Prosodic Focus Marking in Ewe?

Stefanie Jannedy & Ines Fiedler
SFB 632 Information Structure
Humboldt University Berlin
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1. Introduction
   1.1 Structure of the Talk
   1.2 Motivation
   1.3 Focus Expressions in Ewe

2. Methods
   2.1 Materials
   2.2 Recording Procedure
   2.3 Acoustic Analysis

3. Data
   3.1 Duration
   3.2 F0

4. Conclusions
“Different languages employ different means for the formal expression of focus.

Thus focus may be signaled prosodically by stress as is the case in English.

Some languages express focus morphologically by means of special morphemes and particles. This is the situation in many African languages including Ewe and Akan.”

(Ameka 1992: 3)
Questions:

Does Ewe also use prosodic means to express focus?

If yes, which kinds of prosodic means are used?
Hints for prosodic focus marking in the literature:

1. Möhlig (1971)
   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.

2. Lefebvre/Brousseau (2002:154) (on Fon)
   If the focussed element “is linked to the direct object position of the verb [. T] there is a short pause after [the focus marker] wè...” But if the focussed element “is linked to the subject position of the verb. (…), there is no pause between wè and the verb, …”
Questions:

- Does Ewe use prosodic means to express focus?  
  - maybe?!

- If yes, which kinds of prosodic means are used?  
  - F0-modulation  
  - phrasing (pauses, lengthening etc.)
Based on the literature, it seems that the pragmatic category ‘focus’ is mostly expressed by morpho-syntactic means. (e.g. Ameka, 1992)

Focus on the subject

\[[S-\text{é}]_{\text{Foc}} V O\]

Focus on the object

\[S V [O]_{\text{Foc}}\]
\[[O-\text{é}]_{\text{Foc}} S V\]
1. nyónũ nyá ōmē.
   woman know person
   ‘A/the woman knows the/a person.’

2. nyónũ nyá móá.
   woman know way.DEF
   ‘A/the woman knows the way.’

3. māmá nyá móá.
   grandma know way.DEF
   ‘A/the grandmother knows the way.’
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4. **nyónú ọ̀̀kù núwó.**

woman eat thing.pl

‘A/the woman has eaten things.’

5. **āmè ọ̀̀kù àgbè.**

person eat life

‘A/the person has enjoyed life.’

6. **māmá ọ̀̀kù àgbè.**

grandma eat life

‘A/the grandmother has enjoyed life.’
1. **Focus on the subject** (42 utterances)
   Q: Who knows the person?
   A: S + FM V O
      *nyónū* é *nyá* *āmē*.

2. **Focus on the object (ex-situ)** (39 utterances)
   Q: Whom does the woman know?
   A: O + FM S V
      *āmē* é *nyónū* *nyá*.

3. **Focus on the object (in-situ)** (36 utterances)
   Q: Whom does the woman know?
   A: S V O
      *nyónū* *nyá* *āmē*.

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Recordings were made:

- in a sound attenuated recording booth
- with one male educated speaker of Aήλο
- at 44Khz in digital format
- reading lists (question-answer paradigms): recorded (at least) five times, each time in a different randomized order → at least five tokens per sentence type

6 sentences x 3 conditions x at least 5 repetitions > 90
For these utterances
- the speech stream was annotated phonemically in Praat
- the duration of each phoneme was calculated via a script
- the F0 was calculated and time-normalized via a script
Sample of Praat Labeling file:

Sound pressure wave form

Spectrogram with overlaid fundamental frequency (F0) contour

segmentation window with transcription
1. nyónű nyá āmē.

2. nyónű nyá móá.

3. māmā nyá móá.

4. nyónű qù núwó.

5. āmē qù āgbè.

6. māmā qù āgbè.

Duration – object focus in-situ

subject  verb  object  final phone

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1. nyónu é nyá āmē.

2. nyónu é nyá āmē.

3. māmā é nyá móá.

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4. 

nyónū ẹ̀ d̀ nùwó.

5. 

āmē ẹ̀ d̀ àgbè.

6. 

māmā ẹ̀ d̀ àgbè.
1. [n=8] nyónũ é nyá āmē.


Duration – **Subject vs. Object** ex-situ Focus

- **object**
- **FOC marker**
- **subject**
- **verb**
- **final phone**

---

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Duration – **Subject** vs. **Object** ex-situ Focus

4. [n=7]

nyónù é ḍà núwó.

5. [n=7]

āmē é ḍà āgbè.

6. [n=7]

māmā é ḍà āgbè.

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A Linear Mixed Effects Model Anova on the duration of the Focus Marker in S+FM versus O+FM shows a significant effect:

\[ p < .05, \text{df} = 1, F = 15.77 \]
The focus marker in the ex-situ object \textbf{O+FM} is produced reliably longer by this speaker than in the \textbf{S+FM} condition.

- **S-Foc**: lengthening as indicator for focus
- **O-Foc**: lengthening as indicator for clausal boundary and focus (compounding effect)
Subject Focus with Marking

Object Focus no Marking

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Subject Focus (with FM)

Time-normalized F0 contours

x-axes: phonemes
y-axes: F0

nyónú é nyá móá.

Object Focus (no Marking)

nyónū nyá móá.

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Subject Focus with Marking

Object Focus no Marking
Subject Focus with Marking

Object Focus no Marking
Subject Focus with Marking

Object Focus no Marking
Subject Focus with Marking

Object Focus no Marking
**F0 – Comparison: O-Foc in-situ vs. S-Foc**

- **Intro**
- **Methods**
- **Data**
- **Conclusions**

**Intro**

**Methods**

**Data**

**Conclusions**

- nyónű nyá ämē.
  vs. nyónű é nyá ämē.

- nyónű nyá móá.
  vs. nyónű é nyá móá.

- mámá nyá móá.
  vs. mámá é nyá móá.

- [Graphs showing data comparison]

- nyónű ṣù núwó.
  vs. nyónű é ṣù núwó.

- āmē ṣù àgbè.
  vs. āmē é ṣù àgbè.

- mámá ṣù àgbè.
  vs. mámá é ṣù àgbè.
Overlay of neutral reading & Object focus in-situ for six sentence types.
Does Ewe also use prosodic means to express focus?

Yes!

There is evidence for **duration** (lengthening of FM) to play a (tertiary) role, supporting syntactic structure.

\[
S_{\text{Foc}} \mid V \ O
\]

\[
O_{\text{Foc}} \mid S \ V
\]

There is evidence for **F0** (compression of postfocal material) to play a (secondary or tertiary) role.
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<tr>
<th>Syntax</th>
<th>Morphology</th>
<th>Phonology: duration</th>
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<tbody>
<tr>
<td>[O-é]_{Foc}</td>
<td>√</td>
<td>√</td>
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<tr>
<td>S V [O]_{Foc}</td>
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<td>[S-é]_{Foc} V O</td>
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