

Tone Assignment on Lexical Items of English and African Origin in Krio

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Abstract

The nature of tone marking on words of English origin in English-based creoles is a highly debated issue. In creoles defined by some as pitch-accent languages, high tones in words that are derived from stress (accent) languages generally coincide with primary stress. I adopt herein the position that Krio is a tonal language, rather than a pitch-accent language. Tone is generally specified in the lexicon, particularly for lexical items of African origin. Tone assignment on disyllabic lexical items of English origin is unpredictable, albeit-predictable in a limited set of polysyllabic lexical items: In this case, high tone generally corresponds with the primary or secondary stress that is closest to the end of the word. Finally, I propose a tonal rule of high tone deletion and spreading of low tone on the initial components of compounds of English origin.

1. Introduction

Factors contributing to the expansion of creole grammars have been the subject of much debate, with researchers adopting one of two polar views. The Universalist view argues for a prototypical creole grammar that accounts for grammar and lexicon primarily through the application

of universal rules. Such grammars fail to incorporate any reference to tonal patterns (Bickerton 1975, 1977, 1988, McWhorter 1998, Seuren & Wekker 1986). The Substratist view, on the other hand, maintains that West African substrate languages (especially those belonging to the Kwa language subgroup) have predominantly influenced the suprasegmental, grammatical and lexical properties of creoles (particularly the Atlantic varieties). There is thus no consensus on the extent to which properties of creoles (including Krio) have been influenced by properties of substratal languages, and in particular by suprasegmental features such as tone.

Suprasegmental features of lexical items constitute a major area of controversy in Krio, an Atlantic creole and the lingua franca of Sierra Leone. Strevens (1966: 116) asserts that the pronunciation of Krio speakers in Freetown, Sierra Leone, is closest to Standard English, possessing "a system of stress and intonation of the same nature as that of Received Pronunciation." He claims that in spite of a large number of Yoruba borrowings, the tonal system of Yoruba has disappeared from Krio, which now exhibits a stress and intonation pattern not unlike that of Received Pronunciation – Standard British English. A contrary position (Berry 1961, 1970a, 1970b, Fyle & Jones 1980, Johnson 1974, Jones 1971) maintains that Krio exhibits the characteristics of a tonal language, and that the most significant phonological feature distinguishing Krio from English is tone, which is inherent and generally unpredictable for lexical items, including English borrowings.

I support the view that Krio is a tonal language, and tone assignment is unpredictable on lexical items of African origin. Moreover, tone is unpredictable in disyllabic words of English origin. English borrowings with three or more syllables are however subject to certain predictable tonal rules, with high (H) tone generally corresponding with the primary or secondary stress that occurs in the ultimate or penultimate syllable. Low (L) tone, however, does not necessarily correlate with unstressed syllables in English, as is proposed in pitch-accent languages (Berry 1959, Bickerton 1975, Devonish 1989, Hall 1966, Holder 1991, Schneider 1966, Strevens 1966). In order to explain Krio suprasegmental

patterns, I further propose tonal rules of H deletion and L spreading on initial segments of compounds of English origin.

2. Stress, Tone, and Pitch-Accent Languages

2.1. Characteristics of Stress, Tone, and Pitch-Accent Languages

Languages are classified under one of three suprasegmental categories: stress, tone, and pitch-accent. Stress languages assign primary stress to only one syllable in a word. The vowel of this syllable is pronounced with more intensity (longer, louder, stronger pitch) compared to vowels contained in other syllables. Vowels in unstressed syllables are usually reduced. English, the lexifier language of Krio and a number of other creoles, is categorized as a stress language (Goldsmith 1990, Poldauf 1984).

Pike (1948:3) defines a tonal language as having "lexically significant, contrastive but relative pitch on each syllable". That is, pitch (tone) may be used to distinguish between meanings of words, and every syllable carries at least one significant pitch unit. This is not the case, though, for all tonal languages. There are some in which tones are not freely assigned to syllables. There is sometimes a restriction on the combination of tones (i.e. the number of tonal patterns), as is the case for Mande languages. Such languages are generally categorized as Restricted Tone (Tone Harmony) languages. In Lexical Tone languages, including a number of West African languages (Leben 1973, Woo 1972), pitch is generally unpredictable and usually specified in the lexicon. It is used contrastively to minimally distinguish one lexical item from another, and/or to distinguish one grammatical category from another. Languages vary in the number and kinds of tones they allow.

Pitch-accent languages are intermediate between stress and tone languages. They are usually, but not always, claimed to be contact languages, such as creoles (Alleyne 1980, Devonish 1989, Hall 1966, Holder 1991, Schneider 1966, Strevens 1966). The designation of

creoles as pitch-accented is largely due to the fact that though creoles tend to be tonal, a substantial portion of the lexicon is borrowed from a source language that is generally a stress language. The assumption is that creoles substitute H tone for primary stress for lexical items derived from the source language while unstressed syllables are automatically assigned L tone. Alleyne makes the following generalization:

“the earliest forms of all Afro-American dialects [i.e. creoles] ... had a characteristic high pitch, which generally coincided with the main stress of cognate words in English” (Alleyne 1980: 73).

Tone assignment in pitch-accent languages, like in stress languages, is assigned post-lexically (Hyman 1978, Pulleyblank 1986). Tone is not inherent in the lexical entries of items.

2.2. *Pidgins and creoles as Pitch-Accented Languages*

Suprasegmentals have been rarely studied in pidgins and creoles, and there is a striking absence of detailed analyses of the interaction of stress and pitch in the pronunciation of lexical items derived from different sources. Alleyne (1980) proposes that though tone became distinctive in creoles with the introduction of vocabulary from substratal language, tone became “less and less prominent as a distinctive feature” (Alleyne: 1980: 73) in the course of the history of continued English influence on Krio, Saramacan, Sranan, as well as on Jamaican, and Guyanese creoles (Alleyne 1980: 71). Devonish (1989) similarly claims that in Djuka and Saramaccan, H tones in words borrowed or derived from stress languages generally coincide with the location of primary stress. Berry (1959) and Strevens (1966) make a similar assertion for Krio. Hall (1966) likewise suggests that stress position in Krio “is automatic, as all words are stressed on the first syllable except for recent loan words from English” (Hall 1966: 34-35). He attributes this to the fact that primary stress in English (and other Germanic languages) is generally assigned to initial syllables. He further claims that Haitian

creole assigns stress at the end of the word, as is the case in its source language – French. Schneider (1966) echoes a similar view in his analysis of Cameroonian pidgin English.

Bickerton (1975) and Holder (1991) support the proposal of an interaction of stress and pitch in Guyanese creole. Holder maintains that Guyanese is a pitch-accent language with surface pitch generally corresponding to stress in Standard English. He proposes that suprasegmentals are generally non-distinctive in Guyanese and that accent placement is largely predictable from syllabic and grammatical information. Carter (1987: 227) on the contrary identifies a number of mismatches between stress pattern and pitch assignment on some English loan words in Guyanese creole. She points out that schwas and syllabic liquids and nasals receive primary stress in Guyanese creole though they are invariably unstressed in English. Holder acknowledges these as exceptions but maintains that pitch remains largely predictable and that there is correlation between stress in English and pitch in Guyanese creole for the vast majority of Guyanese lexicon.

The designation of creoles as either pitch-accent or tonal languages is still debated, and the lack of consensus is evident in discussions of Krio suprasegmentals, discussed at length in this paper. The primary question addressed is whether and to which extent tone is predictable. The following issues are examined:

- (1) lexical specification of tone in words of English and African origins
- (2) the predictability of tone across different lexical and grammatical categories
- (3) the influence of the source language (English) on predictability

2.3. *Is Krio a Pitch-Accent or Tonal Language?*

Early proposals by Berry (1959) and Strevens (1966) sparked the debate over whether Krio was a pitch-accented or tonal language. Berry's proposal is that the placement of H tone in Krio matches the placement of primary stress in English. He claims that there is a correlation between

Krio H tone and English primary stress and between Krio L tone and British English unstressed syllable. Stevens in his discussion of the pronunciation of English in West Africa also asserts that the English pronunciation of native Krio speakers in Freetown, Sierra Leone, is similar to Standard English pronunciation because of the close relation between the phonological patterns of the two languages. Krio, Stevens maintains, possesses a stress and intonation system much like the same exhibited by Received Pronunciation. As such, native Krio speakers do not acquire English as a foreign language because Krio shares a lot of phonological properties with Standard English.

The generalization of H tone coinciding with main stress and L tone automatically assigned on unstressed syllables of cognate words in the source language, proposed to be the pattern exhibited by pitch-accent languages, is not borne out in lexical items borrowed into Krio from English. Stress placement is not always predictable from syllabic information, and a number of mismatches do exist between the stress pattern of English and tone assignment on some English loan words in Krio. There are a number of English borrowings in Krio in which syllables with H and L tones do not necessarily correspond stressed and unstressed syllables respectively in English.

As a result, a number of linguists, mostly native Krio-speaking linguists (Berry 1961, 1970a, 1970b, Fyle & Jones 1980, Jones 1971, Johnson 1974), have maintained that Krio is a tonal language, and that tone assignment is generally unpredictable and inherent in the lexical entries of items. Using Pike's (1948) definition as a yardstick, Krio does satisfy the criteria for it to be categorized as a tonal language. Tone is specified in the lexicon and is usually unpredictable. There is no correlation between syllable structure or vowel quality and tone marking. In addition, tone could be used contrastively in minimally distinguishing between lexical items of both African and English origins.

2.4. *The Influences of West African Languages on Krio*

Krio has a rich history of contact with other West African languages, dating as far back as the abolition of the Trans-Atlantic Slave Trade and the resettlement of some of the freed slaves, including Recaptives (those captured in the High Seas) in Freetown, Sierra Leone. These slaves were primarily from West Africa and brought along a variety of West African languages, with Yoruba being the most influential. The language and traditions of the Yoruba settlers have had a strong influence on the language, social life and customs of Krio speakers in Freetown (Bradshaw 1966, Fyle 1994, Fyle & Jones 1980, Jones 1971). A large number of lexical borrowings in Krio from West African languages, particularly Yoruba, are well documented (Bradshaw 1966, Fyle & Jones 1980, Jones 1971). Yoruba is second only to English as the largest contributor to the Krio lexicon (Bradshaw 1966, Fyle 1994). Lexical items of African origin are usually borrowed along with their tonal specifications, with minor phonemic variations sometimes. H and L tone marking generally remains unchanged in Krio. Bradshaw (1966) contains an impressive list of Krio lexical items borrowed from Yoruba. The examples of Yoruba borrowings in Bradshaw (1966) support the correspondence of H and L tones between the Yoruba words and the corresponding borrowings in Krio. However, Yoruba Mid tones were sometimes assigned H or L tones in the Krio equivalents and no pattern was apparent. The influence of West African languages on Krio is evident not only in lexical borrowings but also in borrowed grammatical properties, such as compounding. Krio continues to borrow lexical items from African languages, particularly Mende and Themne, the most widely spoken languages next to Krio in Sierra Leone.

2.5. The Interaction of Stress and Tone in Krio

In spite of the influence of African languages on the tonal specifications of lexical items in Krio, the assignment of H tone nevertheless does coincide with placement of stress (primary or secondary) in some polysyllabic lexical items (containing three or more syllables) borrowed from English. In these lexical items, H tone

corresponds with the primary or secondary stress closest to the end of the word though L tone is not necessarily assigned to unstressed syllables. My position, thus, is that Krio is a tone language, with the following specifications:

- (1) Tone is used contrastively in words of both African and English origins.
- (2) Tone assignment is unpredictable on words of African origin but is predictable in a restricted set of polysyllabic items of English origin
- (3) H tone does not necessarily coincide with primary stress and neither is an unstressed syllable always assigned L tone, as proposed for pitch-accent languages

2.6. *Data Source*

The primary source for the Krio data used in this paper is a Krio-English dictionary compiled by Fyle & Jones (1980). According to the authors, the meanings and pronunciations (including tonal specifications) assigned to lexical entries are reflective of standard usage by native Krio speakers residing in Freetown and supported by their intuitions as native Krio speakers. Some lexical entries in the dictionary contain multiple tonal specifications reflecting pronunciation variations among native speakers. Bradshaw (1966) is used as supplementary resource for Krio words of Yoruba origins. Examples used in this paper are limited to those whose tonal specifications are supported by my intuitions as a native Krio speaker.

3 **Contrastive Use of Tone in Krio**

Contrastive use of tone in Krio is evident in lexical items of both African and English origins as the following examples illustrate. Most of the words of African origin are borrowed from Yoruba and other languages widely spoken in Sierra Leone:

- (1)
- | | | |
|----|---------|---|
| a. | àlé | ‘Go away’ |
| | àlè | ‘Herb with irritating effects on the skin’ |
| b. | bábá | ‘A type of drum’ |
| | bábà | ‘A barber’ |
| | bàbá | ‘A young boy’ |
| c. | gbángbá | ‘A wide open public place’ |
| | gbàngbá | ‘A medicinal herb’ |
| d. | kángá | ‘A species of fish’ |
| | kángà | ‘A personal name’ |
| | kàngà | ‘Magic’ |
| e. | pátá | ‘Small panties worn by babies’ |
| | pàtá | ‘A slap’ (N); ‘To hit with palm of hand’ (V) |
| f. | sóso | ‘Only’; ‘Nothing but ...’ |
| | sòso | ‘So-so’; ‘Not too good, not too bad’ |
| | sòso | ‘Susu - A language of Sierra Leone’;
A native speaker of Susu’ |

Tone is sometimes used contrastively for disambiguation purposes, to distinguish between the meanings of lexical items of English origin with identical segmental properties. In most cases, the lexical items have a polysemous relationship, and tone is used to distinguish the meaning of one from the other(s). For example:

(2)		
a.	bèbí	‘A baby’; ‘A doll’
	bébí	‘Girlfriend’; ‘An attractive young woman’
b.	bródà	‘Brother’
	bròdá	‘An elder brother or older male relative’
c.	faḏá	‘God’
	faḏà	‘Father’
	fàdá	‘A Catholic priest’
d.	kóntrì	‘A country’
	kòntrí	‘Someone who hails from the countryside’
e.	sístà	‘Sister’
	ṣístá	‘An elder sister or older female relative’
f.	skwáyà	‘A square’ (shape)
	skwàyá	‘A dull and inexperienced person’
g.	tɛ̀nkì	‘Thank you’
	tɛ̀nkí	‘Gratitude’

The examples in (1) and (2) illustrate the contrastive use of tone in words of African and English origins. In addition, H or L tone assignment is not influenced by vowel quality, syllable weight, or position of syllable in the sentence.

4. Tone Assignment on Words of African Origin in Krio

Tone assignment on monosyllabic lexical items of African origin is predictable in Krio: It is invariably falling (^) in sentence-final position and in citation form and H in non-sentence-final position (Fyle & Jones 1980). Polysyllabic lexical items in Krio generally carry level tones – H (´) and L (`) – and are lexically specified. Hence, a number of combinations of H and L tones are theoretically possible. For example:

(3) *Two Syllables*

kábò:	‘Welcome’
kàngà	‘Magic’
kókó	‘A bump on the body’
pàdí	‘Friend’

(4) *Three Syllables*

árará	‘Nothing at all’
éminá	‘Plant with an edible yam-like tuber’
jàkùtè	‘Elephantiasis’
màràbú	‘A Muslim’
máslàsì	‘Mosque’
òkúrí	‘Rabies’
rákpàlà	‘Engage in rough and tumble’
wàhálà	‘Trouble’

(5) *Four Syllables*

àbíámó	‘Woman with motherly feelings’
àláfiâ	‘Peace of mind’
àlákòrí	‘Good for nothing person’
àbíòsè	‘A female personal name’

gbògbògìà	‘Thick grass’
kífíkàtà	‘Rushing furiously’
kàkàtùà	‘The ring leader’
óbìàtà	‘A type of sauce’
òmòlánké	‘Handcart’
sańkámàrún	‘A poor imitation of jewellery’
súmángámá	‘Incest’
táwákáltù	‘To be determined’
wàràwèré	‘Suddenly’; ‘In a flash’
úmànlàpá	‘A womaniser’

As the above examples illustrate, tone assignment on words of African origin cannot be predicted by vowel quality, syllable weight, or position of syllable in the sentence. Pitch has to be lexically specified and multiple combinations of H and L are possible. All 4 possible combinations of H and L tones – HH, HL, LL, LH – are evident on disyllabic lexical items in (3). All eight possible combinations of H and L tones on three syllable words – HHL, LHL, LLH, LLL, HHH, HLH, HLL, LHH – are evident in (4). Likewise, the examples in (5) are illustrations of 14 out of out of sixteen possible combinations of H and L tones that are theoretically possible: LHHL, LLHL, HHHL, LLLH HLHL, LHLH, LHHH, HHLL, LLLL, HHHH, HLLH, HHLH, LHLL, LLHH.

5. Tone Marking on Lexical Items of English Origin in Krio

For Krio lexical items of English origin, tone assignment is to a large extent predictable in monosyllabic items but unpredictable for disyllabic lexical items. Tone assignment is partially predictable for words of three or more syllables, with H tone coinciding with the primary or secondary stress closest to the end of the word.

5.1. *Tone Assignment on Monosyllabic Lexical Items of English Origin*

Tone assignment on monosyllabic lexical items of English origin in Krio, like those of African origin, is invariably falling (^) in sentence-final position and in citation form and H in non-sentence-final position (Fyle & Jones 1980). Monosyllabic grammatical items (prepositions, conjunctions, auxiliaries) of English origin are exceptions to this pattern. As indicated by Fyle & Jones (1980), they have an inherent low tone regardless of context. The following grammatical items are all assigned L tone regardless of the context in which they are used:

(6)	bin	‘Past tense marker’
	go	‘Future’
	bɔt	‘But’
	kin	‘Conditional’
	de	‘Progressive’
	lek	‘Comparative (like/as)’
	ɛn	‘And’
	na	‘Locative (on, in, at)’

The only exception is /dɔn/ ‘perfective’, which has a high tone.

5.2. *Tone Assignment on Polysyllabic Lexical Items*

The strongest evidence of Krio as a tonal language primarily centers on the assignment of tone on polysyllabic lexical items, which, unlike pitch-accented creoles, is mainly unpredictable. Pitch-accented creoles are proposed to have no more than one underlying H tone whose location on polysyllabic lexical items is predictable, usually coinciding with the location of primary stress on the cognate word in the source stress language. In effect, primary stress is reinterpreted as H tone, and unstressed syllables are automatically assigned L tone.

Stress in English, the source language of Krio, is to a great extent predictable. Primary stress is largely determined by syllable weight (the number of morae that the syllables contain) and is generally assigned to a heavy syllable (CVV, CVC, CVCC, etc.). Tone assignment in Krio is not determined by syllable weight, and words derived from English may be assigned more than one H tone, which may or may not coincide with primary stress in English. Unstressed syllables are not automatically assigned L tone. Thus, different processes govern tone assignment in Krio and stress assignment in English

5.3. *Unpredictability of Tone Assignment on Disyllabic Lexical Items*

Tone marking on disyllabic grammatical items of English origin is not predictable and must be specified for each item. For example:

(7)	lèkè	‘Comparative (like/as)’
	ɔ̀ndà	‘Under’
	pàntáp	‘Above/on top of’

There are a number of disyllabic lexical items of English origin in Krio in which primary stress coincides with H tone. There are however other countless examples in which there is a mismatch between English stress and Krio tone. I acknowledge the proposal by Fyle & Jones (1980: xxii) that “certain English-derived words considered ‘superior’ or as yet unassimilated keep their English pitch patterns which then become Krio tonal patterns.” Recent borrowings from English do exhibit a correspondence between English primary stress and Krio tone. For the vast majority of disyllabic lexical items, however, the tonal specifications do not correlate with the English stress pattern in a very predictable way. A HL or LH sequence cannot be predicted by the position or weight of the syllable, or by the semantic category (noun, verb, etc.) of the lexical item. In the following examples, primary stress coincides with H tone on an initial syllable in (8), and with H tone on the

final syllable in (9). In (10), however, H tone conflicts with primary stress location, and it is not possible to predict when H tone may coincide or conflict with primary stress:

(8)	English	Krio
	barber 1 st	bábà
	country 1 st	kóntrì
	business 1 st	bíznès
	Christmas 1 st	kriśmès
	people 1 st	pípùl
(9)	English	Krio
	advice 1 st	àdvaís
	before 1 st	bìfó
	demand 1 st	đimánd
	allow 1 st	àlaú
	expect 1 st	èkspékt

(10)	English	Krio
	Monkey	mòŋkí
	1 st	
	water	wàtá
	1 st	
	darling	dàliŋ
	1 st	
	party	pàtí
	1 st	
	daddy	dàdí
	1 st	
	biscuit	bìskít
	1 st	
	body	bòdí
	1 st	
	basket	bàskít
	1 st	
	bracelet	brèslét
	1 st	
	gravy	grèví
	1 st	
	candy	kàndí
	1 st	
	chocolate	čòklét
	1 st	
	blanket	blàŋkít
	1 st	
	mattress	màtrés
	1 st	
	capsize	kàpsái

1 st	
baptize	bàptaíʒ
1 st	

The mismatch between English stress and Krio tone is further evident in disyllabic personal names derived from English. In the following examples, an initial stressed syllable in English corresponds to a L tone in the Krio equivalents while an unstressed syllable is assigned H tone. Thus a LH (rather than a HL) tonal pattern emerges:

(11)	English (1 st stress on initial syllable)	Krio (H tone on final syllable)
	Thomas	tòmós
	Alfred	àlfređ
	Agnes	àgnés
	Sally	sàlí
	David	dèviđ
	Mary	mèrí
	Joseph	ɔʒòséʃ
	Frances	frànsés
	Rachel	rèčéł
	Wallace	wòléś
	Peter	pìtá
	Gertrude	gàtruđ

5.4. *Partial Predictability of Tone on Polysyllabic Lexical Items*

Tone assignment on English-derived polysyllabic lexical items with three or more syllables is partially predictable in Krio. In English, one syllable of polysyllabic lexical items is assigned primary stress while additional syllables may receive secondary stress or remain unstressed.

When such items are borrowed into Krio, the general pattern is for the first indication of stress (primary or secondary) from the end of the word to be automatically converted into H tone. That is, H tone corresponds with the primary or secondary stress that is closest to the end of the word. However, L tone is not necessarily assigned on unstressed syllables.

If the final syllable of an English lexical item is assigned primary or secondary stress, the Krio equivalent is assigned H tone, and all the preceding syllables, regardless of their stress status in the English equivalent, are assigned L tone by default. For example:

(12)	ENGLISH	KRIO
	telephone 1 st 2 nd	tèlìfòn
	calculate 1 st 2 nd	kàlkyùlét
	criticize 1 st 2 nd	krìtìsáíz
	isolate 1 st 2 nd	àisòlét
	exercise 1 st 2 nd	èksàsáíz
	estimate 1 st 2 nd	èstímét
	undermine 1 st 2 nd	òndámáín
	compensate 1 st 2 nd	kòmpènsét
	legalize 1 st 2 nd	lìgàláíz
	understand 1 st 2 nd	òndàstáín

clarify 1 st 2 nd	klàřífaí
congratulate 1 st 2 nd	kòŋgràtyùlét
domesticate 1 st 2 nd	dòmèstíkét

If one or more non-final syllables are assigned stress (primary and secondary) in English, the stress closest to the end of the word is converted to H tone and all preceding syllables (if any) are automatically assigned L tone. The final syllable, generally unstressed in English, is also assigned L tone. The H tone is then copied perseveratively (Left to Right) on to following non-final syllables (if any). The process of perseverative tone copying, whereby a syllable receives its tone from an adjacent syllable to its left, is a common process among West African tonal languages (including Yoruba, Nupe, Guari, and Ngizim) and is proposed to be a universal tendency and very productive in tonal languages (Hyman & Schuh 1974).

In the following examples in (13), only one syllable is stressed. All the others are unstressed. In (13a), H tone corresponds with stress on the middle syllable while the final syllable, unstressed in English, is assigned L tone in Krio. The preceding initial syllable is assigned L tone by default. In (13b), H tone corresponds with stress on the initial syllable and is copied on to the only non-final syllable (the middle syllable). The final syllable, unstressed in English, is assigned L tone in Krio. In (13c), stress on the antepenultimate syllable is converted to H tone, which is copied on to the penultimate syllable. The final syllable is assigned L tone, as is the initial syllable. In (13d), the stress on the initial syllable is converted into H tone, which spreads on to the antepenultimate and penultimate syllables. The final syllable is assigned L tone:

(13)	English	Krio
a.	election	ìlékšòŋ

	1 st cassava	kàsádà
	1 st banana	bànáà
	1 st chamelion	kòmíèl
b.	1 st article	áfíkùl
	1 st medicine	mérésìn
	1 st terminal	támínàl
	1 st general	jénéràl
c.	1 st America	àmérikà
	1 st conditional	kòndíšónàl
	1 st biology	bàyólóǵì
d.	1 st difficulty	dífíkólǵì
	1 st dictionary	díkšónerǵì
	1 st necessary	nésíséǵì

The examples in (14) contain both primary and secondary stress. The stress on the penultimate syllable, which is closest to the end of the word, coincides with H tone in Krio. The final unstressed syllable is converted into L tone. All other syllables preceding the H tone assigned on the penultimate syllable receive L tone by default:

- (14)
- | | | |
|----|--|----------------|
| a. | application
2 nd 1 st | àp̄likéšòṅ |
| | education
2 nd 1 st | èdyùkésòṅ |
| | elementary
2 nd 1 st | èl̄imeńtr̄i |
| b. | examination
2 nd 1 st | ègzàm̄inésòṅ |
| | congratulation
2 nd 1 st | kɔŋgratyulésòṅ |
| | dissatisfaction
2 nd 1 st | disatisfákšòṅ |
| | extraordinary
2 nd 1 st | èkstràódíńáf̄i |
| | responsibility
2 nd 1 st | rèspòṅs̄ibífi |
| c. | helicopter
1 st 2 nd | èfikóptà |
| | television
1 st 2 nd | tèl̄ivízòṅ |

5.5. *Exceptions*

There are some exceptions, though, to the pattern proposed for words with three or more syllables. Not many of these exceptions are listed in the Krio-English dictionary by Fyle & Jones (1980). These counterexamples contain are tri-syllabic words with primary stress on the initial syllable in English but H tone on the middle syllable in the Krio equivalent:

(15)	English	Krio
	calendar 1 st	kàlɛ́ndà
	officer 1 st	òfíśà
	hospital 1 st	òspítùl
	baptism 1 st	bàptiẓím
	Abigail 1 st	àbigèl
	parable 1 st	pàrébùl

6. Tone Assignment on Krio Compounds of English Origin

In English, the compound stress rule generally assigns primary stress on the initial member of a compound while the second member is generally assigned secondary stress. Fyle & Jones (1980) observe that for English-derived compounds composed of monosyllabic constituents, the initial constituent generally carries a L tone while the final constituent is assigned a H tone. This is similar to the pattern of tone assignment in non-compounds, in which the stressed (primary or secondary) vowel closest to

the end of the word is assigned H tone and all other preceding vowels are automatically assigned L tone. For example:

(16) English	Krio
blackboard 1 st 2 nd	blàkbód
football 1 st 2 nd	fùtból
bathtub 1 st 2 nd	bàt-tób
classroom 1 st 2 nd	klàsrúm
living-room 1 st 2 nd	lìvìn-rúm
gearbox 1 st 2 nd	gǐàbók
prayer-book 1 st 2 nd	prèà-búk
station-master 1 st 2 nd	stèšòn-máštà

There are other compounds in Krio whose individual constituents are derived from English. The pattern described above applies to them as well but only when the initial member of the compound has a HL sequence, as shown in (17). That is, it is restricted to compounds whose initial members are disyllabic with a HL sequence, or monosyllabic, whose falling tone in Krio is arguably a HL sequence. It does not apply when the initial member of the compound has a LH sequence, as shown in (18). Apparently a LH sequence on an initial constituent of a compound blocks this process:

(17) áfríkà (Africa) + mán (man) = àfríkà-mán

‘An African’

àmèríkà (America) + mân (man) = àmèrìkà-mán

‘An American’

fíngà (finger) + pókìt (pocket) = fíngà-pókìt

‘Pickpocket’

gàná (Ghana) + mân (man) = gánà + mán

‘A Ghanaian’

méréšìn (medicine) + mân (man) = mèrèšìn-mán:

‘A witchdoctor’

ròtìn (rotten) + bèlé (stomach) = ròtìn-bèlé

‘Gluttonous’

(18) màmí (mother) + wàtá (water) = màmí-wàtá: ‘Mermaid’

bèbí (baby) + êd (head) = bèbí - êd : ‘A sore toe’

kriyó (Krio) + b̂y (boy) = kriyó -b̂y ‘A male Krio speaker’

sàlón (Sierra Leone) + mân (man) = sàlón-mán:

‘A Sierra Leonean’

7. Discussion and Concluding Remarks

Contrary to claims that Krio exhibits characteristics of pitch–accent languages (Alleyne 1980, Berry 1959, Hall 1966, Strevens 1966), examples from this paper support the view of Krio as a tonal language. This is evident in tone-assignment on lexical items of both African and English origin, which is largely unpredictable in polysyllabic lexical items of both African and English origin. The examples also illustrate both the contrastive and lexical nature of tone assignment on words. Tone is used to minimally distinguish between meanings of lexical items of both English and African origins. Tone assignment is further not conditioned by the position or weight of the syllable.

In addition, the proposal of a correlation between primary stress and H tone, and unstressed syllables and L tone, evident in pitch-accent languages, is not realized on polysyllabic lexical items in Krio. H tone on disyllabic lexical items is generally unpredictable. It is partially predictable on lexical items of three or more syllables with H tone coinciding with the primary or secondary stress closest to the end of the word. Nevertheless, L tone is not automatically assigned on vowels in unstressed syllables. All vowels preceding the H tone that corresponds with English primary or secondary stress are assigned L tone regardless of their stress status in English. This H tone is also copied on to following non-final unstressed syllables, resulting in more than one H tone assigned on some polysyllabic lexical items. These processes apply to compounds as well. Tone is additionally used contrastively on English-derived words for disambiguation purposes, as the examples in (2) illustrate.

The stress pattern of English may have had some influence on the correspondence between H tone and primary or secondary stress in some words of English origin. Indeed this influence continues as new words are borrowed from English. Nevertheless, Krio, as the Lingua Franca in Sierra Leone, is used extensively in a region dominated by tonal languages. It is not surprising therefore for tonal rules to be incorporated into lexical items in Krio.

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