

Qualitative Exploration of Ewe Focus Prosody

Stefanie Jannedy (Humboldt University Berlin) & Ines Fiedler (Humboldt University Berlin)

This study investigates the modes of expression of pragmatic focus in Ewe, a Niger-Congo language belonging to the subgroup of Gbe languages within the larger New Kwa family (Capo, 1991, Heine and Nurse, 2000) and is spoken by about 3 million people in the southern parts of Ghana and Togo. Ameka (1992:3) claims that “Some languages express focus morphologically by means of special morphemes and particles. This is the situation in many African languages including Ewe [...]” Ewe marks focus morpho-syntactically by appending the high toned morpheme *é* to subjects or fronted objects. Given that we know of hybrid systems (Beckman, 2006) that combine elements of different types of prosodic systems (Creole languages such as Saramaccan for example uses lexical tone and pitch accents) it seems reasonable to assume that there may be languages that use prosody in addition to morpho-syntactic marking of pragmatic contrasts. Thus, we investigated if there are prosodic reflexes of focus in Ewe.

Möhlig (1971) observes that “Ewe uses „expressives prosodemes“: one of them, for instance, serves to emphasize a word or phrase by a higher realization of all high tones in the respective phrase. Given though that there is virtually no experimental or instrumental data available on this language, this claim was not tested and could not be verified or falsified. For this reason, we collected data from 3 male native speakers of this language. Given that in Ewe, ‘consonants’ interact with ‘tone’ (for example, voiced stops and fricatives lower a non-H tone while a H tone becomes rising in this consonantal context), we tried to control for possible consonant and tonal interactions and concentrated on the six tonal combinations shown in example (1).

- (1) a. nyónū d̀̀ núwó
 H non-H # non-H # H H
 woman eat thing.pl
 ‘The/A woman has eaten things.’
- b. àmè d̀̀ àgbè
 H non-H # non-H # non-H non-H
 person eat life
 ‘The/a person has enjoyed life.’
- c. māmá d̀̀ àgbè
 non-H non-H # non-H # non-H non-H
 grandma eat life
 ‘The/a person has enjoyed life.’
- d. nyónū nyá àmè
 H non-H # H # non-H non-H
 woman know person
 ‘The/a woman has known the/a person.’
- e. nyónū nyá ḿ́á
 H non-H # H # H H
 woman know way.DEF
 ‘The/a woman has known the way.’
- f. māmá nyá ḿ́á
 H non-H # H # H H
 grandma know way.DEF
 ‘The/a grandmother has known the way.’

The recordings were made in Berlin and in Ghana with three male native speakers of the Anglo dialect of Ewe. Each of the three speakers read our target sentences in a question-answer context at least five times from randomized lists.

The soundfiles were then time-normalized¹ (Xu, 1999) and annotated in Praat, then overlaid and graphed in Excel in order to make qualitative comparisons of the commonalities and differences. In the graph below, each column represents the data (1a-1f) from one speaker. The individual graphs in each row display the time normalized F0 contour for the six different sentence types with different tonal specifications.

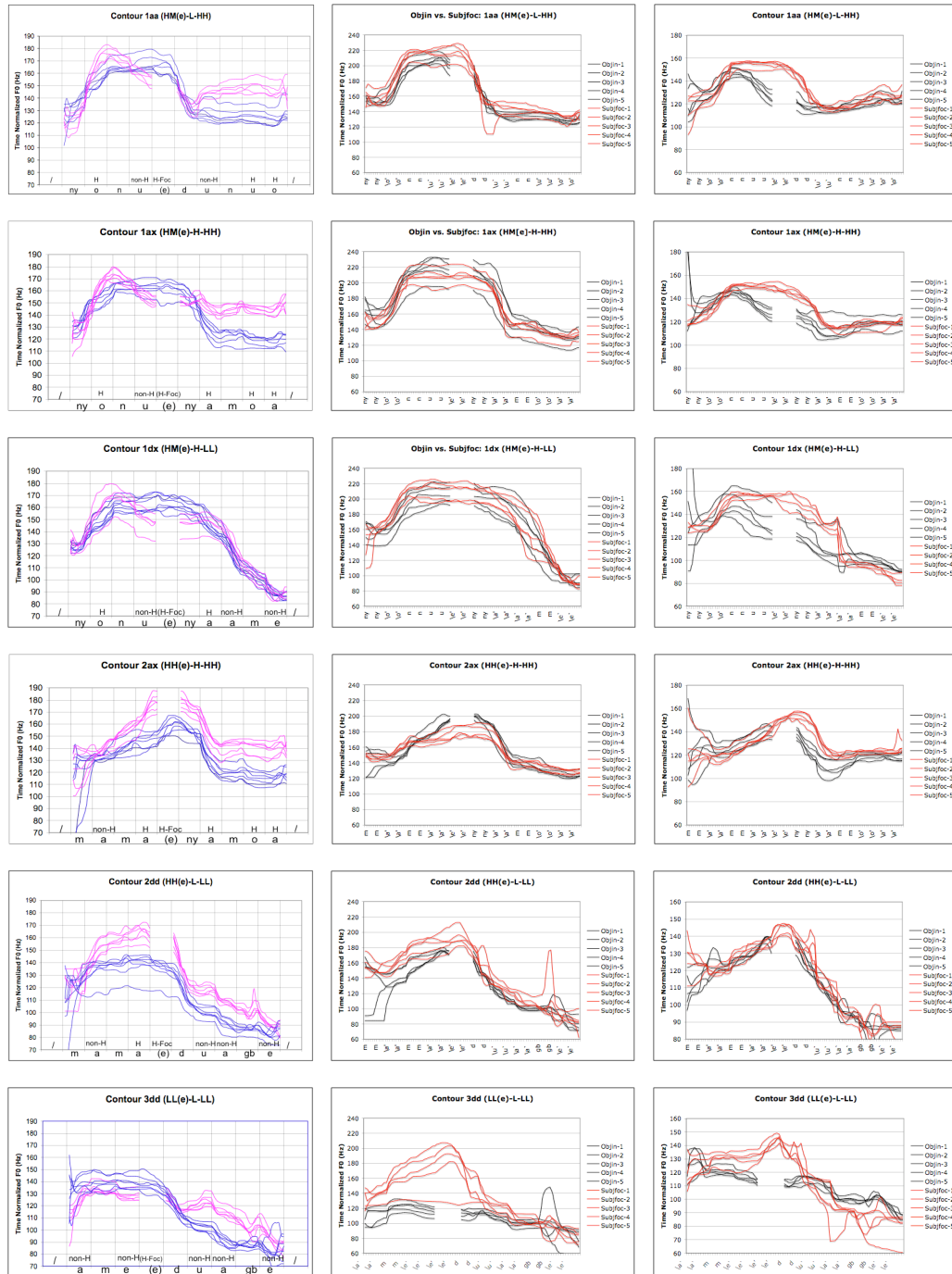


Fig. 1: Time normalized tonal realization for six utterance types (Subject-focus and Object focus-in-situ) with varying tonal specifications (rows) for three different speakers (columns).

¹ We kindly acknowledge Yi Xu for letting us use his time-normalization script.

It should be noted that in the subject focus case, there is one more morpheme (the high toned focus marker \acute{e}) and we chose to graph the non-marked in-situ object focus utterances with a gap after the subject. This gap is an artefact of our representation rather than a pause or phrase break. Note further that we did not find a difference between the object-in-situ cases and the ‘out of the blue’ utterances, thus, we use the object-in-situ tokens as our baseline. It can be noted that speaker 1 (leftmost column) shows a slightly different pattern from the other two speakers: for him, the F0 in the verb-object complex is different in the subject-focus versus the object-in-situ cases.

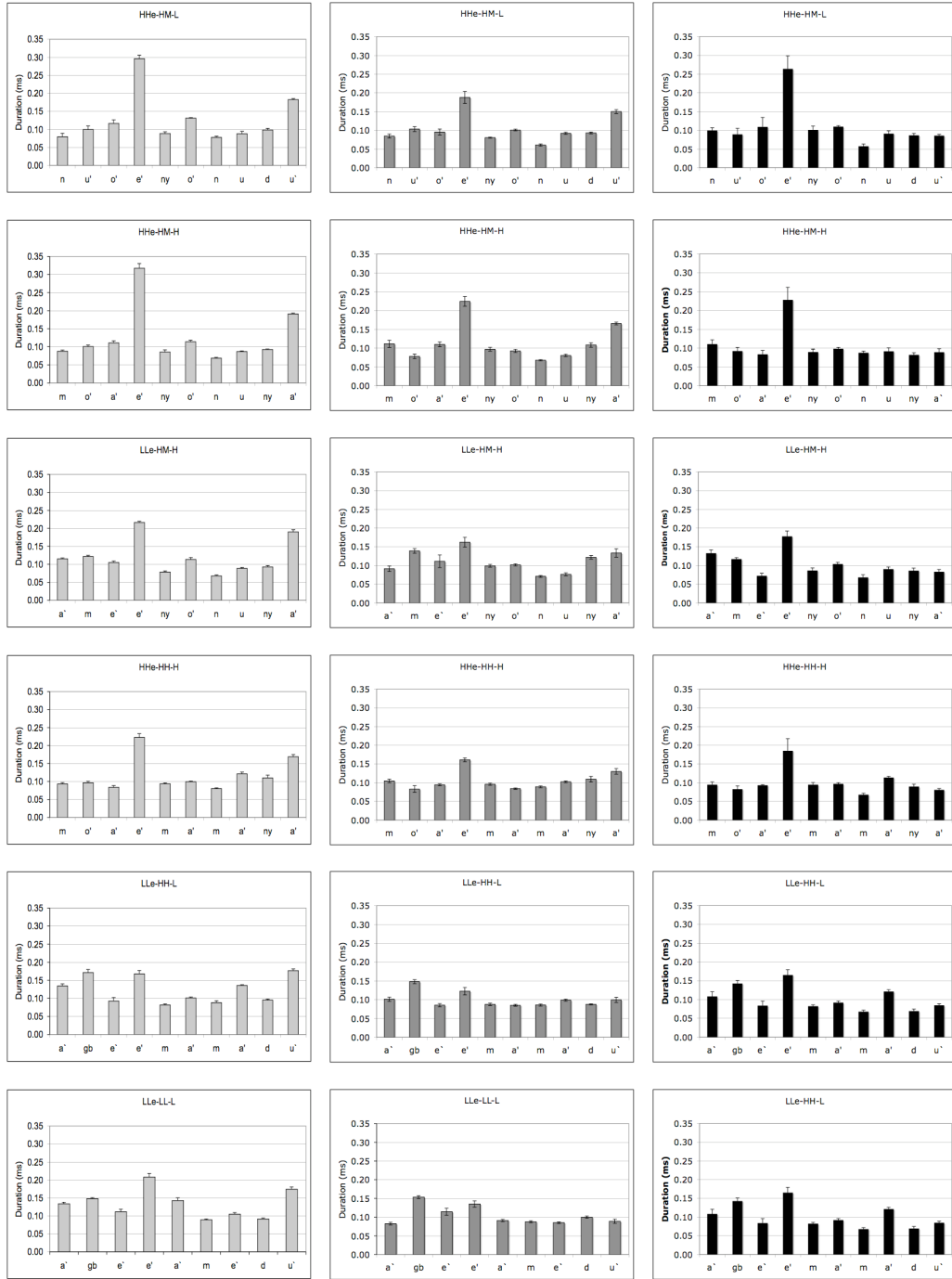


Fig.2: Mean duration of each segment for six utterances with different tonal specifications (rows) for three different speakers (columns).

With the exception of contour HM(é)-H-LL (nyónū(-é) nyá àme), we find the different in patterning. Neither of other speakers show such visible difference between the two conditions. It is noteworthy that the high toned focus marker pulls up a preceding mid tone to form a plateau but raises above the values of a preceding H tone (bottom two rows Fig. 1). We conclude that besides the local affect of the high toned focus marker é, pulling up the F0 and possibly influencing the phonetic implementation of a neighbouring tone, no suprasegmental, that is, intonational tonal effects are visible that can be correlated with focus and information structural content.

There is evidence though that durational cues are paired with morphosyntactic markings of questions (Tamminga, 2005) and also focus (Jannedy & Fiedler, 2006). Tamminga neither found register raising nor other F0 cues differentiating questions from statements, however, she noticed that the question-marker –ka approached about twice the duration of any other CV-syllable in the utterance. The graphs in Fig. 2 indicate that the focus marker (here we plotted the object focus utterances) is longest in comparison to the other segments. Jannedy & Fiedler (2006) showed that at least for speaker one, the focus marker is significantly longer in the object focus case compared to when it marks focus on a subject. Therefore, it appears that F0 is no relevant prosodic parameter in Ewe beyond marking lexical distinctions. That is, no higher levels of the prosodic hierarchy are indicated via F0 modulations or tone modification.

In terms of the implication for a relevant prosodic hierarchy that we can assume for Ewe, it seems that the language makes more use of segmental, that is, durational cues which of course affect the prosody, that is, the timing of the utterance. However, whether or not the durational cues are to be interpreted as lengthening at the right edge of some kind of intonational phrasal constituent is less clear. Rather, there is some evidence now that the language marks the morpho-syntactic marker and leaves the remainder of the utterance unaffected. This evidence seems to suggest that there is no effect of information structure (subject-focus/object-in-situ) or utterance type (question/statement) on higher prosodic levels in Ewe.

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