

STEM-INITIAL ACCENT AND C-EMPHASIS PROSODY IN NORTH-WESTERN BANTU

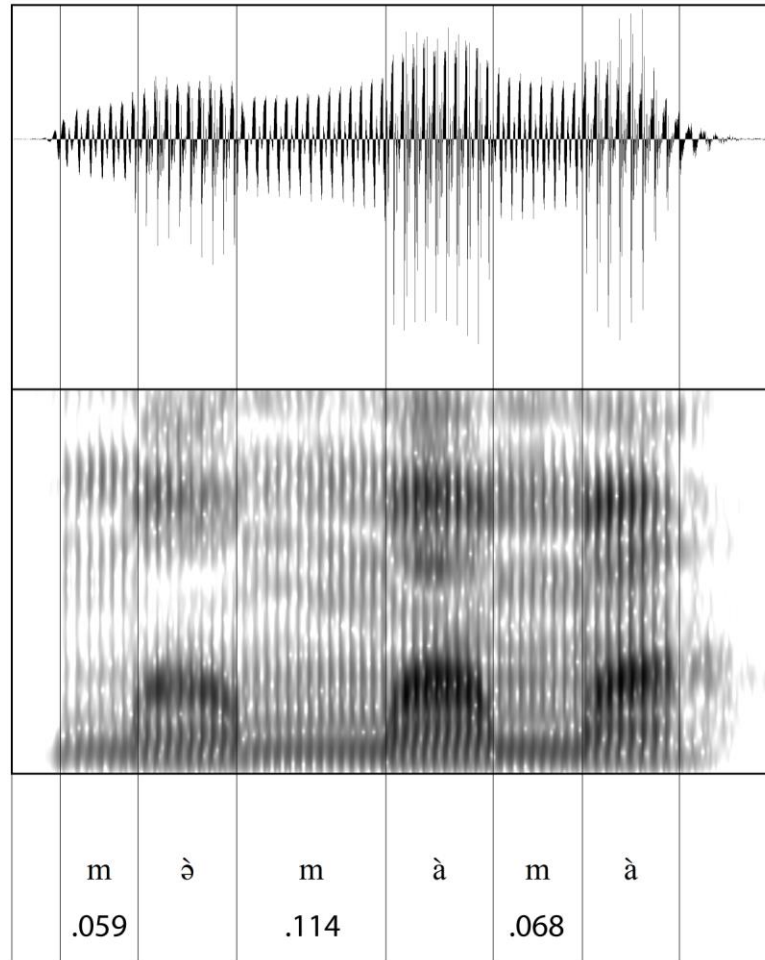
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- Several NW Bantu languages have been described with stem-initial **accent** (stem-initial **prominence**).
- E.g. in Eton (A70, Cameroon), stem-initial accent is manifested phonotactically, phonetically & phonologically, as well as tonologically:
 1. **phonotactic skewing: half of the consonant phonemes restricted to C_1**
 2. **C_1 consonants are longer than consonants in other positions**
 3. **C_1 not subject to lenition rules that occur elsewhere**
 4. **only accented syllables can host two underlying tones**



Consonant length in the nonsense word *mè-màmà*





- C-lengthening as a significant **stress correlate** is typologically **rare** and even **rarer as the primary phonetic parameter** in the realization of stress
- Remijsen (2014) cites the following languages with lengthening of the consonant that **follows** the vowel of the stressed syllable as a stress correlate:
 - Iquito (Michael 2011) (primary parameter)
 - Washo (Yu 2008)
 - Welsh (Williams 1985, 1986)
 - Zapotec (Pickett, Villalobos & Marlett 2010)
- May also be common in Australian languages (cf. Butcher 2006)
- In Pirahã, the **onset consonant** of the stressed syllable is longer



- Although typically stem-initial, **C-accent** in Bantoid may be fixed to sites other than the stem-initial position:
 - In Bube (A31), it is the onset **C** of the final syllable, (compare penultimate V-lengthening in many Bantu languages, mostly E Bantu)





Our research programme for (stem-initial) C-accent:

- provide an instrumental analysis
 - is consonant length the primary/only phonetic correlate?
 - how important is the difference in length between C_1 and other positions?
 - is this difference in C length constant among the languages with stem-initial C-accent?
- establish the boundaries of the phenomenon within Bantu and beyond (hypothesis: it is (much) more recurrent in Northern sub-Saharan Africa (NSSA))
- look for correlations between (stem-initial) C-accent and: labial-velars, maximality constraints, and morphosyntactic properties that may correlate with the latter (cf Hyman 2004).

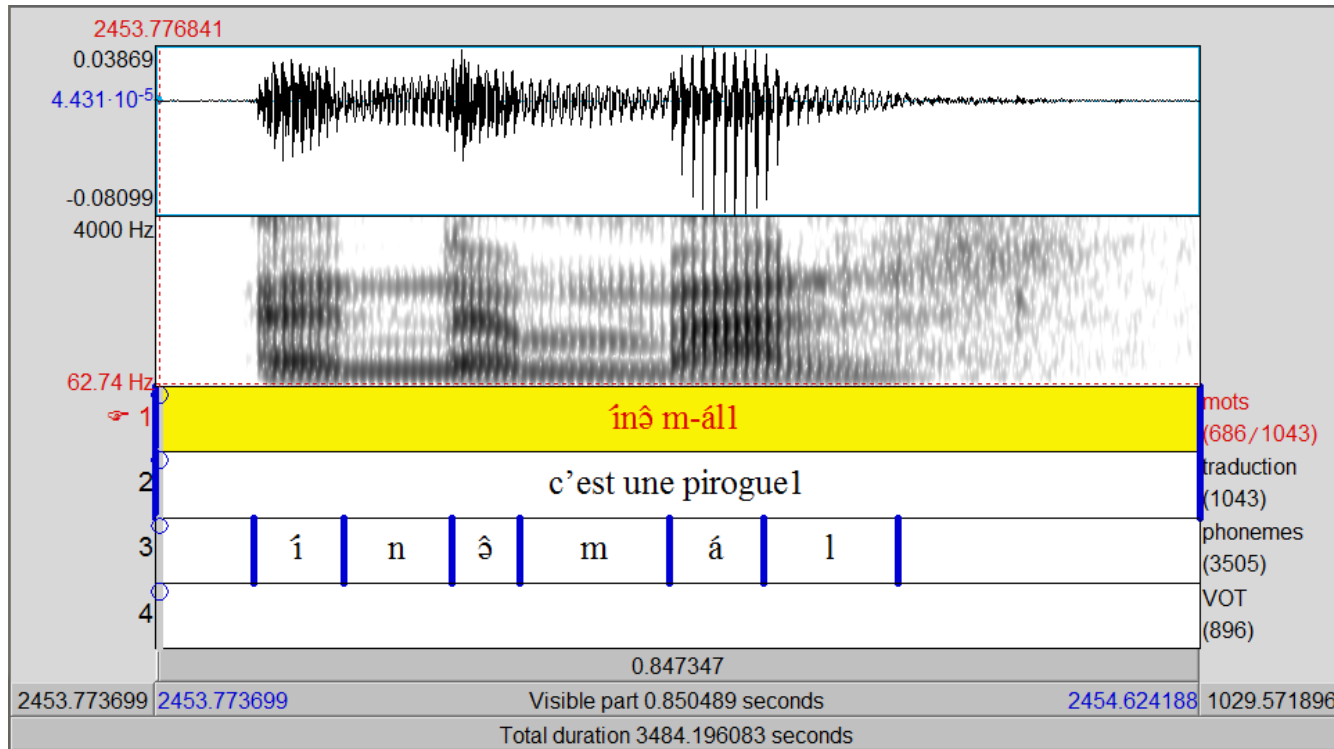


Originally, we recorded questionnaires for nine languages in Cameroon and Gabon for a total of ca. 30 hours:

- Eton (Bantu A70): 4 men, 5 women, ca. 90 min / questionnaire
- Bafut (Bantoid): 2 men, ca. 70 min / questionnaire
- Bapuku (Bantu A30): 2 men, ca. 50 min / questionnaire
- Basaa (Bantu A40): 2 men, 1 woman, ca. 45 min / questionnaire
- Fang (Bantu A70), different regional varieties: 4 men, 5 women, ca. 50 min / questionnaire
- Kota (Bantu B20): 2 men, ca. 45 min / questionnaire
- Kwasio (Bantu A80): 2 men, ca. 35 min / questionnaire
- Bagyeli (Bantu A80): 1 man, ca. 35 min / questionnaire
- Orungu (Bantu B11): 1 woman, ca. 35 min / questionnaire



Ca. 7 hours have been segmented and annotated in Praat for Eton,
 6 h for Fang, 2 h for Basaa.





Some initial findings:

- Stem-initial consonant length in all languages (set #1), except Bapuku (and Orungu, set #2), which have penultimate vowel length and which lack many of the typically NW Bantu morphosyntactic characteristics
- Within A70, relative length of C_1 appears to decline in the extreme south of the domain

A further hypothesis based on initial findings:

C-accent as the exaggeration of the duration of consonants rather than vowels in a certain position in a word is **in origin** an **utterance-level prosodic / intonational phenomenon** marking a particular **emphasis** on a given element within the utterance



C-emphasis prosody → stem-initial C-accent

- the **stem-initial position** is expected to be a **frequent site for the realization of such emphatic prosody** as the primary position associated with expressing lexical meanings, which are likely to be in need of emphasis more frequently than the more functional types of meanings, such as number, agreement, TAM, etc., which tend to be expressed by prefixes or suffixes.
- this frequency correlation has gradually led to a reanalysis (phonologization) of C-lengthening as **an inherent property of the stem-initial position**
- SIC-accent would enhance any existing tendency for **word-internal C-lenition**, which is a common phenomenon cross-linguistically anyway and may occur for reasons unrelated to the presence of SIC-accent

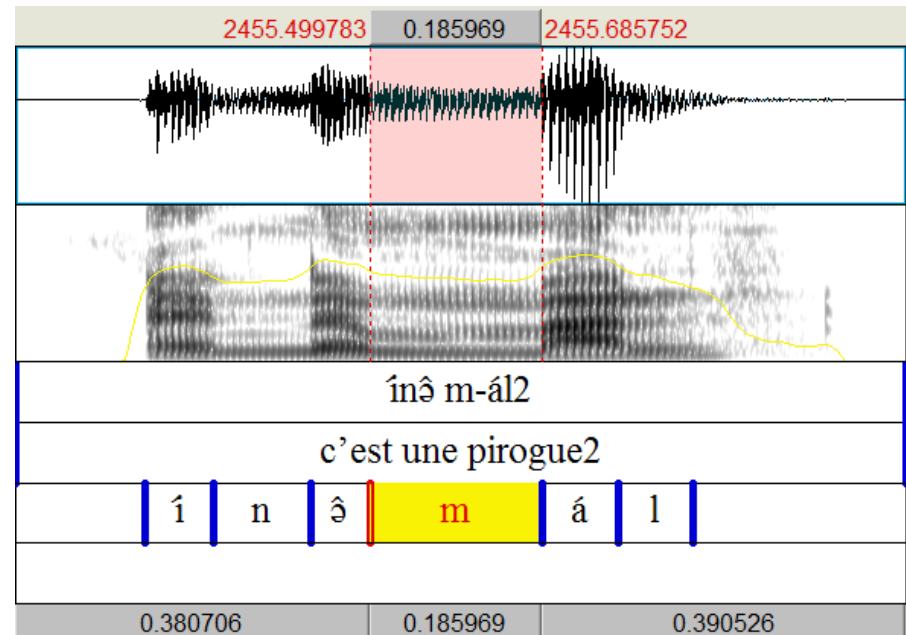
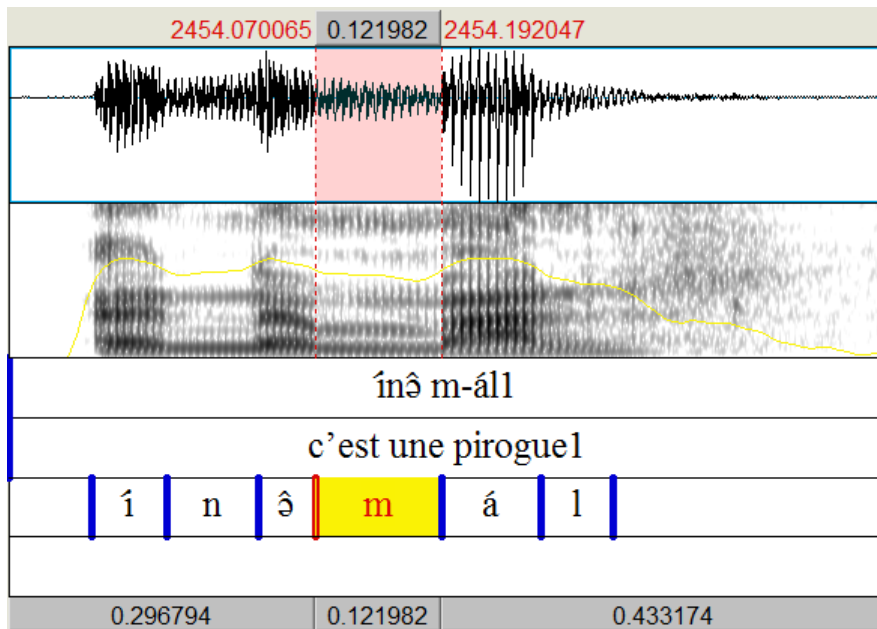
C-emphasis prosody → stem-initial C-accent

- The origin of SI-accent in an utterance-level **prosodic / intonational phenomenon** marking a particular emphasis on a given element within the utterance accounts for the **ease of its spread** in language contact situations (see Matras 2009, 2014... on borrowability)

Functions that serve to negotiate attitudes among the participants in the interaction and which convey evaluations, assessments, the processing of presuppositions, or emotions, are particularly prone to borrowing: This includes **information structuring** at the level of the discourse and clause, [...], **prosody** in phonetics and phonology, discourse particles [...] They represent bilingual speakers' need to align the emotional and presupposition-oriented side of negotiating communicative interaction across interaction settings.

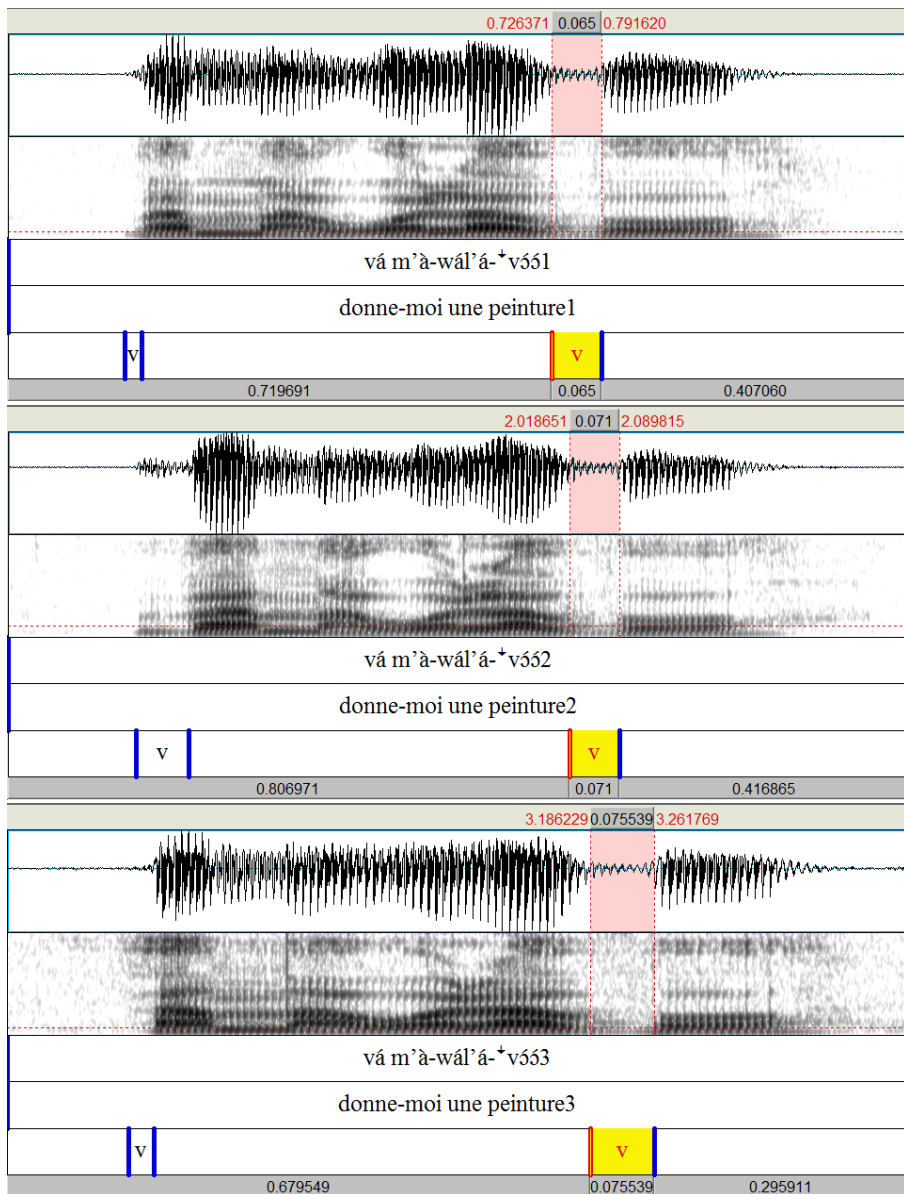
- In a longer utterance, certain SICs are lengthened more than others:
 - SIC of the word that expresses the **new information focus** of the utterance
 - SIC of the word that is **contrastively focused**

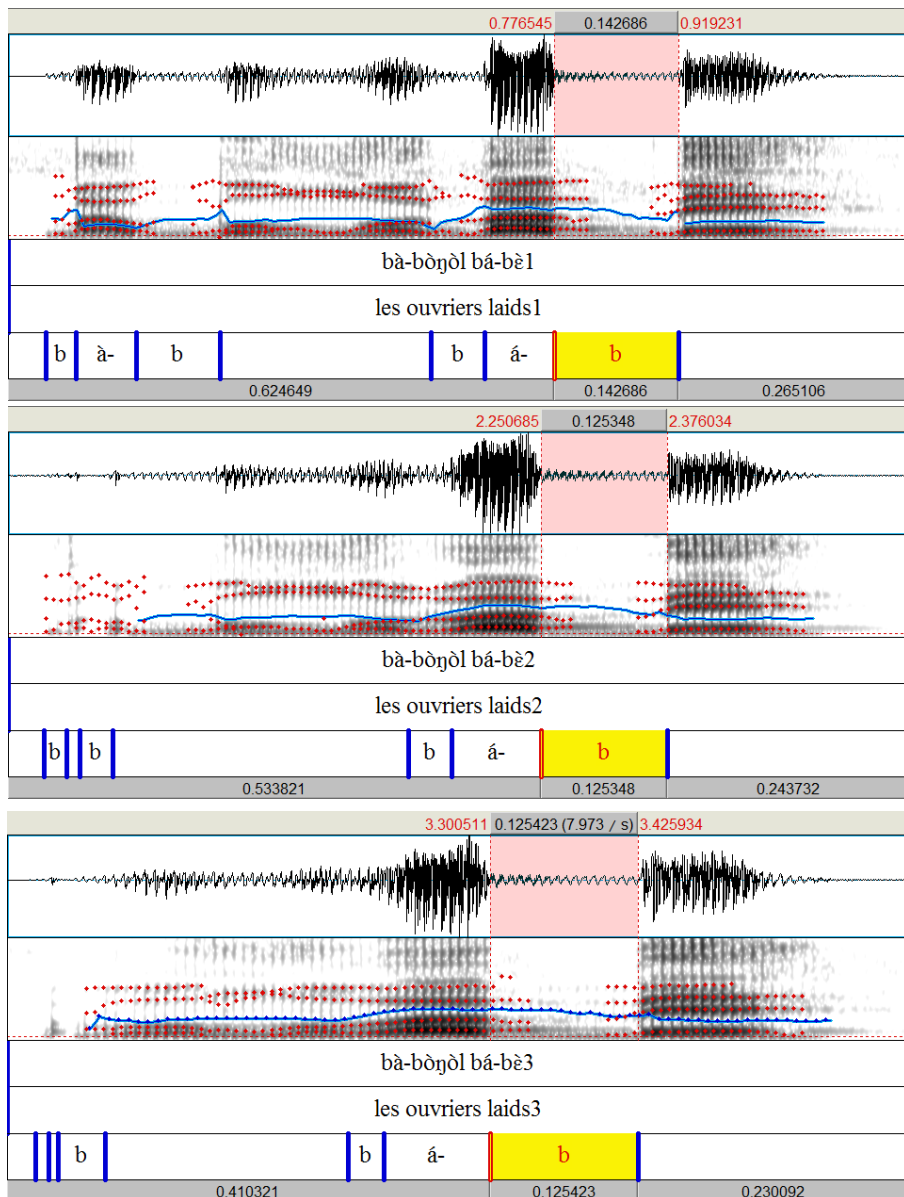
Eton (A70)





Okak Fang (A70)





Basaa (A40)



N

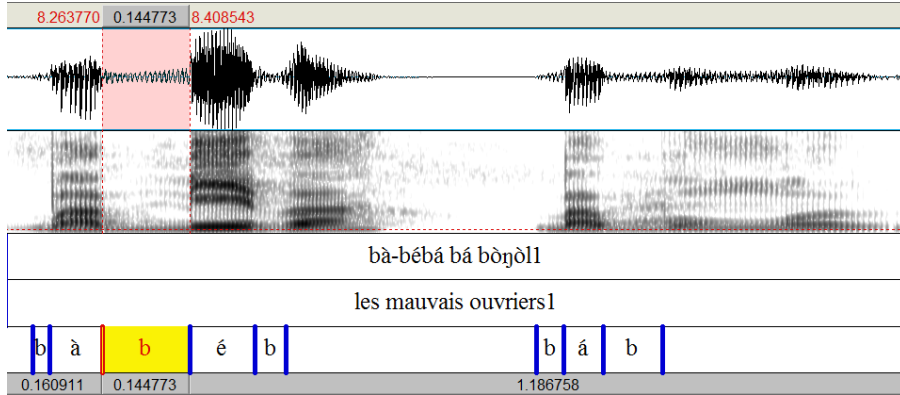
Adj

bà-bòṅòl

bá-bè

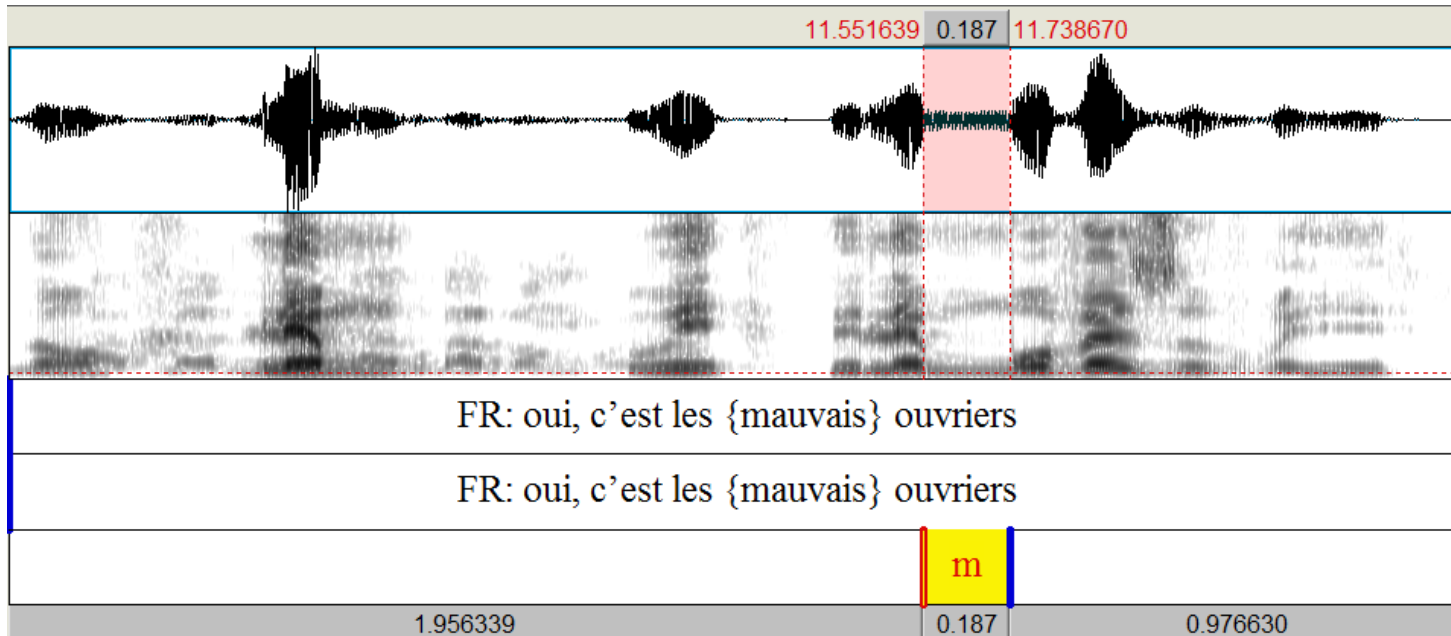
G2-worker AG2-ugly

C-EMPHASIS & STEM-INITIAL ACCENT



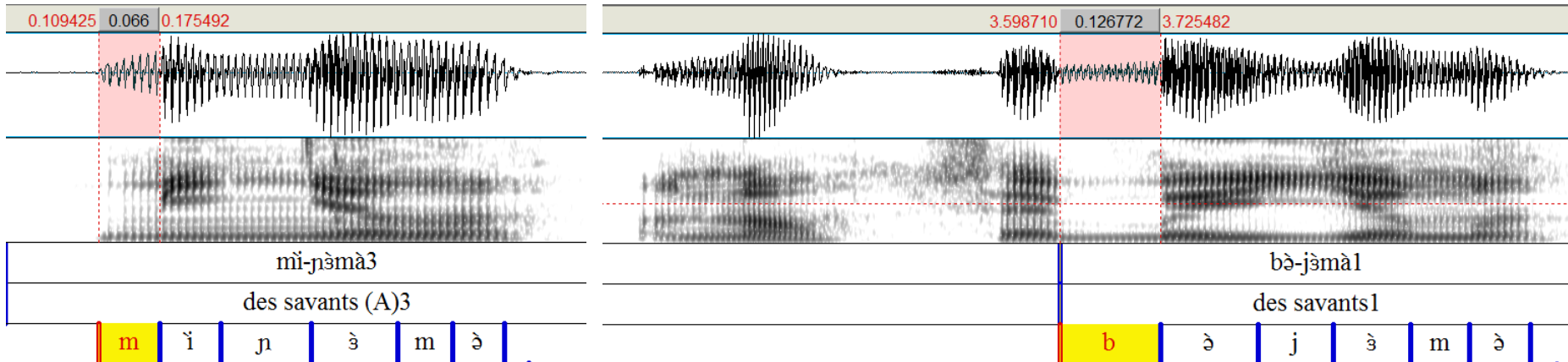
Basaa (A40)

N1	CON	N2
<i>bà-bébá</i>	<i>bá</i>	<i>bònòl</i>
G2-bad	AG2.CON	worker



- Occasionally, **C-emphasis** (new information, contrastive focus) can also occur **on morphemes other than stems**

Eton (A70)

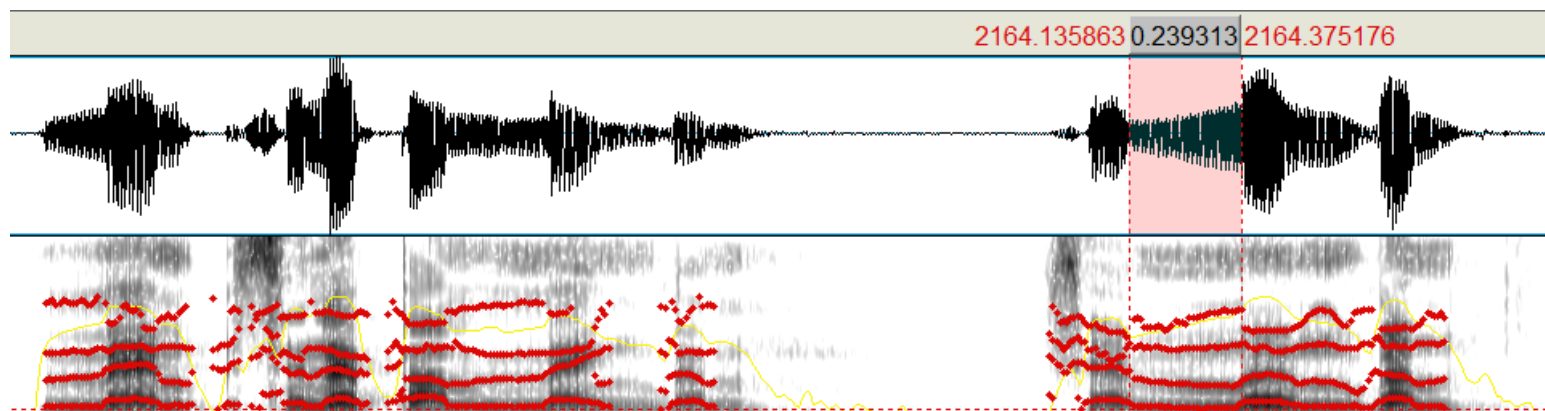
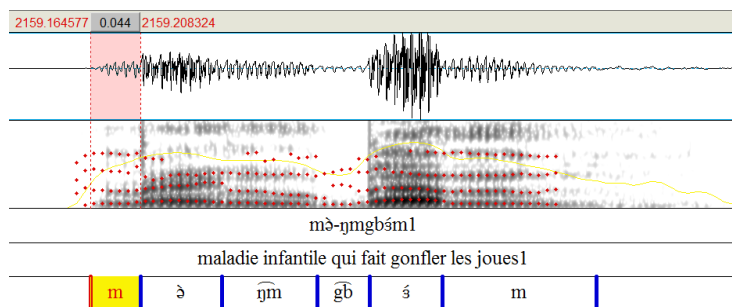


mĩ-jèmà. Non, c'est *bè-jèmà*



- Corrective focus on the prefix V realized with prefix C-emphasis

Eton (A70)



FR+ET: Mais, ce n'est pas mè-ηmgbám (FOC), c'est mè-ηmgbám (FOC)

FR+ET: Mais, ce n'est pas mè-ηmgbám (FOC), c'est mè-ηmgbám (FOC)

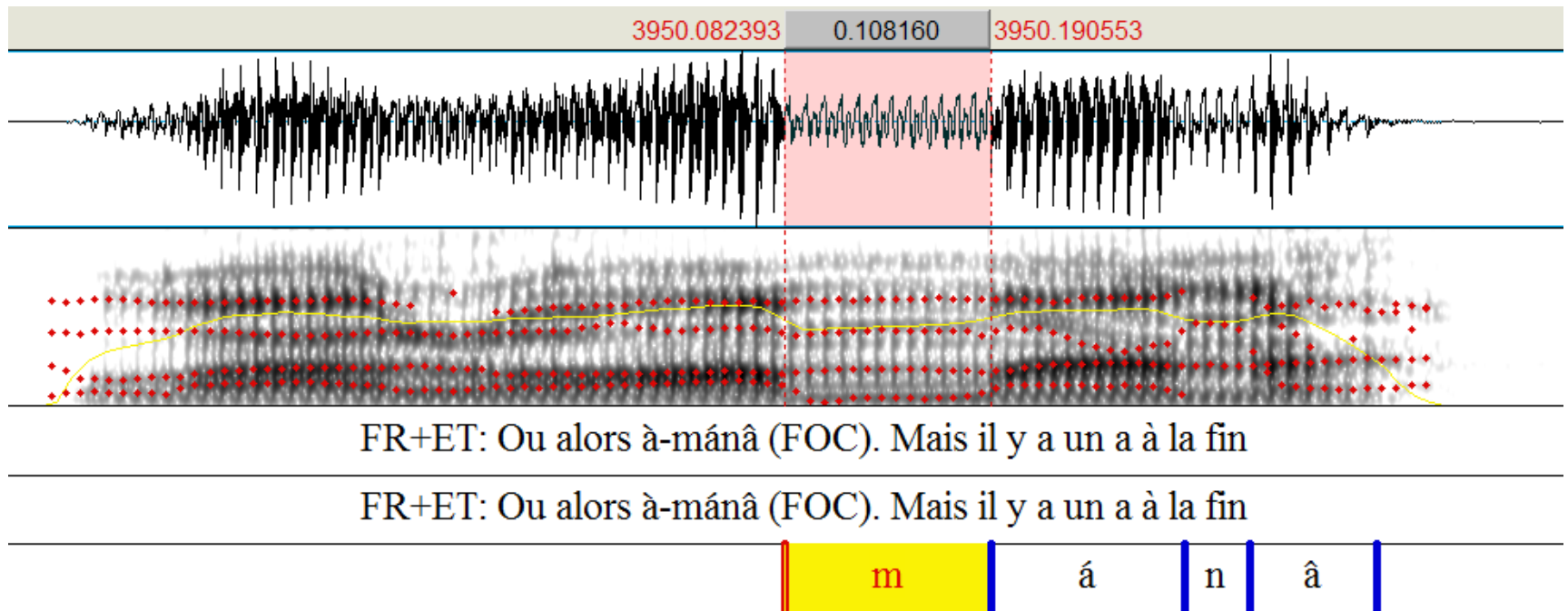
m | è | ηm | gb | s̃ | m

m | è | ηm | gb | s̃ | m



- New information **focus on the final V realized with stem-initial C-emphasis**

Eton (A70)





- This kind of prosody can also be found **outside of Bantoid** (and **NSSA**), but in other languages it appears to have **very low frequency** and to be restricted to **certain types of consonants** (only fricatives? only continuants?...), on top of being pragmatically marked.
 - English:
Now... 'that [ð:] is interesting!
 - French:
ça me fait 'chier [ʃ:]!
 - Russian:
Mm, 'suka [s:] kakaja! ‘Mm, what a bitch!’



- C-emphasis prosody must be **widespread** in **inland NW Bantu** (and in the wider area of NSSA, except in its extreme W and in N)
- C-emphasis prosody is more readily observable in **Bantoid** languages because they have more morphology (especially, prefixes)
- C-emphasis prosody in the form of SI-accent is likely to be relevant for the emergence and spread of **labial-velar stops** in most of NW Bantu (and in the wider area of NSSA)
- More importantly, SI-accent is likely to be largely responsible for the emergence of **maximality constraints** in many NW Bantu languages (and beyond in NSSA)



- Further **durational effects** of SI-accent & C-emphasis besides C-lengthening
 - Stem-initial V_1 is often longer as well
 - Stem-internal C_2 in V_V contexts is strongly lenited (or final V is lenited)
 - Where word-final V was lost, the resulting stem-final C_2 may be lengthened in pre-pausal (utterance-final) context
 - Prefix V lengthens
 - C_0 of a CV- prefix shortens, and in V_V context, weakens



- In the course of time, these durational effects may lead to...

