèlàè	HHL/LLLL	My father's very ancient tree

Table 3. Example of non-lexical contrast from Olátunji (1984, 35).

A contrastive tone that does not alter meaning is simply a form of wordplay if you are looking at it from a poetic perspective, or melodic development, if you are looking at it from a musical perspective. Non-lexical contrast in repeated text is frequently found in music, which often includes substantial repetition of text. The repetition may simply be for emphasis, but it is an emphasis without monotony (quite literally because it not the same tone!).

In summary, there are three primary categories of tonal counterpoint in Yorùbá *oríkì* identified by Olátúnjí (1984): (1) homophone change; (2) parallelism (similar words); and (3) non-lexical (meaningless) contrast. Tonal counterpoint may be interior to a single phrase or spread across two phrases as a couplet. Olátúnjí includes an example in which he observes a pattern across six lines of text. Generally, high tone sets up expectancy for final low tone, but in some cases, low tone may precede contrasting high tone.

## ANALYZING TONAL COUNTERPOINT

When the number of syllables is the same in both phrases of a couplet (as in Olátúnjí's examples reprinted in Table 3), it is easy to make analytical comparisons of the melodic contour. One way to do so is to compare the contour adjacency series (CAS) of each phrase (see Friedmann 1985). A CAS compares the pitch height of each note (or tone in this case) to the prior adjacent note, representing the relationship between each pair of notes with one of three symbols. The minus sign [–] indicates the note is lower than the previous note; zero [o] indicates the same pitch height; and, the plus sign [+] indicates it is higher than the previous note. In this article, we apply aspects of contour theory to linguistic tone levels and actual vocalized pitches. Table 4 is an analysis of the couplet from Olátúnjí in Table 3 (1984, 35). The tone sequence for the first phrase is in the second row, and the tone sequence for the second phrase is in the fifth row. A CAS for each phrase is in-between.

English	My fat	My father's very ancient tree								My father's very ancient tree												
Yorùbá	i-	gi	bà-	bá-	à	mi	kan	lá-	é-	lá-	é	i-	gi	bá-	bá-	à	mi	kan	lá-	é-	lá-	é
Tone	M	M	L	Н	L	М	M	Н	Н	Н	Н	M	M	Н	Н	L	M	M	L	L	L	L
Contour		0	_	+	-	+	0	+	0	0	0		0	+	0	-	+	0	-	0	0	0

Table 4. Contour Adjacency Series for couplet in Table 3.

The change of the third tone from L to H changes the two contour signs around it. The second entry in CAS I changes from – to + in CAS 2. The third entry in CAS I changes from + to 0 in CAS 2. However, the change of the last four tones from H to L, starting from "lá-," only changes one contour sign from + in CAS I to – in CAS 2. Analytically, it is most efficient to view the latter as a single change of direction instead of a change in four tones. This perspective also makes sense physiologically. In transitioning from the seventh to the eighth syllable in the second phrase, the poet simply went down instead of up (as in the first phrase at the same point). In both phrases, the poet stays on the tone of the eighth syllable to the end of the phrase (which requires little or no further adjustment to the larynx in either case).

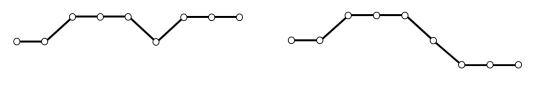
## ÌJÁLÁ: CONTEMPORARY PRACTICE OF AN INDIGENOUS VOCAL ART

In this section, we apply the methodology explained above to modern instances of the technique with the addition of computer-assisted pitch (fo) analysis for voice-only recordings. The examples are from young Ìjálá poet Máyòwá Adéyemo, a female poet and musician who graduated from Lagos State University in 2014. The analyses are drawn from 2013 field recordings (made by the article authors) of Adéyemo's "Oríkì Ejiré" (praise of twins), and the canonic Ìjálá praise, "Oríkì Ògún" (praise of Ogun). While both of these praise topics exist within the oral traditions, these renderings are versions that Adéyemo has developed, and that she can shorten or lengthen based on the occasion.

In the *Oríkì Ejiré*, we observe a similar transformation observed in the first example from Olátúnjí (Table I) is very similar to an application of the device by Adéyemo.

Yorùbá	Tone Change	English
Ejirệ nhá bí, nhá <i>jó jó jó</i>	ННН	If I give birth to twins, I will dance!
Ejirệ nbá bí, nbá yộ yộ yộ	LLL	If I give birth to twins, I will rejoice!

**Table 5.** Tonal counterpoint in "Oríkì Ejiré" (praise of twins) by Mayowa Adeyemo (2013). <a href="http://hdl.handle.net/20.500.12322/adept.yor:0025">http://hdl.handle.net/20.500.12322/adept.yor:0025</a>



English	If I	If I give birth to twins, I will dance!							If I give birth to twins, I will rejoice!									
Yorùbá	e-	ji-	ré	ǹbá	bí,	ǹbá	jó	jó	jó	e-	ji-	ré	'nbá	bí,	ǹbá	yò	yò	yò
Tone	M	M M L H L M M H H						M	M	L	Н	L	M	M	Н	Н		
Contour		0 - + - + 0 + 0							0	-	+	-	+	0	+	0		

**Table 6.** Analysis of tonal counterpoint in Adeyemo's 2013 performance.

In an April 16, 2013 performance at the University of Lagos, she performed her version of "Oríkì Ejiré" (the praise of twins) among other praise poems. The tonal counterpoint is quite striking when it is heard (as opposed to read). The recording is linked in Table 5 and the excerpt analyzed here starts at 0:03. This couplet contrasts tone between a near homophone: "jó" and "yọ." This is unlike Olátúnjí's examples which are either homophones, the same word with distorted tone, or simply words of similar length and analogous meaning and type. No low tones appear in the first phrase or in the beginning of the second phrase, so the tonal expectancy for L tone is built up until the very end. This recording has too much background noise to apply computer-assisted analysis, unlike the next example, "Oríkì Ògún," where such analysis is possible.

While twins are celebrated in traditional Yorùbá culture, Ògún is worshipped. Ògún is the Yorùbá god of iron, "who has water at home, but bathes with blood." Ìjálá is the type of oríkì chant traditionally offered by hunters and warriors, both of whom owe a debt to the god of iron for their weapons, hence the canonicity of praising Ògún. The transcribed text is based on a July 27<sup>th</sup>, 2013 audio-only recording made by the article authors at the Peter King College of Music. The first 24 lines are similar to other performances by Adeyemo that we recorded in 2013. In the piece, there are at least two major sections that form complex formal pitch structures (with multiple instances of tonal counterpoint): lines 1–8 and lines 15–20. These sections are also thematically united in their text. Lines 1–8 serve as an introduction. Lines 15–20 list Ogun's followers.

Phr.	Yorùbá	Tones	English
I	Ògún o	LHM	Ogun o
2	Ògún oníreè ọkọ ò mi	LHMHMLMMLM	Ogun, god of iron, my husband.
3	Irúnmolè tí-ń rù mìnìmìnì	MHMLHLLLLL	A deity that strikes heavily,
4	Òlómi nílé fèjè wè	LHMHHLLL	He has water at home but bathes with blood.
5	Òlása nílé fimòbímoò bora	LHMHHLLHMLMM	He has clothes but wears palm fronds.
6	Ògún aládàá méjì	LHMHLHHL	Ogun possesses two cutlasses:
7	Ó fikán sánko,	HLHHM	One for cutting grass,
8	ó fikán yènà	HLHLL	one for making marks
9	Ojó Ògún nfikòlé òrun bò wá s'ílé	МНІННІНІМІНННМН	Since Ogun came down from heaven to earth,
10	Asa iná ló mú bora	МММНННММ	He uses robes of fire as his cover.
II	èw'èjè ló wò sórùn o	LLLHLHLM	A shirt of blood is what he puts on.
I2	Ògún onílé owó ọlọnà ọlà	LHMHHMHMHLML	Ogun has a house of riches, a house of wealth.
13	Ògún onílé kángun kàngun òde òrun	LHMHHHMLMLLLM	Ogun has a house of war in the great beyond.
14	Méje l'Ògúuùn mi	HMLHMLM	my god of iron is seven.
15	Ògún alárá n'í gbajá	LНМНННМН	Worshippers of Ogun bring him a dog,
16	Ògún oníreè a gbàgbò	LHMHMLMLL	Ogun also accepts ram as a sacrifice.
17	Ògún ìkọlaà a gbà ˈgbín	LHLMMLMLH	The Ikola offer Ogun snails,
18	Ògún elémonà n'í gbeèsun'su	LHMHMLHMLMM	The Elemona offer Ogun roasted yam,
19	Ògún akirun á gbà wo àgbò	LHMMMHLMLL	The brave bring Ogun a ram.
20	Ògúùn gbénàgbénà [eran ahun níí je]	LHLHLHL	The carpenter offers Ogun tree sap.
21	Ògúùn mákinde, ti d'Ògún léhìn odi	LHLHMMMLHHLMM	Makinde, Ogun is now worshipped everywhere
22	Bí ò bá gba tápaà gbàbókí	HLHMHMLLHH	If he sells Tapa,
23	á gbaà húnkùnhúnkùn	HMLHLHL	he will sell his friend
24	á gba tèmbèrí o jàre	HMLLHMLM	He will collect three, he will sell his friend
25²	Mo ní e má bógúnrún fijà seré	MHMHHHLLMH	Do not use the sword to play with the god of iron.
26	Ògún òlódodo l'Ògún tèmi	LHLHMMLHLM	My Ogun is a truthful deity,
27	Qmọ Orórínà, ọmọ Tàbúfú	MMMHHLMMLHH	The son of Ororina, son of Tabafu
28	Morú nítorípé l'ójó Ògún kó délé ayé,	МННМННННННННМН	I tell you because, when Ogun came into the world,
29	Emu ló kó bèrè o mgbà tó délè ìrè o	MMHHLLMHLHHLLLM	He asked first for palm wine when he got to Ire
30	Ògún onílé owó, Olónà olà	LHMHHMHMHLML	His house is full of money, his path full of wealth
31	Ògún ónile, kángunkàngun òde òrun	LHHMMHMLMLMLM	The owner of the ugly house in heaven
32	Mo ní e má aàbógùn fijà sére o o	MHMHMLHLLLHMMM	I tell you, do not fight playfully with Ogun
33	Ara Ògún kan gó gó gó	ММLНМННН	Ogun isn't smiling at all
	•		

Kan gó gó gó

MMLHMHHH

Ogun isn't smiling at all

Table 7. Text for Adéyemo's "Oríkì Ògún" 7/27/13 audio-only recording.

http://hdl.handle.net/20.500.12322/adept.yor:0013

<sup>2.</sup> Other recordings of Adeyemo differ from Phrase 25.

Phr.	Yorùbá	Tone Change	English
7	Ó fikán sánko	HM	One for <i>cutting grass</i> ,
8	ó fikán <i>yènà</i>	LL	one for making marks

Table 8. Tonal counterpoint in Phrases 8–9.

Instances of tonal counterpoint, as found here, offer an opportunity to compare analogous syllables with like or unlike tones. This example of tonal counterpoint follows Olátúnjí s description closely. The HM at the end of the first phrase map to LL at the end of the second phrase. H and M are both changed to L. The segmental content (vowels and consonants) of the last word is also changed. The example is not simply wordplay, but a more sophisticated instance of the device, wherein each sentence has a distinct meaning.

For the computer-assisted analyses in Figure I (and similar figures later on), the recordings were segmented using Melodyne software (Neubacker & Gehle 2003) according to the text transcription and then exported for pitch (fo) and melodic contour analysis in MATLAB. The computer assistance aids in comparing the language transcriptions to the digital audio. The plots themselves were produced in MATLAB using the YIN function (de Cheveigne and Kawahara 2002) and original scripts by the lead author. The first three syllables of each parallel phrase of Table 8 are identical in segmental and tonal content. The pitch contour similarity of the beginning of both phrases is apparent in Figure I. However, neither the fundamental frequency trace nor mean pitch of the segments (both displayed in semitones where 69 = A4 440Hz) has the same absolute pitch height in each. The mean pitch is about two semitones higher for the first three syllables in the consequent phrase. The difference in overall pitch height indicates that (I) tone levels are not fixed to absolute pitch heights and (2) a greater range (meaning higher high tones and lower low tones) may be needed to exhibit the strong phrase final declination of the consequent phrase with the final low.

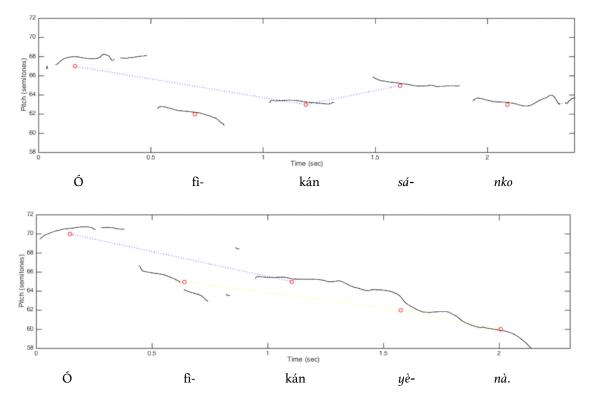


Figure 1. Tonal counterpoint in Phrases 7 & 8.

It is a positive sign for the tradition of Yorùbá Ìjálá that performances by contemporary artists such as Mayowa Adeyemo are consistent with the pitch features that Olátunji described decades ago. Several audiovisual primary sources featuring tonal counterpoint with language transcription and translations are available in the Yorùbá collection of the Africana Digital Ethnography Project (<a href="radar.auctr.edu/adept">radar.auctr.edu/adept</a>).

## FÚJÌ: NEO-TRADITIONAL PRAISE-SINGING

Because of concerns about the encroachment of western languages and globalized culture into formerly colonized and missionized regions, we are pleased that observations of traditional vocal arts from the past are consistent with observations of those in the present. However, a more astonishing finding is that tonal counterpoint is present in a popular music genre that did not even exist when Olátúnjí first wrote of tonal counterpoint. Fújì has emerged as the most popular form of Yorùbá-language music since the 1990s (Waterman 2002). Fújì artists use *íjinleè* (deep) or "conc" Yorùbá (*conc* is an abbreviation for concentrated). The vocabulary makes translation challenging, even more so than the canonic Ìjálá chants presented in the last section. Tonal counterpoint is revealed by our close analysis of voice-only introductions of Fújì recordings. As with the previous examples, the analysis method includes detailed transcription with tone, translation, and computer-assisted pitch (fo) analysis.

We purchased compact discs at Alaba and Yaba markets in Lagos State, Nigeria. A vendor at each location was asked for 10 Fújì and 10 Jùjú CDs from their current inventory. Unaccompanied vocal sections, appropriate for voice analysis, were excerpted from the Fújì commercial recordings. Although it would be possible to build a larger corpus, for this close analysis, we selected three song introductions by three notable Fújì artists are included here: Barrister, K1, and Saheed Oṣùpá. These artists come from the first, second, and third "generations" of Fújì artists, respectively. Generations is a term commonly used by Fújì listeners to group artists into three periods (based on fieldwork in 2014). From these short excerpts, ranging from 14 to 31 seconds in length, transcriptions were drafted by University of Lagos undergraduate student Lanre Şefunye and verified by doctoral student Tola Oṣunnuga. Transcriptions and translations were also checked using Abrahams' *Dictionary of Modern Yorùbá* (1962) and the University of Ibadan's *Yorùbá Dictionary* (1990). It is important to note that, much like traditional Oríkì, Fújì uses poetic language, not conversational or conventional language.

#### FIRST GENERATION ARTIST: BARRISTER

Alhaji Sikiru Ayinde Barrister and Alhaji Professor Ayinla Kollington are superstars of the first generation of Fújì artists (Barber and Waterman 1995, 244). It is difficult to find credible biographical information on Barrister, who is deceased. Wikipedia's entry for Barrister cites Barber and Waterman (1995) for basic biographical information, including a birth year of 1948. However, that information is not included in Barber and Waterman's 1995 chapter, which is one of the very few scholarly writings that present primary research on Fújì. What we can verify from interviews is that Barrister died in 2010. Every Fújì singer we interviewed in 2013–14 mentioned Barrister as a primary influence. Barber and Waterman (1995) report that Barrister named his music Fújì after Mount Fújì based on seeing a poster in a travel bureau office. This story was also recounted by Saheed Òṣùpá whom we interviewed in February of 2014. The track information in Table 9 does not include recording or release date because that information is not included on the sleeve. In general, CD sleeves in Nigeria include contact information for a marketer, but not much else. International copyright information is not included, and piracy is rampant.

Artist	Fújì Commander Alhaji Sikiru Ayinde Barrister and his golden Fújì exponent
. 77	
Album	Orisa Bi Iya Osi
Track	ı. Ile Aiye Odun Pupo
Time	00:00 to 00:18

Table 9. Track Information for Barrister.



Figure 2. Cover for Barrister's Orisa bi Iya Osi.

The lyrics are vaguely proverbial but do not include specific sayings associated with a distinct underlying tone. The excerpt's most notable aspect is that pitch variation is relatively limited (see Figure 3). Barrister's Phrase 5 spans four semitones while phrases analyzed in subsequent sections (by KI and Òṣùpá) span eight to twelve semitones. Barrister's near monotone voice is striking because the narrow range is uncharacteristic of Yorùbá speech, poetry, and song in general.

Phr.	Yorùbá	Tones	English
I	Orí mí máa jèn fi	MHHHMLL	My head (destiny) should not let me leave
2	ìyá mi s'áye lò.	LHMHML	my mother on earth.
3	om'abí ní w'ayé	ММННМН	A child is given on earth.
4	èdá mí máa jèn fi	LHHHMLL	My creator should not let me leave
5	ìyá mi s'áye lò	LHMHML	my mother on earth.
6	Ilé ayé ladùn (púpọ jù)	MHMHML	This world is full of joy

**Table 10.** Text transcription and translation for the Barrister excerpt.

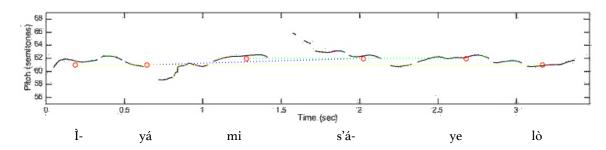


Figure 3. Fo plot for Phrase 5 of Table 10.

The observation of an exceptionally narrow pitch range in Phrase 5 may be generalized to the entire excerpt. Of the recordings we gathered and analyzed, this older recording (recorded before Barrister's death in 2010) is less reflective of the nuances of tone language vocal arts than more recent recordings by living artists K1 and Saheed Oṣupa. Barrister does not use tonal counterpoint in the introduction. In fact, he seems to deemphasize tone and contrastive melodic contour generally. His vocal style is very different from the more recent artists analyzed in the next sections.

## SECOND GENERATION ARTIST: KI

KI shares similar appellations to Barrister ("Ayinde Barrister"). Colloquially, however, "Barrister" refers specifically to the previous artist and "Wasiu" or "KI" refers to this artist. Notice in the cover art in Figure 4 that KI's band is the "Fújì commander," not the "Golden Fújì Exponent" (as in Figure 2). Another nuance is that Wasiu precedes "Ayinde Barrister" for this artist, whereas Sikiru preceded "Ayinde Barrister" for the previous artist. They are differentiated biographically by their era of popularity. KI is known as a second-generation artist, famous since the 1990s, and still active as an elder artist.

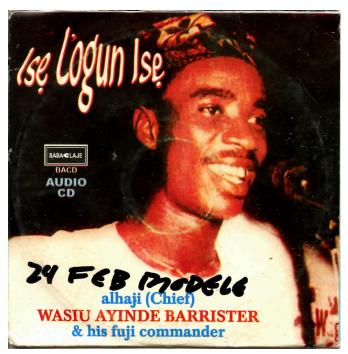


Figure 4. Cover for Kı's Ise L'Ogun Ise.

Despite some attempts, we were not able to interview KI and confirm our transcription and interpretation of his lyrics as we were able to do with the next artist, Saheed Òṣùpá. However, we are confident in the observance of tonal counterpoint (of the most common type, non-lexical contrast). KI's introduction is characterized by two instances of tonal counterpoint, in Phrases I–2 and 3–4, accounting for four out of five phrases.

Artist	Alhaji (Chief) Wasiu Ayinde Barrister & his Fújì commander (K1)
Album	Ise l'Ògún Ise
Track	I. Îre ni tèmi
Time	00:00 to 00:14

Table II. Track Information for Second Generation Artist.

Phr.	Yorùbá	Tones	English
I	Ìsán sán mó-o-òn kúbúré	LНННМLННН	The great harvester
2	sán sán mó-o-òn kúbùrè	HHHMLHLL	The great harvester
3	Ài- gbìn alubósà kó w'ệfó	LLMMHLHLH	We cannot plant onion and reap (green) vegetable
4	Ài- gbìn alubósà kó w'ệfô	LLMMHLHLL	We cannot plant onion and reap (green) vegetable
5	O'un abá gbiìn lóoò wù bó dòla	MMHMLHMLLHLM	Whatever you plant is what will grow when tomorrow comes

Table 12. Text transcription and translation for the KI excerpt. (link to audio file)

In phrases I–2, *kúbúré* (HHH) is mapped to *kúbùrè* (HLL) (see Figure 5) and in phrases 3–4 *èfó* (LH) is mapped to *èfò* (LL) (both of which may be heard in this <u>audio link</u>). Because *kúbúré* (HHH) and *kúbùrè* (HLL) are not distinct words with distinct meanings (i.e. not tonally contrastive homophones), when the same segmental phonemes are repeated with a different pitch contour, the meaning is neither changed, nor is it ambiguous. Once the lexical tone is clearly stated in the first phrase of the pair, it may be modified as "tonal wordplay" (Olátúnjí 1984, 37) or, a melodic variation. We have also observed a similar treatment of repeated texts, specifically non-lexical contrasts for melodic variation, in westernized choral music in indigenous languages (including Yorùbá and Igbo) by Nigerian composers (see Carter-Ényì 2016 for examples).

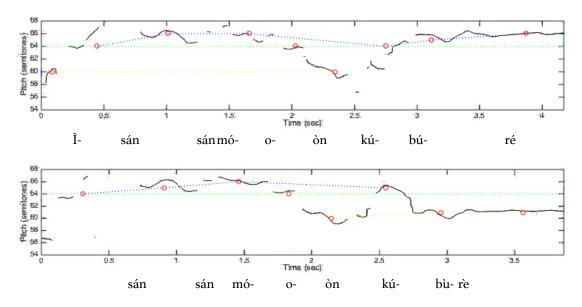


Figure 5. Tonal counterpoint in Phrases 1–2 of Table 12.



Figure 6. Cover for Òsùpá's Fújì Icon.

## THIRD GENERATION ARTIST: ÒŞÙPÁ

Saheed Òṣùpá is a leading third generation Fújì artist, along with Pasuma, Malaika and Ṣefiu Alao. These artists have gained popularity since 2000. "Tribute to my father" is from Òṣùpá's 2009 album Fújì Icon. The album is divided into two parts (A and B) like an LP or cassette, though it is only available on CD (and on YouTube). Fújì Icon "B" follows a narrative trajectory from Òṣùpá's father dying, to celebrating his mother, to acknowledging the celebrities (gbajumạn) that came to his father's wake. In our February 2014 interview, Saheed revealed that he did not grow up with his father. It was only later, after his career began, that Saheed learned that his father had been a Fújì singer (though not nearly as famous as Saheed). The excerpt analyzed introduces a textual theme that runs throughout Fújì Icon "B" that is central to oríkì praise culture: people become words, their good and bad deeds are how they are remembered and talked about.

Artist	King Dr. Saheed Osupa
Album	Fújì Icon
Track	3. Tribute to my father
Time	00:00 to 00:3I

Table 13. Track Information for Òṣùpá.

Phr.	Yorùbá	Tones	English
I	ọm'ệdá dí ọrò	MLHHML	The children of creation become words,
2	a dí/ọ'rò/awíntúnwí	MHLHHH	Words are repeated.
3	om'èdáadí/orò ò	MLH(M)ML(L)	The children of creation become words,
4	a dí/ọˈrò/awíntúnwí ò	MHLHHHL	Words are repeated.

Table 14. Òṣùpá's introduction to Fújì Icon "B" ("Tribute to my father"). (link to audio file)

The first phrase sets Òṣùpá's vocal style and melodic realization of lexical tone apart from Barrister and KI immediately. Although it is a four-semitone range, the pitch of each segment is clearly delimited and corresponds closely to the underlying tone. In this case, the first couplet ends low then high. However, the repetition of the entire couplet with an embellished melody is punctuated with a low vocable ("o") before moving on to new text, marking finality of the opening idea: "people become words, words are repeated."

The relatively stable pitch of each segment may reflect broader trends in Nigerian commercial music, particularly the prevalent use of autotune. While the range of tone realization to pitches was very narrow for Barrister (almost like a monotone), the stability of pitch within each of the tone segments has a vibrato-like quality. Òṣùpá does not use autotune, but the strong presence of it in Naija Hip-Hop and dance music since 2005 may explain why he makes use of straight tone instead of emulating the less stable (more wavering) pitch of Barrister or KI.

#### **DISCUSSION**

Many Niger-Congo vocal art traditions are panegyric, in praise of gods, ancestors, people, places, or animals. There is also oral history, narrative and romance. The vocal continuum includes speech, chant, singing, and ululation. This is a broad space, but there are also many fine distinctions of styles within cultures, according to vocal register and timbre. If tone is highly contrastive in a language, then the vocal arts may have special features that are not present in non-tone languages (Carter-Ényì 2016). This is likely true of many tone languages, not just Yorùbá. In Ìgbò, the homophone /akwa/ has four tonal variants, all of which appear in the tongue twister in Table 15. Such tonal wordplay is common in tone language vocal arts, a complement to the tone-tune correspondence that has been studied by ethnomusicologists for nearly a century and has recently become an interest of linguists.

Ìgbò	English	/akwa/ tone	Gloss
Nwányī n'ákw'ákwà	Woman sewing cloth,	HL	cloth
ì n'àkw'ákwā	are you crying	НН	cry
n'òkúkò yìr'àkwá	because a hen laid an egg on	LH	egg
n'énú ákwà í kwàr'àkwá	cloth you've already sewn	HL	cloth
nó n'énú àkwà?	which is on top of the bed?	LL	bed

**Table 15.** Ìgbò tongue twister (Carter-Ényi & Carter-Ényì 2017). <a href="http://hdl.handle.net/20.500.12322/adept.ibo:0004">http://hdl.handle.net/20.500.12322/adept.ibo:0004</a>

Schellenberg (2012) concluded the degree of correspondence between speech and melody is to a large extent dependent on genre. Cross-cultural comparison showed folk or traditional music has higher correspondence than commercial music. Regarding Yorùbá music, Contemporary Christian, Naija Hip-Hop, and translated European hymnody have very low correspondence, while Jùjú and especially Fújì have high correspondence, as do Yorùbá poetry and choral music.

Fújì defies generalizations. Among the recordings analyzed here, recent Fújì music by Saheed Ösùpá has more tone-tune correspondence than even earlier examples from the same genre. While not a large sample, this research suggests that Fújì is becoming more sensitive to linguistic tone features, or at least, not less sensitive as one might expect in a country where the language of business and education is English. Vidal (2012) refers to Fújì vocals as Islamicized singing, and it is true that Fújì is typically produced and consumed by Muslims. However, the style of Fújì singing (which is increasingly sung by Christians as well as Muslims and those that are not particularly devout) may be more precisely attributed to the fact that it is less westernized than the earlier form of Yoruba neo-traditional praise-singing, Jùjú. Like so much popular African music, Jùjú is embedded in the western tonal music system and instruments, initially through Christianity, but more recently through western popular music production. Our interviews with sound engineers suggest that the recording process for Fújì is the opposite of more westernized forms (such as Jùjú and Gospel) because drums and vocals are recorded before any western instruments like keyboards, guitars or saxophones (which may not be included at all). Fújì is freer from the conventions of western music, and therefore able to be conc. (concentrated) Yorùbá in a way that Jùjú is not. Thus, Fújì increasingly follows many of the same conventions of Yorùbá oral poetry that Olátúnjí (1984) and others have identified, confirming that Yorùbá-language lyrics truly are the focal point of this music.

## CONCLUSION AND FURTHER RESEARCH

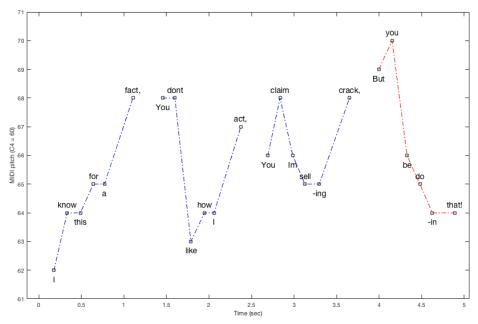
In 1984, Olátúnjí outlined features of Yorùbá oral poetry including tonal counterpoint, wherein a sequence is repeated with the same or similar segmental content (vowels and consonants) but with poetic changes in tone. We have confirmed for the first time that tonal counterpoint may be observed in computer-assisted analysis of Yoruba oral poetry recordings. In addition, we have shown that Fújì, a neo-traditional Yorùbá vocal music that scarcely existed in 1984, also exhibits tonal counterpoint. Such wordplay does not alter lexical meaning in words where tone is non-contrastive. Alternately, tonal counterpoint is used to create ironic semantic contrasts in words where tone provides phonological contrast. The presence of similar features to Yorùbá poetry in Fújì, such as tonal counterpoint, is a particularly interesting finding.

Generally, in the Fújì analyses, tones did not appear to correspond to fixed pitches within or between phrases (i.e., high tone is not consistently realized as the pitch F#4). The most recent artist analyzed, Saheed Oṣùp´a, exhibited the most precise mapping of tone to tune. At the same time, his singing's sustained and stable pitch within segments suggests the influence of global popular music trends and technology (like autotune).

Prosody is the study of suprasegmental features, including intonation, timing, and stress. Intonational phonology has studied pitch accents as a form of prominence (relatively high or low pitch as markedness) within phrases and the interaction of tone and intonation (e.g., Ladd 2008). In linguistic theory, phrase-final pitch movements are called "boundary rise" and "boundary fall" (Ladd 2008). Cohen and 't Hart found it curious that the boundary rise, though clearly distinctive, "need not occur in dominant words or even in prominent syllables" (1967, 189). The boundary rise and fall are typical, but what is the motivation? This observation brings up temporal issues because unlike interior pitch accents (i.e., marked tones), boundary rise and fall may mark an entire phrase, suggesting it is a cue for larger-scale (supra-phrasal) structure.

Outside of tone language poetry and song, non-lexical contrast for paralinguistic affect, not lexical (word) change, is the only form of intonational contrast possible. Yet, preliminary research, which we plan to pursue further, suggests a similar pattern of phrase-final contrasts is present in vocal arts in non-tone languages such as Swahili and English, including rap. While Swahili and English are not tone languages, much of the music in these languages has a connection to the Niger-Congo ethnolinguistic cultures of Nigeria, through the Bantu expansion or trans-Atlantic slave trade respectively.

Is there tonal counterpoint in languages without lexical tone? Extensibility to a variety of ethnolinguistic cultures (both with and without lexical tone) is engaged by more generic terminology: pitch polarity. Pitch polarity is the juxtaposition between phrase endings of high and low pitch, or more accurately, fast and slow, phonation with or without the motivation of lexical tone (so it is inclusive of tonal counterpoint). Pitch polarity is relatable to a well-known



**Figure 7.** Pitch polarity in KRS One's "Sound of da police", the three blue phrases end high and the red phrase ends low.

heuristic for English—questions go up and answers go down (Nishiguchi 2005)—but as a feature of solo vocal performance, not discourse, it is also distinct. It is similar to a discursive question and answer in that there is an antecedent-consequent relationship marked by poles of pitch prominence in yes/no questions, a build-up of tension (a phrase that ends high) and a release (a phrase that ends low). Although our work on pitch polarity has just begun, preliminary findings suggest that pitch polarity is not limited to tone language vocal arts (like Yoruba oriki and Ìjálá). KRS-One's "Sound of da Police" (1991; Figure 7) is just one of many examples from American rap that suggests that pitch polarity may be as pervasive as rhyming. At the most basic level, the high phrase-finals within a larger group (like in Figure 7), are a cue for continued attentiveness, as if to say, "I'm not finished with this part yet." The final low is a maturation of an idea, extended across a cluster of phrases, concluding a phrase group section. This interpretation is supported by evidence that the western pitch-height paradigm (describing fast and slow vibrations as high and low) is not universal.<sup>3</sup> In Yorùbá culture, the talking drum gives a tangible representation of pitch as tension: squeezing increases the frequency of the vibration and releasing the tension cords drops the pitch. The Suya of the Amazon basin characterize faster vibrations as young and slower vibrations as old (Seeger 2004). The Suya pitch-age paradigm applied to pitch polarity suggests the final low is a matured sound.

The Yorùbá pitch-tension paradigm is quite literal to the understanding we propose for the pragmatic function of pitch polarity: building up of tension through squeezing and the

<sup>3.</sup> For a summary of pitch-mapping across global cultures please see Ashley (2004).

literal release of tension for resolution. The conventional European pitch-height paradigm suggests a denouement through gravity: what goes up, must come down. This is not inaccurate here. Finally, there is the physiological explanation for low being final: declination through the loss of subglottal air pressure. It is not really a question of whether pitch polarity exists, we have yet to find vocal arts where it is not present. So, the intellectual imperative is a more developed understanding of an extant poetic feature redacted in written language.

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