INTONATION IN PALENQUERO

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The least understood aspect of Palenquero phonology is its intonational system. This is a serious gap, as it is precisely in the realm of prosody that the most striking phonological differences between Palenquero and (Caribbean) Spanish are apparent. Although several authors have speculated that African influence may be at the source of Palenquero’s peculiar intonation, to date published research offers no detailed information about the intonation of the creole.

The goal of this study is to remedy this situation. Here we identify several specific intonational features where conservative (or older-generation) Palenquero differs from (Caribbean) Spanish. One of these features is a strong tendency to use invariant word-level contours, with a H tone on the stressed syllable and L tones on unstressed syllables, in all sentential contexts, including prenuclear positions. A second feature that we have identified is the use of a sustained phrase-final high or mid level contour in declaratives accented on the final syllable, and a long fall in declaratives accented on the penult.

The final section addresses the issue of the possible origin of these intonational features. We point out similarities with Equatorial Guinea Spanish and conclude that, at some point in the history of Palenquero, the Spanish prosodic system was interpreted as involving lexical tone, in conformity with claims in the literature regarding several Atlantic creoles.

KEYWORDS: creole, Colombia, intonation, Palenque, Palenquero, prosody, Spanish, substrate, tone, accent, vowel lengthening, Bantu
1. Introduction

Palenquero is a creole language spoken in El Palenque de San Basilio, Colombia, located about 60 km inland from the city of Cartagena de Indias. Founded in the second half of the 17th century, this former maroon community has been speaking creole and Spanish for several centuries (Schwegler, 1998: 223-237). The fact that the inhabitants of Palenque spoke both Spanish and their own language already early on is noted in a document of 1772 (Patiño, 1983:183).

Palenquero was first identified as a creole in publications by Granda (1968) and Bickerton & Escalante (1970). Over the last 30 years or so, the almost exclusively Black community has been shifting towards increased use of Spanish (Schwegler & Morton, 2003). Although Patiño (1983) describes the situation he encountered in the late 1970s as one of general bilingualism, he notes that older speakers tend to use the creole more, a situation which still obtains today. Recently, Schwegler (in press b) has observed that many younger people in Palenque have only a passive command of the creole.

Conversations in Palenquero are characterized by almost constant extra- as well as intra-sentential switches between creole and Spanish (Patiño, 1983: 186, Schwegler & Green, in press). Despite this heavy interaction (or even overlapping) of the two local languages, at the descriptive level, Palenquero can readily be characterized as a separate code from Spanish. At the same time, speakers are very much aware of the existence of two distinct languages in their community.

Palenquero displays many of the syntactic features associated with Atlantic creoles (Bickerton & Escalante, 1970; Granda, 1968, 1978; Patiño, 1983, 2002; Schwegler & Green, in press). Its lexicon is derived almost exclusively from Spanish, but it contains some two hundred elements of Bantu origin (specifically Kikongo, according to Schwegler, 2002a, 2002b, in press a). Of these, only a dozen or so are used in daily speech [fn1]. Common Palenquero words of Bantu origin are: moná ‘child’ (< Kik. mwana ‘child’), Kik. lumbalú ‘name of a local funeral tradition’ (<Kik. lu-mbálu ‘memory, recollection, melancholy’), and ma ngómbe ‘cattle’ < Kik. ngombe ‘cattle’) (see Schwegler, 2002a) The last example contains the particle ma (see Moñino, 2005), from the Bantu class 6 prefix, in the standard classification of Bantu noun classes (see, e.g., Wald, 1987: 1000, Katamba, 2003: 104), which has become a general plural marker in Palenquero; e.g.: ma hénde ‘people’ (< Sp. gente), ma ómbe ‘men’ (< Sp. hombre), ma páló ‘trees’ (< Sp. palo). [fn 2] Moñino (2002) and Schwegler (2002b) also discuss possible cases of African influence on Palenquero (morpho)syntax. In addition to these
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The present-day segmental phonology of Palenquero does not differ much from that of the neighboring Caribbean Spanish varieties. [fn 3] Significantly, there are no differences in segmental inventory (Bickerton & Escalante, 1970; Patiño, 1983: 90; Schwegler, 1998: 264-267). Coda /s/ — variably [s], [h] and [õ] in Caribbean Spanish — has been systematically eliminated: uté < Sp. usted ‘you (sing./formal)’, pekão < Sp. pescado ‘fish’. That is, Palenquero has taken the weakening of coda /s/, present in Caribbean and many other Spanish varieties, to its logical conclusion. Sequences of liquid plus stop have given rise to geminates: mátt < Sp. martes ‘Tuesday’, kabbón < Sp. carbón ‘(char-)coal’, Tubháko < Sp. Tumbaco (toponym), a process variably found in Cartagena (Becerra, 1985; Nieves Oviedo, 2002) as well as some areas of Cuba (Guitart, 1976) and the Dominican Republic. In Palenquero, as in these Caribbean varieties of Spanish, voiceless geminates may be simplified, but voiced geminate stops contrast with voiced approximants or fricatives (cf. lágo [lá/ø] ‘lake’ vs. lággo [lág:ø] ‘long’ < Sp. largo). Intervocalic /d/ often becomes a flap [ɾ]: kuiráo ‘care(ful)’ < Sp. cuidado, as is also the case in some rural coastal Colombian varieties (Granda, 1994) and the Dominican Spanish dialect of El Cibao (Núñez Cedeño, 1987).

Nevertheless, in spite of these coincidences with Caribbean Spanish, Palenquero also exhibits clear indications of an earlier, more Bantu-like phonological stage. Two contemporary features in particular are indicative of an earlier reinterpretation of the Spanish allophonic alternation between initial [b-, d-, g-] and intervocalic [-β-, -ð-, -ɣ-] as the typical Bantu pattern with initial [mb-, nd-, ng-] and intervocalic [-β-, -l-, -ɣ-] (see, for instance, Maddieson, 2003: 24). These features are: (1) the optional and still very common prenasalization of word-initial plosives like ndá < Sp. dar ‘to give’, ngatá < Sp. gastar ‘to spend’, mbósa < Sp. bolsa ‘bag, pocket’ ; and (2) the replacement of intervocalic /l/ with /l/, kelá < Sp. quedar ‘to stay’, bitílo < Sp. vestido ‘dress’. Also somewhat suggestive of Bantu substratal influence (although the process is also found in other languages) is the voicing of postnasal voiceless stops — obligatory in a select few words like tiémbo < Sp. tiempo ‘time’, kumblá < Sp. comprar ‘to buy’, pláñça < Sp. plátano ‘banana’, sindí < Sp. sentir ‘to feel’, and Paléng < Palenque, but free in items like kandá ~ kantá ‘to sing’ < Sp. cantar (for this voicing process in Bantu, see Hyman, 2003: 50). [fn 4]

Another Bantu-like feature is the replacement of rhotics with /l/, observable in a number of words: aló < Sp. arroz ‘rice’, pélo < Sp. perro ‘dog’, selá < cerrar ‘close,

Against this background, it would not be surprising if Palenquero prosody also preserved vestiges of a Bantu substrate (Patiño 1983: 109-110). In fact, in the first description of Palenquero, Montes (1962: 450 [cited in Patiño 1983: 110]) refers to the “peculiarísimo tonillo palenquero, una de cuyas más salientes características es la notoria elevación del tono y el alargamiento cuantitativo de la sílaba acentuada” [fn 5], for which he surmises an African origin. Bickerton & Escalante claim that in Palenquero, “final-syllable accent is a matter of high tone rather than stress”, and that “there are some pairs, such as *kusina* ‘kitchen’, *kusiná* ‘to cook’, which are only tonally distinguished” (1970: 257). While acknowledging the existence of striking intonational patterns, Patiño (1983: 109-110) denies the existence of contrastive lexical tone in Palenquero, preferring to interpret word-level prosody in terms of stress (see also Patiño, 2002: 28). All scholars who have subsequently researched Palenquero seem to agree, explicitly or implicitly, that the creole lacks lexical tonal contrasts.

The fact remains, however, that very little is known about Palenquero intonation (but see Moñino 2003: 524-525 for a brief description). Prosody continues to be the least understood aspect of Palenquero phonology, even though it is precisely at this level that one finds the most remarkable synchronic phonological differences with respect to the neighboring Spanish varieties. As Megenney states:

La faceta que sin duda es la más difícil de resolver es la de los patrones de entonación del palenquero, que en algunas instancias, difieren del español costeño normal, y eso, en donde se esperaría, en los tonemas. La pregunta inmediata que nos hacemos al escuchar estas diferencias de entonación se relaciona con el posible vínculo que los patrones anómalos del palenquero tengan o no con los sistemas tonales de las lenguas africanas. Hasta ahora este problema es irresoluble. (1986: 22) [fn 6]

A goal of this paper is to shed some light on this hitherto “unsolvable problem” of the origins of Palenquero intonation. The issue that we want to address is what makes Palenquero intonation so different from Spanish, including Caribbean and Colombian Spanish, as several researchers have reported. That is, our goal is to try to identify specific aspects of Palenquero prosody that may account for its distinct intonational impression. Once some of these features are identified, we will proceed to examine whether the Bantu substrate may have been a causal factor.

In section 2 we describe our data sources (recordings of Palenquero). Section 3 offers a brief overview of Spanish intonation, focusing on the major features that will be
useful in the comparison. In section 4 we examine specific aspects of Palenquero declarative patterns that seemingly differ from Spanish. Section 5 concentrates on interrogative intonation. The main intonational differences between Palenquero and Spanish are summarized in Section 6, where we also review the possible influence of a Bantu substrate, and compare Palenquero intonation with that of other Atlantic creoles.

2. Corpus for the study of Palenquero intonation

For the purpose of this study, we have used two recordings of Palenquero speech. Our main source of examples is a recording made by one of the authors, A. Schwegler, in Palenque in the summer of 1988. The recording contains a lively, highly informal and relaxed dialogue between two female speakers, R. (born 1919) and V. (born 1914). The conversation is interspersed with occasional remarks by the researcher and other participants. As expected, code-switches between Palenquero and Spanish are frequent. [fn 7]

Our secondary recording, also obtained in situ in 1988, is a long monologue by a younger but very competent speaker of Palenquero, S. (born 1955). The monologue is solely in creole. The recordings were digitized and analyzed with PRAAT (Boersma & Weenink, 1999-2005).

Heavily stigmatized (see Patiño, 1983: 110), [fn 8], the traditional tonillo (sing-song intonation) of traditional Palenquero speech has been avoided by the latest generations to the point where contemporary local intonational patterns show a much higher degree of convergence with those of regional Spanish. In light of Palenque’s sociolinguistic history and prevailing local language attitudes (Schwegler, 1998; Schwegler & Morton, 2003), it is logical to assume that the age of informants and the date of a recording significantly condition the prosodic features we seek to examine in this study. Older speakers and early recordings are thus more likely to reveal the special intonational contours that Montes (1962) and others have noted. These and other considerations have guided us in selecting the aforementioned “early” recording from the late 1980s as our principal data source.

The general auditory impression obtained from our recordings confirms the (often vague) descriptions made in the above-mentioned earlier investigations. Frequently, the intonational patterns of Palenquero differ markedly from those found in any monolingual Spanish variety. In this paper, our emphasis will be on patterns that appear to significantly differ from those of Spanish.
3. Basic features of Spanish stress and intonation

Spanish has contrastive lexical stress on one of the last three syllables of the word; e.g. *número* ‘number’, *numero* ‘I number’, *numeró* ‘s/he numbered’ (stressed syllables are underlined). Function words and expressions may be either lexically stressed or unstressed (Navarro Tomás, 1977: 187-194; Quilis, 1993: 390-395; Hualde, 2005: 233-235). definite articles and prenominal possessives, for instance, are unstressed (*el libro* ‘the book’, *nuestros amigos* ‘our friends’), whereas indefinite articles and demonstratives are stressed (*un libro* ‘a book’, *estos amigos* ‘these friends’). As in English and many other intonational languages, intonational contours in Spanish can be analyzed as resulting from the interpolation between tonal events associated with stressed syllables (known as pitch accents) and tonal movements at the end of phrases (boundary tones) (Pierrehumbert, 1980; Beckman & Pierrehumbert, 1986; Ladd, 1996; Gussenhoven, 2004).

Figure 1 illustrates a typical neutral declarative contour in Spanish with the text *le dieron el número de vuelo* ‘they gave him the number of the flight’. [fn 9] The figure contains three time-aligned tiers: the text of the utterance, divided into syllables, the waveform, and the intonational curve. This intonational curve shows three pitch excursions, corresponding to the three lexically stressed syllables in the utterance. Notice, however, that the first two tonal peaks occur after the stressed syllable. The three pitch accents in the figure have a rising configuration: the pitch rises through the stressed syllable from a low point or valley at the beginning of each of the three lexically stressed syllables (*die-, nú- and vue-*). The peak is reached in the following syllable (*-ron, -me-*) in the case of the first two (prenuclear) accents, and within the stressed syllable in the last or nuclear accent [fn 10]. At the end of a final declarative, there is normally a low boundary (indicated with the symbol L% in the tonal transcription), resulting in a final fall, as can be seen in Figure 1. The same Figure 1 also shows that in final declaratives, accentual peaks are typically lower from the beginning to the end of the intonational phrase (Prieto et al., 1995). This phenomenon, known as “declination” or “downtrend”, is typical of final declaratives. Exceptions to declination are, nevertheless, found in spontaneous speech (Face, 2003).
Fig. 1. Example of neutral declarative in Spanish:

le  dieron  el  número de vuelo

to him  gave (3. pl.) the  number of flight

LH           LH           LH-L%

‘they gave him the number of the flight = they gave him the flight number’

Lexically stressed syllables are underlined. Notice that this example contains three rising pitch-accents (LH). The beginning of the rise (a valley) coincides with the onset of the lexically stressed syllable. The peak is displaced to the posttonic in the two prenuclear accents. All three peaks are progressively reduced (declination). The utterance ends with a boundary low tone (L%).

In Spanish neutral declarative sentences, the pitch thus typically rises during the stressed syllable of (most) content words, and reaches a peak in the posttonic syllable, except in the final or nuclear accent, where the peak occurs within the stressed syllable (e.g. Prieto et al., 1996; Sosa 1999; Hualde, 2002, 2003). It is not the case, however, that lexical stress is always manifested as a pitch rise. Spanish does not have lexical tone.
Instead of rises, other pitch-accents can be chosen to convey different pragmatic meanings. For instance, in yes-no questions, the last stressed syllable is often associated with a low tone, before a final rise that is confined to the posttonic syllable(s) (see Fig. 2. In the figures, the total duration of the utterance is given in seconds, abbreviated (s)).

Fig. 2. Example of yes/no question in Spanish:
(Note that the last stressed syllable, *vue*- is associated with a L tone.)

¿Le dieron el número de vuelo?

*to him gave (3 pl.) the number of flight*

\[ \text{LH} \quad \text{H} \quad \text{L-H\%} \]

‘Did they give him the flight number?’
Also, in many dialects, neutral declarative nuclear accents are realized as a fall during the stressed syllable, as in the Coastal Colombian Spanish contour in Figure 8 (p. 000).

That is, as in other languages without lexical tone, stressed syllables are not systematically characterized by any particular pitch contour. Lexically stressed syllables function as “anchors” for intonational pitch accents, but the shape of pitch accent varies depending on pragmatics factors. A lexically stressed syllable may be associated with a rising contour (LH), a high tone (H), a falling contour (HL), a low tone (L), or no tonal target at all. How such a lexically stressed syllable is ultimately realized depends on the type of sentence, the position of the word in the sentence, the distribution of old and new information, and so on. Certain pitch accents are more common than others, but there are several possible contours that may be associated with the stressed syllable of the word. The specific inventory depends on the language (for Spanish, see Beckman et al., 2002; Hualde, 2003, among others).

For the purpose of this paper, it is important to note that in Spanish, just like in English and other stress languages, words cited in isolation have a rise that is confined to the stressed syllable, with a fall on the posttonic. This is the contour on the word vuelo ‘flight’ in Figure 1, which is in nuclear position in a declarative sentence. Even though this may not be a particularly frequent contour in discourse (a rise with displacement of the peak to the posttonic may be more common), the nuclear or “citation” contour is especially important, as it has been observed that speakers of languages with lexical tone tend to adopt borrowings from stress-accent languages with the tonal pattern they receive in citation form (Devonish, 2002).

4. Declarative sentences in Palenquero

4.1. Pitch accents

In the Palenquero corpus that we have examined, declarative sentences typically exhibit a high tone on every stressed syllable (that is, on every syllable that would be stressed in the Spanish cognate word), without any displacement of the peak. This pitch accent is thus contrary to the typical Spanish pattern of rising accents with peaks displaced to posttonic syllables. The stressed syllable is high for most of its duration, and there is a low tone on the posttonic. Successive peaks show very little or no declination. This is illustrated in the two representative examples given in Figures 3 and 4 (speakers
are identified by their initial in parenthesis after the text). Notice that in Figure 3, *depué i tán buká pekáo a Kataléna* [fn 11] ‘later on I will go look for fish in Cartagena’ (Sp. *después voy a buscar pescado en Cartagena*), every syllable that would have lexical stress in Spanish is associated with a high tone, and all the high-toned syllables have roughly the same F0 level, without any declination. [fn 12]

**Fig. 3. Palenquero:*** *depué i tán buká pekáo a Kataléna …* (V.)

later I FUT go get fish in Cartagena

\[ \text{H H H H H} \]

‘later I will go get fish in Cartagena …’

The second example, *i tá yebá é plánda* ‘I am taking along bananas’ in Figure 4 again illustrates the presence of a high tone on all stressed syllables. Readers will note that once again there is essentially no declination.
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Consider also the example in Figure 5: yó sí tén maílo nú pogke ri mí á morí ‘I do not have a husband, because mine died’ (cf. Sp. yo (sí que) no tengo marido porque el mío ha muerto). As shown, all syllables that in the Spanish cognate words would be stressed are once again realized with a H tone in Palenquero. Note in particular (1) the absence of tonal valleys between the three H-toned syllables with which the utterance...
starts, and (2) the lack of peak displacement. For instance the phrase-medial word maílo ‘husband’ (< Sp. marido) is realized with a L-H-L surface pattern. In Spanish discourse this pattern on the word marido would be expected only if the word were realized with special emphasis or in isolation.
Fig. 5. Palenquero:

`yo'sí'tén'mai'lonupo'rí'mi'amo'ri'`

I AFFIRM have husband NEG because

H H H H H

of mine has die

H H H

'I have no husband, because mine died.'
As a final example, consider the contour in *y-a tené ma-numáno mí, y-a tené mahaná mí* ‘I have my brothers, I have my children’ (Fig. 6). In this example the postnominal possessive *mí* ‘my’ is emphasized and uttered with an upstepped H tone. Nevertheless, the preceding word is realized in both cases with the contour it would presumably receive in isolation: *numáno* L-H-L, *mahaná* L-L-H (that is, with the contour that Spanish words with penultimate and final stress, respectively, would receive if pronounced in isolation).
Fig. 6. Palenquero:

\[
y\-\ a\ tené\ ma-numáno\ mi,\ y\-\ a\ tené\ mahana\ mi.\ (R.)
\]

I T/A have PL brother mine I T/A have boys mine

H H ↑HL% H H ↑HL%

‘I have my brothers, I have my children (= I have several brothers and children).’
The reinterpretation of stress as lexical association of a H tone with the stressed syllable has been claimed both for Caribbean creoles (Devonish, 1989, 2002) and for African varieties of European languages, such as Nigerian English (Amayo, 1980). This transfer of high tone onto the stressed syllable would have resulted from essentially the same process that occurs in borrowings from English and Portuguese in a number of Bantu and other West African languages: the intonational contour of words in isolation in the source language is taken to characterize the word at the lexical level (Carter, 1987; Devonish, 2002). That is, the pitch contour in the citation form of words is taken as an integral part in the pronunciation of the word in all contexts, allowing for very little flexibility in intonation. Conservative Palenquero intonation with its consistently high tone on stressed syllables and low tones on unstressed syllables would appear to be in agreement with this cross-linguistic pattern.

Lack of peak displacement in prenuclear rising accents has been reported for two bilingual or contact Spanish varieties: the Spanish of Cuzco (O’Rourke, 2004) and the Spanish of bilingual Basque speakers (Elordieta, 2003). Buenos Aires Spanish also appears to differ from other Spanish dialects in this respect (Sosa, 1999: 187; Colantoni, 2005), apparently as a result of a recent change triggered by Spanish/Italian bilingualism at the beginning of the 20th century.

We should note, however, that, impressionistically, Palenquero intonation differs substantially from these Spanish varieties. A strict alignment within the stressed syllable of accentual peaks cannot, therefore, be considered the crucial ingredient for the Palenquero tonillo. What appears to cause the distinct prosody of Palenquero is, at least in part, the level high tone over much of the duration of stressed syllables. This contour is better characterized as a level H tone rather than as a rising accent LH, as we typically find in Spanish.

4.2. (Absence of) boundary tones in phrases with oxytonic ending

Another striking feature of Palenquero intonation is that final declaratives sometimes end in a level tone, without a final drop. In utterances where the last word is oxytonic (that is, has final stress, as in mamá, in Fig. 7), we often find a level high tone on the last syllable, without the final fall that is nearly obligatory in Spanish (as it is in English) in final declarative sentences. The example i á tá sin mamá ‘I am without mother = I no longer have a mother’ (Fig. 7) and the corresponding Colombian Spanish yo estoy sin mamá (Fig. 8) illustrate this intonational difference.
Fig. 7. Palenquero: *i á tá sin mamá.* (V.)

I T/A be without mother

‘I am without mother = I no longer have a mother.’
Fig. 8. Coastal Colombian Spanish:

*yo estoy sin mamá.*
  ‘I am without mother = I no longer have a mother.’

*Note the intonational fall throughout the final, lexically stressed syllable. Analytically, the “toneme” (last pitch-accent and boundary tone) is $HL^*L%$.*

Bickerton & Escalante’s (1970: 257) claim that “final-syllable accent is a matter of high tone rather than stress” would appear to refer to this striking intonational feature of Palenquero: the use of a level H tone on phrase-final accented syllables. It is interesting to note that in the example in Figure 7 where the two last syllables are
segmentally identical (mamá) and, therefore, directly comparable, there is no lengthening of the accented syllable. Instead, the penultimate is slightly longer: /ma/ = 277 ms, /má/ = 267 ms. Bickerton & Escalante are, thus, right in their observation that final prominence in Palenquero may be cued by purely tonal means in some instances. We will return to this point in the next subsection.

Another example of a level H on a phrase-final accented syllable, from S.’s monologue, is given in Figure 9.

Fig. 9. Palenquero: a… súto á tá kumo guandandá (S.)
ah we T/A be like spider
‘ah, we are like spiders’ [meaning: ‘we are spreading / relocating to everywhere’]

Note the level H tone on the last syllable.
4.3. Final downstep

In sentences with the same basic structure as those examined in the preceding subsection, the H tone of the last syllable is sometimes downstepped, so that it is pronounced at the same level tone as the preceding toneless (pretonic) syllable. This phenomenon is illustrated in Figures 10 and 11. From the data available it is not yet entirely clear what pragmatic or other factors trigger this downstepping of utterance-final highs.

The sentence in Figure 10, *i-á tén séi moná ‘I have six children’* was produced in answer to the question *¿kuánto moná bó tené? ‘how many children do you have?’*. Notice the fall after the H tone in *séi*, and the level phonetic mid-tone over the last two syllables (again without a final boundary tone, like in Fig. 7 and 9). That is, “underlying” *moná L-H* is realized as phonetic M-M in this example. As in Figure 7, the penultimate syllable is actually longer than the accented final syllable: *moná /mo/ = 286 ms, /ná/ = 209 ms.*
Fig. 10. Palenquero: /í- á tén séi moná/ (V.)

I T/A have six child

H H H H H H

'I have six children'
Exactly the same phenomenon is illustrated in Figure 11, where *pa yebá pa bendé* ‘to take along to sell [it]’ (durations: *bendé* /ben/ = 255 ms, /dé/ = 185 ms) exhibits a final level mid-tone over the last two syllables. This pattern is unlike anything normally found in Spanish, where, as noted above, final declaratives usually fall at the end of the utterance, even if the syllable is stressed. In other words, in Spanish (as in other European languages), the presence of a L% boundary tone at the end of a final declarative is essentially obligatory.

![Waveform Diagram](image-url)
A similar phenomenon is illustrated in the second sentence in Figure 12. This figure contains two exclamative utterances: ¡yebá mí té! ¡nú dehá mí té nú! ‘take me along!, do not leave me [here]!’. Both sentences end with a stressed monosyllabic word. As shown in the figure, the last H-toned syllable in each of the two sentences is downstepped to mid (represented as M in the transcriptions).

The second of the two sentence ends with a level tone, like some of the other examples above. In contrast, the last syllable of the first sentence in Figure 12 shows a falling contour; that is, here we find a pronounced drop in pitch after the downstepped H tone on its final syllable. Unlike in the other examples studied here and in the preceding subsection, the final syllable is extraordinarily lengthened to over 500 milliseconds: yebá mí té, /ye/ = 110 ms, /bá/ = 171 ms, /mí/ = 196 ms, /té/ = 568 ms. This is a (somewhat anomalous) example of a contour we will examine in section 4.4.
Fig. 12. **Palenquero:**

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/yebá mí té. nú dehá mí té nú/ (R.)
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take me you (s.) NEG leave me you NEG

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H H ML% H H H H M
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‘Take me along! Do not leave me [here]!’
In partial summary, it thus appears that a H tone linked to the last syllable of a phrase can be downstepped to M both after another H toned-syllable (Fig. 12), and after a toneless syllable (Figs. 10 and 11).

4.4. The long nuclear fall

As we mentioned in section 1, Montes noted as a salient feature of Palenquero intonation “the noticeable raising of the tone and the quantitative lengthening of the stressed syllable” (1962: 450, our translation). Patiño adds that, more exactly, this affects “the last stressed/accented syllable in the sentence” (“la última sílaba acentuada de la oración” [1983: 110]). We would further add that this nuclear contour tends to occur when the last word in the intonational phrase is paroxytonic (i.e., has penultimate accent), since, when the accent is on the last syllable, the contours described in the previous two subsections tend to occur instead (but most words are, in fact, paroxytonic).

An example of this contour is illustrated in Figure 4, on the phrase-final paroxytonic word plánda. In our corpus, this contour, which we will dub the “long nuclear fall”, is particularly frequent in S.’s monologue. The two main features of this contour were adequately captured in Montes’ impressionistic observation. One of them is “the noticeable raising of the tone”. Most often the final pitch accent reaches approximately the same level as a previous pitch accent peak, or rises even higher. This is tantamount to saying that, in this contour, there is little or no declination. The second feature is the extraordinary lengthening of the stressed syllable. If the syllable is open, the tone usually remains as a level H on the stressed syllable and falls on the posttonic. If the stressed syllable has a coda consonant, the fall is initiated during the coda of this syllable.

Although the first sentence in Figure 12 above appears to show a long nuclear fall, this example is unusual in two respects. First, the contour occurs on a final accented syllable. Secondly, its peak is downstepped. We attribute these features to the exclamatory force of the utterance. In the corpora that we have examined, long nuclear falls are rare on oxytonic phrases, and the few examples in our corpus all appear to occur in exclamations. In contrast, the long nuclear fall is a recurrent feature of paroxytonic phrases. The examples given in this section are all from S.’s monologue, which contains sufficient examples of this contour to allow quantitative analysis.
In the example in Figure 13, the phrases *pa salí ri Palénge* ‘to get out of Palenque’ and *pa Katahéna* ‘to Cartagena’ both exhibit a long nuclear fall. Two additional examples with the same contour are shown in Figures 14 and 15.

**Fig. 13.** Palenquero: *pa salí ri Palénge, pa Katahéna (S.)*

to get out of Palenque to Cartagena

‘to get out of Palenque, to Cartagena’
Fig. 14. Palenquero: *ku tó é ma hén de* (S.)
with all these PL people

‘with all these people = with everyone’
(Sp. *con toda esa gente*)
One of the striking features of the contour illustrated in Figures 4 and 13-15 is the extraordinary lengthening of the last stressed syllable. In a study of syllable duration in Spanish, Clegg & Fails (1987) find that stressed syllables are, on average, 50% longer than unstressed ones. We have identified and analyzed 44 phrases bearing a long nuclear fall in S.’s recording, all with phrase-penultimate stress. The average duration of the penultimate syllables is 388.48 ms. (st. dev. 67.05 ms.), whereas the antepenultimate syllable has an average duration of 139.08 ms. (st. dev. 40.28 ms.). [fn 13]. That is, the nuclearly accented syllable in phrases with the “long nuclear fall contour” is more than 2.5 times (or 285%) longer than the preceding one.

These results are roughly in line with those obtained by Kaisse (2001) in a study of a somewhat similar contour, the “Argentinian long fall”. The Palenquero long fall differs from its Argentinian counterpart in several respects. First, it lacks the special pragmatic meaning of the Argentinian contour (item in a discontinuous list or highlighted

Fig. 15. Palenquero: … di é ma kús’ asína ngánde (S.)
… of this PL thing this big
‘… of those things, big like this’
word, according to Kaisse). The Palenquero long fall seems to be a rather neutral nuclear accent configuration when born by a word with penultimate accent. Secondly, the Argentinian contour has its fall entirely within the stressed syllable, while Palenquero keeps the accented syllable high if open, with the fall becoming initiated after the tonic.

We have provided syllable durations so as to facilitate comparisons with published results on Spanish. A more accurate view can be obtained by limiting comparison to the duration of the vowels, as the consonant margins introduce uncontrolled variability (as it is the case in the studies cited). To that end, Table 1 provides mean duration values (with standard deviation in parentheses) for the last three vowels in the 44 utterances we are examining in this section. From these calculations we have excluded accented vowels in antepenultimate position (6 tokens, e.g. kotá plánda ‘to cut bananas’). As shown in the table, vowels in accented syllables bearing a nuclear long fall tend to have roughly twice the duration of vowels in immediately preceding and following unaccented syllables.

<table>
<thead>
<tr>
<th></th>
<th>pretonic</th>
<th></th>
<th>tonic</th>
<th></th>
<th>posttonic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>/a/</td>
<td>89.5 (10)</td>
<td>21</td>
<td>244.8 (57.9)</td>
<td>9</td>
<td>103.8 (5.9)</td>
<td>11</td>
</tr>
<tr>
<td>/e/</td>
<td>110.6 (25.6)</td>
<td>4</td>
<td>204.7 (4.7)</td>
<td>25</td>
<td>95.7 (3.5)</td>
<td>13</td>
</tr>
<tr>
<td>/i/</td>
<td>100.9 (2)</td>
<td>4</td>
<td>199.1 (38)</td>
<td>5</td>
<td>168.8 (20.4)</td>
<td>3</td>
</tr>
<tr>
<td>/o/</td>
<td>98.5 (21.9)</td>
<td>8</td>
<td>198.1 (19.9)</td>
<td>2</td>
<td>68.4 (7.5)</td>
<td>17</td>
</tr>
<tr>
<td>/u/</td>
<td>131.2 (0)</td>
<td>1</td>
<td>157.7 (20.4)</td>
<td>3</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>ALL V</td>
<td><strong>106.8 (34.5)</strong></td>
<td>38</td>
<td><strong>188.0 (22.3)</strong></td>
<td>44</td>
<td><strong>99.9 (24.1)</strong></td>
<td>44</td>
</tr>
</tbody>
</table>

Table 1. Average duration (in ms., standard deviations in parentheses) of vowels in pretonic, tonic and posttonic (final) position in phrases with a long nuclear fall contour.
5. Interrogative intonation

Palenquero does not make use of Spanish-like subject-verb inversion (thus Pal. ¿kuándo bo kelé bae? lit. ‘when you want [to] go?’), but never *¿kuándo kelé bo bae?). Because of the absence of subject-verb inversion, intonation is crucial in the creole for signalling questions, especially yes-no questions. [fn. 14]

In interrogative Palenquero sentences, we find the characteristic Caribbean Spanish “circumflex pattern”, with upstepping of the final accent and a final fall (Sosa, 1999: 203-209), instead of the final rise found in other Spanish dialects that we illustrated in Figure 2.

This section offers four Palenquero examples of interrogative contours. Two end with a paroxytonic word, mátte ‘Tuesday’ (Fig. 16) and sólo ‘alone’ (Fig. 17). The sentence in Figure 16 is a negative yes-no question: ¿mañana nú-é mátte? ‘isn’t tomorrow Tuesday?’. Figure 17 shows a pronominal (“wh”) question: ¿kómo uté tán dehá mí yó sólo? ‘How [is it that] you are going to leave me alone?’ (notice that the subject pronoun uté ‘you’ is in preverbal position). These examples exhibit typical circumflex patterns. The contour reaches a high peak on the penultimate syllable, and drops off rapidly on the final syllable.

The other two examples of interrogative sentences in this section exhibit oxytonic endings: nasé ‘to be born’ (Fig. 18) and aí ‘there’ (Fig. 19). In these examples, the pitch remains high on the last syllable. Figure 18 illustrates a pronominal question functioning as a “check”: ¿lo k’ í nasé? ‘[the day] when I was born?’ This sentence ends with a level contour. Each of the four syllables has the following durations: /lo/ = 188 ms, /ki/ = 218 ms, /na/ = 211 ms, /sé/ = 400 ms’. Notice that the last syllable is twice as long as the other syllables.

The example ¿i si y-á pelé por aí? ‘and what if I get lost around there?’ (Fig. 19) is a question with exclamatory force. The final contour is slightly more complex, with a small fall after the peak on the last syllable, but without a drop off to the intonational floor.
Fig. 16. Palenquero: ¿mañana nú- é mátte? (R.)
  tomorrow NEG is Tuesday

  ‘isn’t tomorrow Tuesday?’
Fig. 17. Palenquero: ¿Kómo uté tán dehá mí yo' sólo? (R.)
how you (s). FUT leave me I alone

‘How [is it that] you are you going to leave me alone?’
Fig. 18.  Palenquero: ¿lo k’í nasé? (V.)
that I to be born

‘[the day] when I was born?’

lo = 188 ms, ki = 218 ms, na = 211 ms, sé = 400 ms
Fig. 19. Palenquero: ¿i si y-á pelé por ai? (R.)
and if I lose around there

‘and what if I get lost around there?’
By employing a circumflex interrogative pattern, Palenquero emulates a pattern that is standard in Caribbean Spanish. It should be noted, however, that this contour allows for the realization of a H tone on the last accented syllable. This is contrary to the rising contour of yes-no interrogatives found in Castilian, Mexican, and other well-known varieties of Spanish (see Sosa, 1999), where the syllable with nuclear accent bears a L tone, as illustrated earlier in Figure 2. This is thus a case where prosodic convergence with regional Spanish is possible without weakening the connection between stress and H tone.

5. Summary and discussion of origins

In the preceding sections we have noted a number of features where Palenquero prosody differs from Spanish. Most important among these are:

(a) The systematic association in Palenquero of accented syllables with level H tones, in declarative and interrogative sentences as well as both in nuclear and prenuclear positions.

(b) The frequent absence of final falls in declaratives with oxytonic endings.

(c) The downstep of phrase-final H tones to a level M tone.

One could analyze Palenquero as essentially a tone language, as has been suggested by Devonish (1989, 2002) and other investigators for several Atlantic creoles (including Iberian-based Papiamentu, as analyzed by Römer, 1991; Rivera-Castillo, 1998; Rivera-Castillo & Pickering, 2004). In such an analysis, Palenquero function words may be either H-toned or toneless, thereby generally corresponding to the contrast between unstressed and stressed forms in Spanish. All other words would bear a lexical H-tone on one of the syllables, which is again the stressed syllable of the corresponding Spanish word, in the lexicon of Spanish origin. In this way, Palenquero would also be similar to Nubi, an Arabic-lexified creole spoken in Uganda (Gussenhoven, 2005) as well as restricted-tone languages such as Somali (Hyman, 1981). Typologically, however, Palenquero is still closer to being an accentual language than a tone language since (a) there can be only one H-toned syllable per word, and (b) every lexical word has a H-toned syllable (there are no toneless words, except for some function words). This latter
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feature makes it unlike Somali and Nubi, which also have one H tone per word, but have rules deleting “underlying” H tones in certain phonological contexts (Somali also has a class of underlyingly unaccented verb forms).

Palenquero lacks the lexical tonal contrast superimposed on stress that is found in Papiamentu, the other Iberian-lexicon creole of South America. As Remijsen & van Heuven (2005) demonstrate, Papiamentu is a stress-accent language with an added pitch-accent contrast, not very different from that found in Swedish (Bruce, 1977; Gussenhoven, 2004: 209-216). Guyanese Creole and some other Anglo-West African varieties possess a similar lexical pitch-accent contrast (see Devonish, 2002: 165-180).

In the final analysis, we find ourselves in agreement with Patiño’s (1983, 2002) position that Palenquero is best analyzed as an accentual language, rather than as a language with lexical tone. However, Palenquero differs more than Spanish from the stress-accent language prototype represented by English, and is closer to being a tonal-accent language. Moñino (2001), in an unpublished conference paper, appears to adopt a similar view, describing Palenquero as possessing a “tonal-accentual system”. He offers a similar conclusion in print, albeit only in passing [fn 15] (Moñino 2002: 247; see also 2005). The very high frequency with which accented syllables bear a H tone, and the other properties listed above contribute to making Palenquero prosody impressionistically very different from that of standard and even regional varieties of Spanish.

We may ask now whether it is reasonable to attribute the peculiar intonational features of Palenquero to substrate influence. That is, could these features be due to the fact that, during the formative period of the creole, a majority of its users were native speakers of Bantu languages (specifically, it appears, from the Kikongo group)?

Most Bantu languages have a lexical opposition between H and L, better characterized for many of the languages as a privative contrast between H-toned and toneless syllables (Kisseberth & Odden, 2003: 59). Bantu languages in general are also well-known for having many complex phenomena of tonal assimilation and other alternations (for Kikongo, in particular, see, Carter, 1980; Odden, 1994; Blanchon, 1998, among others). Palenquero has not adopted this sort of complex tonology, although the lowering of final H tones to M can be analyzed as a tone rule.

The consistency with which accented syllables are realized with a high pitch (reaching a peak within the syllable), leads us to conclude that, at some point in the past, Palenqueros reinterpreted Spanish stress as requiring an association with a lexical H tone, as has been claimed for several English-lexicon creoles (see Carter, 1987; Devonish, 2002, among others). This would have involved the interpretation of the intonational contours of Spanish words in citation form (or in nuclear position) as word-level tone. As
Devonish states it, the general hypothesis is that “[g]iven the appropriate circumstances, sentence level intonation may become reinterpreted as a tone melody associated with an individual word” (2002: 36). We believe that this hypothesis may explain the intonational features that make Palenquero different from (Caribbean) Spanish.

The reinterpretation of Spanish stress as a lexical H tone is indeed what one would, in principle, expect, if most of the first users of Palenquero were native speakers of Kikongo and other Bantu lexical-tone languages. Within this context it is relevant to note that Kikongo imports Portuguese borrowings by adapting them with a H tone on the syllable that bears lexical stress in Portuguese (Carter, 1987: 246-247), and the same adaptation has been reported in borrowings from English into several Bantu and West African languages (Carter, 1987).

Some of the most striking features of Palenquero in tonation are replicated in the Spanish of Equatorial Guinea, where most speakers have a Bantu language as their native tongue. Thus Quilis & Casado-Fresnillo (1995: 138), comparing the Spanish intonation of their Equatorial Guinea informants with that of Madrid Spanish, find that Equatorial Guinea Spanish has very little declination, more ups and downs in pitch, and also level endings.

This coincides with our findings for Palenquero. Lipski also notes that in Equatorial Guinea Spanish “[m]any declarative sentences end on a mid or high tone, and occasionally even on a rising tone, in contrast to native non-African varieties of Spanish” (2005: 212). Lipski concludes that “[i]n the case of Spanish as phonologically restructured by speakers of Bantu languages in Equatorial Guinea (all of which use a basic two-tone system), it appears that many instances of lexical stress accent in Spanish have been reinterpreted as lexically preattached High tone” (2005:212). In our view, these similarities in intonation between Equatorial Guinea Spanish and Palenquero are best explained as the result of a common initial set of circumstances, where native speakers of tonal Bantu languages were exposed to Spanish prosody as adults. That is, the reinterpretation of Spanish prosody that appears to have taken place in Equatorial Guinea Spanish also occurred in the initial development of the Palenquero creole.

This overall scenario, in which Spanish stress and sentence-level prosody are reinterpreted in terms of lexical tone, is consistent with the evidence for another phonological reinterpretation, at the segmental level. As noted in the introduction, certain changes in the shape of words of Spanish origin appear to indicate that the Spanish phonological alternation between the initial voiced stops [b-, d- g-] and the intervocalic voiced fricatives or approximants [-β-, -ð-, -γ-] was initially reinterpreted in terms of the typical Bantu alternation between initial [mb-, nd-, ng-] and intervocalic [-β-, -l-, -γ-]. At
both the suprasegmental and the segmental levels, the original members of the Palenquero community filtered Spanish phonology through the lens of their native Bantu phonology.

As discussed in section 4.4, accented phrase-penultimate syllables are extraordinarily lengthened under the “long nuclear fall” contour. [fn 16] On the other hand, we have also noted that often there is very little or no stress-related lengthening in neutral declarative sentences with an oxytonic ending. Given the fact that phrase-penultimate lengthening is a widespread feature in Bantu languages (see, for instance, Myers, 2003), it would not be unreasonable to attribute the peculiar Palenquero durational pattern in stressed phrase-penultimate syllables to the Bantu substrate as well. [fn 17]

A final caveat: the findings of this paper are based on somewhat dated recordings of Palenquero. As we noted in section 2, the traditional Palenquero “tonillo” is much less noticeable in the speech of younger contemporary speakers. The intonational patterns of Palenquero that originally struck researchers in the 1960’s and 70’s may thus be less apparent to those venturing into the community at the beginning of the 21st century.

References


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Notes

* For comments we are grateful to Steve Byrd, Laura Downing, Yves Moñino and three anonymous reviewers of this journal.

1 The remainder are mostly archaisms or ritual vocabulary associated with the funeral tradition known as lumbalú (Schwegler, 1996).

2 Incidentally, this is also the prefix in Gabriel García Márquez’s fictional Macondo, from the plural of Kikongo (and other Bantu) li-kondo ‘banana tree’.

3 This includes the Spanish spoken in Palenque, together with the creole (Schwegler & Morton, 2003).


5 “The very peculiar Palenquero sing-song intonation, one of whose most salient characteristics is the noticeable raising of the tone and the quantitative lengthening of the stressed syllable.”

6 “The one aspect that, without a doubt, is the most difficult to solve is that of the intonational patterns of Palenquero, which, in some instances, differ from those of Coastal Spanish. This happens where one would expect it, in the tonemes. The immediate question that arises when we hear these differences of intonation relates to the possible link that the anomalous patterns of Palenquero may or may not have with the tonal systems of African languages. At present, this is an unsolvable problem.”

7 Participants were aware of the presence of a tape recorder.

8 “[...] la peculiar entonación con que hablan los habitantes de San Basilio, de la cual no pueden liberarse cuando utilizan el castellano, lo cual les atrae no pocas burlas fuera del terruño” (Patiño, 1983: 110).

[... the peculiar intonation with which the inhabitants of San Basilio speak and of which they cannot rid themselves when speaking Spanish. This makes them the butt of many jokes outside of their town.]

9 Text adopted from Sosa (1999), who uses it to illustrate intonational contours in a large number of Spanish dialects. Although the example in Figure 1 was produced by the first author of this paper, who is a speaker of Northern-Central Peninsular Spanish, the contour illustrated is typical of most
Spanish dialects (Caribbean Spanish included), as demonstrated in Sosa (1999), where the reader can find many essentially identical examples for a large number of Spanish varieties. See also O’Rourke (2004).

10 The nuclear accent is the perceptually most prominent accent in the phrase. In Spanish, this accent is placed on the last content word of the phrase in utterances with broad focus. Prenuclear accents are localized pitch movements preceding the nuclear one. See, for instance, Ladd (1996).

11 In general, we follow the usual conventions in the transcriptions of Palenquero (see, for instance, Patiño, 1983). Our main departure from tradition is that, following Moñino (2002: 247), we mark stress on all stressed syllables. The phoneme transcribed as <h> is a pharyngeal fricative /h/, which is often realized as voiced [ɦ] in intervocalic position (Patiño employs Spanish <j> for this sound). The letters <b, d, g> stand for the phonemes /b,d,g/, which, as in Spanish, are realized as continuant segments in most contexts. The letter <γ> represents a voiced palatal with fricative and affricate allophones. The letter <r> stands for a rhotic tap, and <rr> for a trill. In standard Spanish, the contrast is neutralized word-initially, where only the trill occurs. In Palenquero, the tap may, however, occur word-initially and preceded by a vowel (as an allophone of /d/), as in pogke ri ‘because of’ < Sp. porque de.

12 For introductions to the study of tone, see Yip (2002) and Gussenhoven (2004).

13 Final unstressed syllables present difficulties for measuring, as our speaker often devoiced the final vowel, either partially or completely. With this caveat, the average value obtained for the posttonic syllable in the 44 tokens we analyzed is 193.79 (st. dev. 102.32 ms.)

14 Lipski notes that “subject preposing in WH- questions has at times been attributed to an earlier Afro-Hispanic creole, if not directly to African substrate” (2005: 262). In Latin America, non-inverted questions are also found in Cuban, Puerto Rican and coastal Colombian Spanish (that of Palenque included). In these areas, Spanish speakers from the Canary Islands and/or Galicia may have introduced the intonation-based strategy for forming yes-no questions. As Lipski (2005: 263) rightly points out, this by no means implies that contact with creoles or African languages may not also have been a contributing factor for the rise of non-inverted yes-no questions.

15 “La lengua [palenquera] es fonológicamente acentual, pero el acento no es de intensidad y se realiza por medio de un tono alto y/o alargamiento de la vocal: … justificaremos estas opciones [de transcripción] en un trabajo en preparación sobre la prosodia de la lengua criolla”.

‘Palenquero is phonologically an accentual language, but the accent is not one of intensity, and is realized by way of a high tone and/or lengthening of the vowel: … I will justify these conventions [of transcription] in a paper on Palenquero prosody, currently in preparation.’
The lengthening of the stressed phrase-penultimate syllable in interrogatives is also visually detectable in the example in Figure 17, ¿kómo uté tán dehá mí yó sólo? ‘How [is it that] you are going to leave me alone?’ (/yó/ = 145 ms, /sól/ = 227 ms, /lo/ = 189 ms).

The influence of the substrate on durational (as well as intonational) patterns is demonstrated by van Leyden (2004) in an experimental study of the prosodic characteristics of the Shetland dialect (Scotland), which has a Scandinavian substrate.

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