

Prosodic Focus Marking in Ewe?

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 - 1.2 Motivation
 - 1.3 Focus Expressions in Ewe
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“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] wɛ...” But if the focussed element “is linked to the subject position of the verb. (...), there is no pause between wɛ 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-é]_{Foc} V O

Focus on the object

S V [O]_{Foc}

[O-é]_{Foc} S V



H nonH # H # nonH nonH

woman know person

'A/the woman knows the/a person.'



H nonH #

H # H H

woman know way.DEF

'A/the woman knows the way.'



nonH H # H

H H

grandma know

way.DEF

'A/the grandmother knows the way.'

4

H nonH #

nonH # H H

woman eat thing.pl

'A/the woman has eaten things.'



5.

nonH nonH # nonH #

nonH nonH

person eat life

'A/the person has enjoyed life.'

6.

nonH H # nonH # nonH nonH 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



2. Focus on the object (ex-situ) (39 utterances)

Q: Whom does the woman know?

A: O + FM S V



3. Focus on the object (in-situ) (36 utterances)

Q: Whom does the woman know?

A: S V O

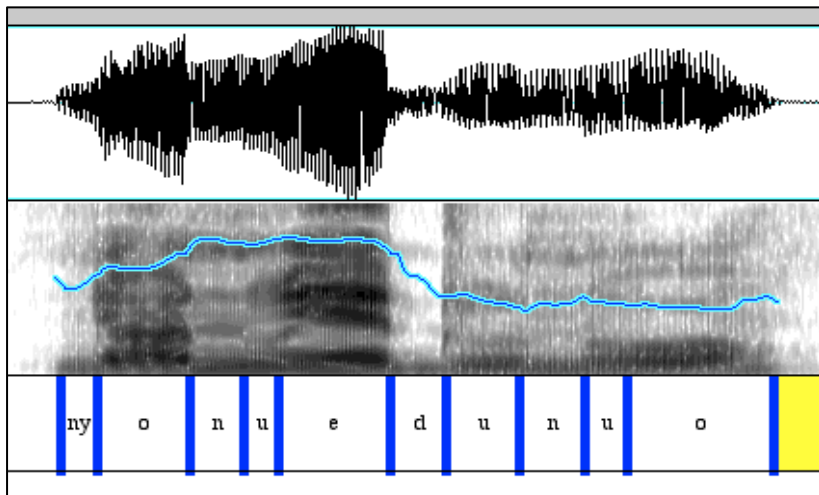
Recordings were made:

- in a sound attenuated recording booth
- with one male educated speaker of A☠●②
- 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

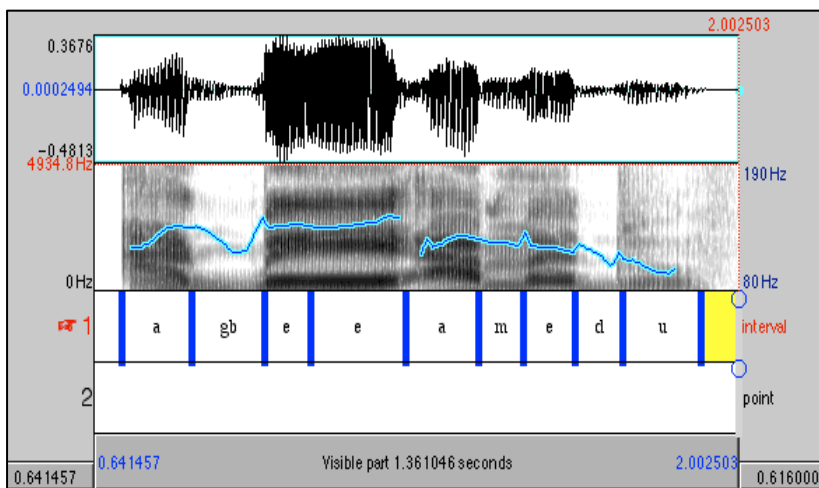


Sample of Praat Labeling file:

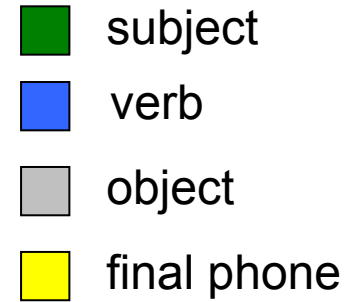
Sound pressure wave form

Spectrogram with overlaid fundamental frequency (F0) contour

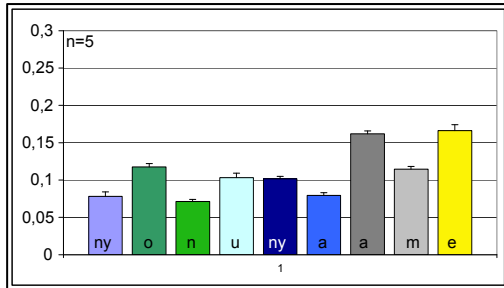
segmentation window with transcription



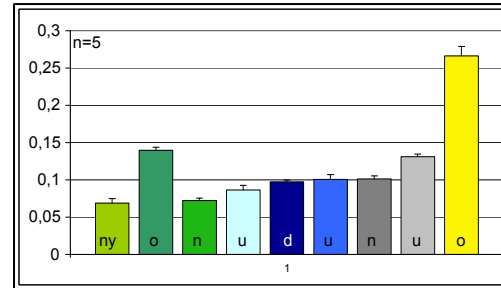
Duration – object focus in-situ



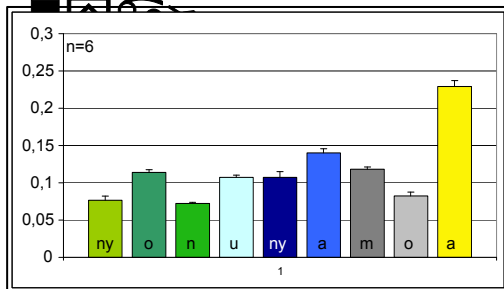
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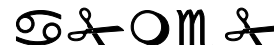
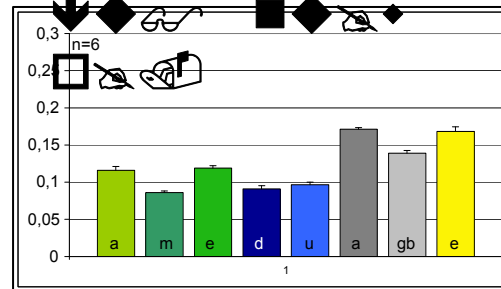
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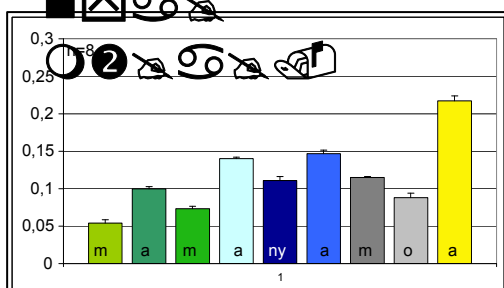
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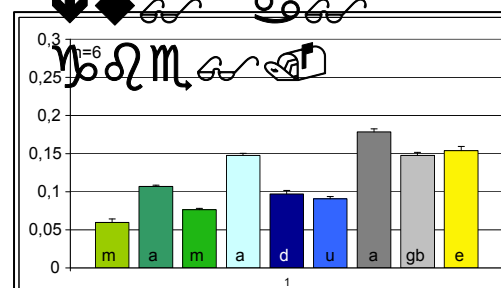
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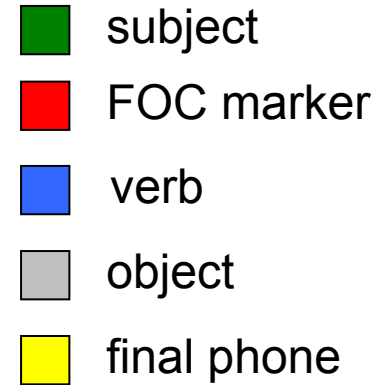


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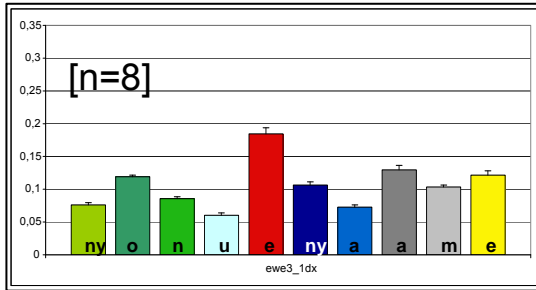


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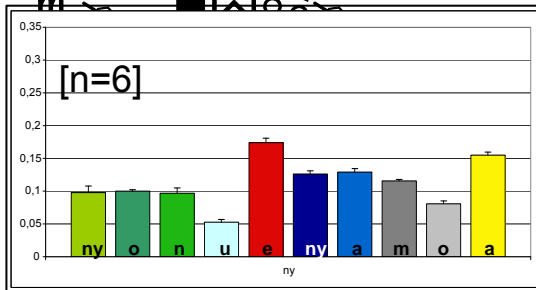




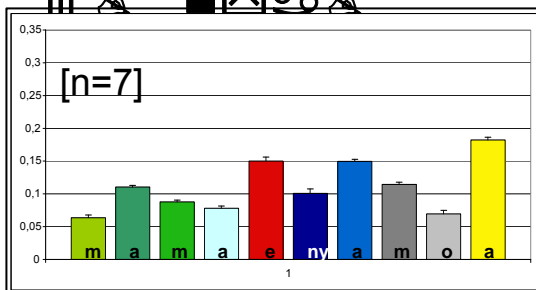
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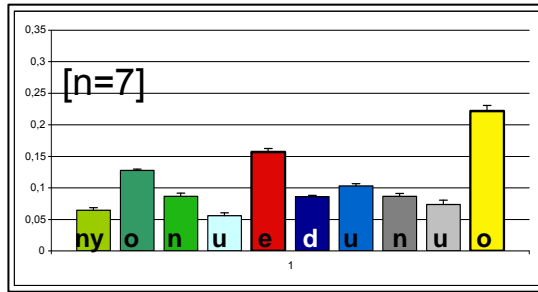


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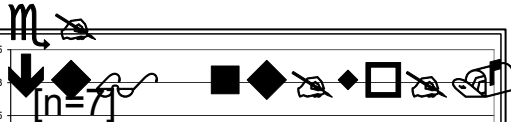
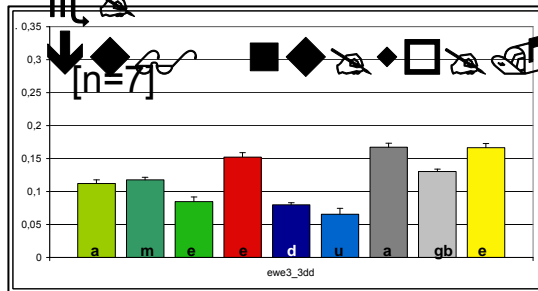


- subject
- FOC marker
- verb
- object
- final phone

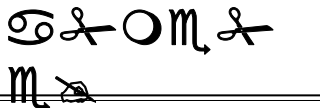
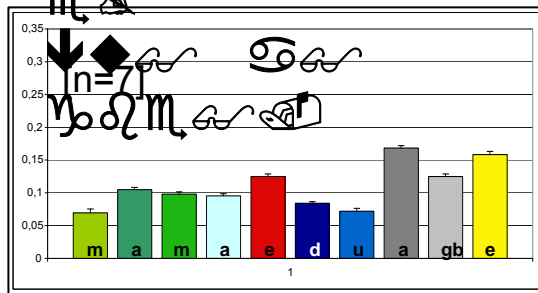
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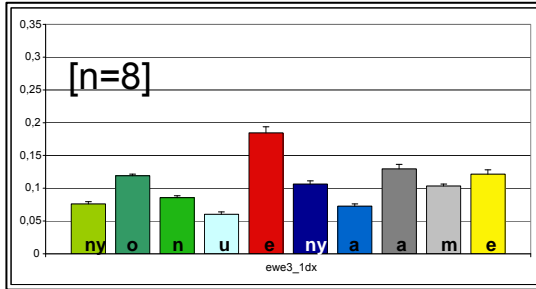
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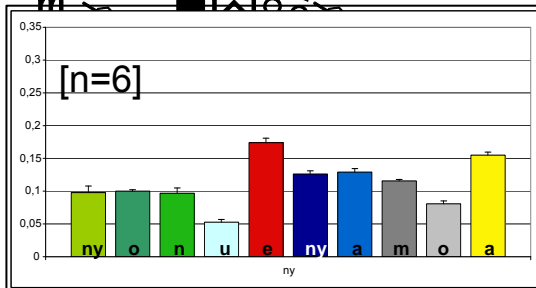
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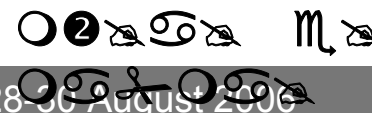
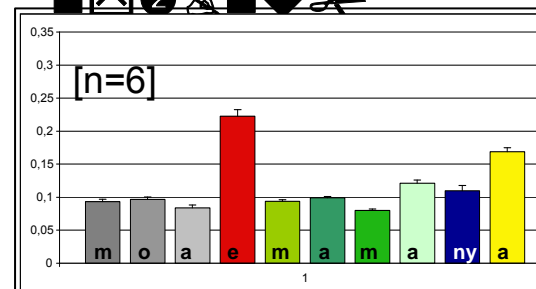
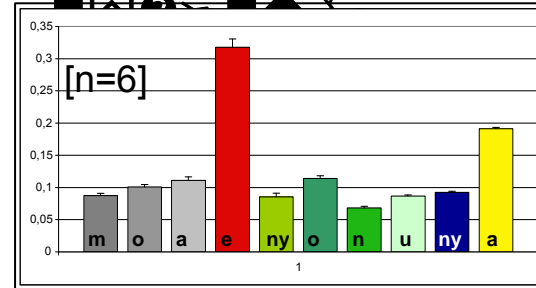
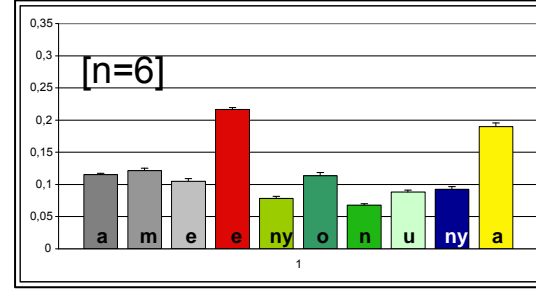
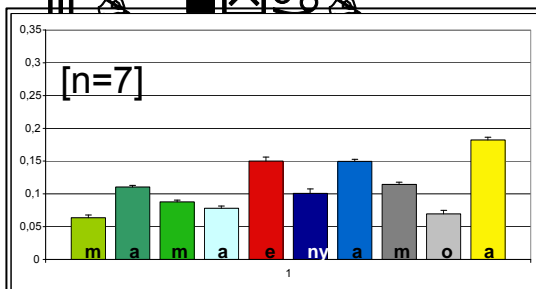
1.



2.



3.



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

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

$$p.< .05, df=1, F=15.77$$

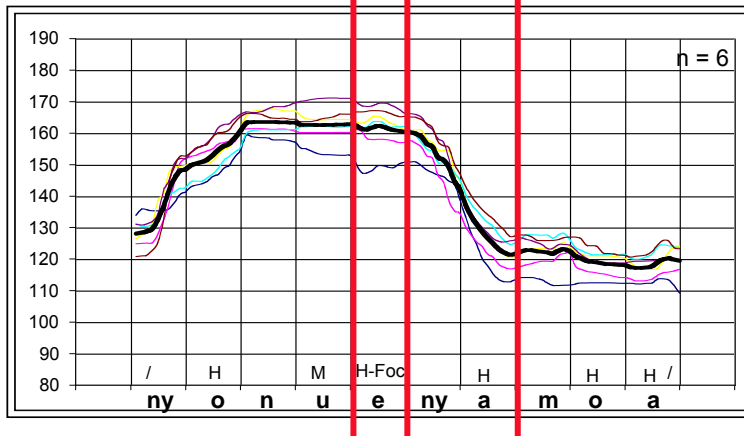
The focus marker in the ex-situ object **O+FM** is produced reliably longer by this speaker than in the **S+FM** condition.



S-Foc: lengthening as indicator for focus

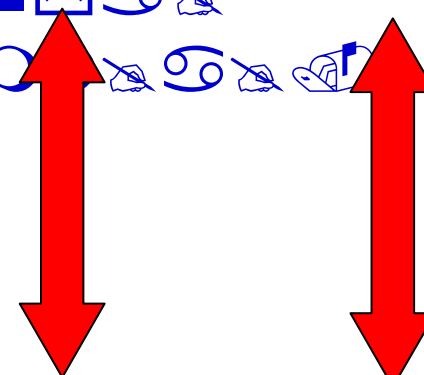
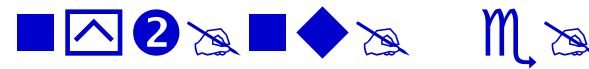
O-Foc: lengthening as indicator for clausal boundary and focus
(compounding effect)

Subject Focus (with FM)

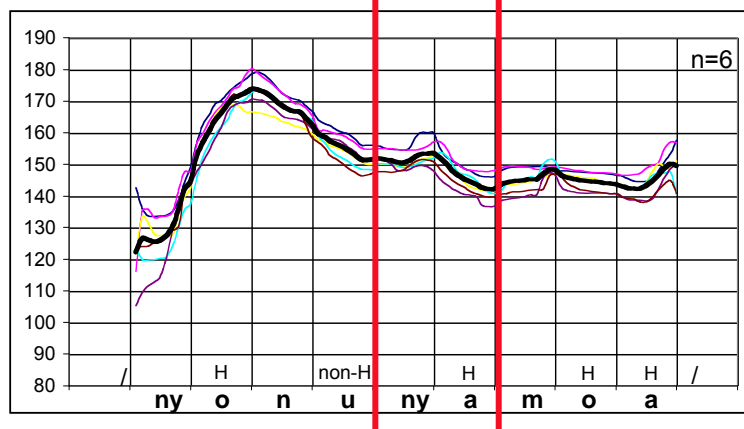


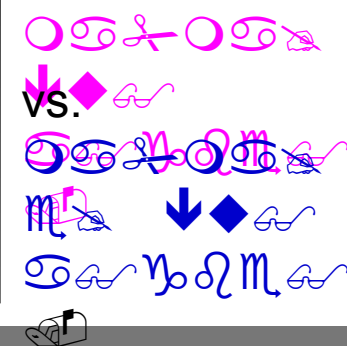
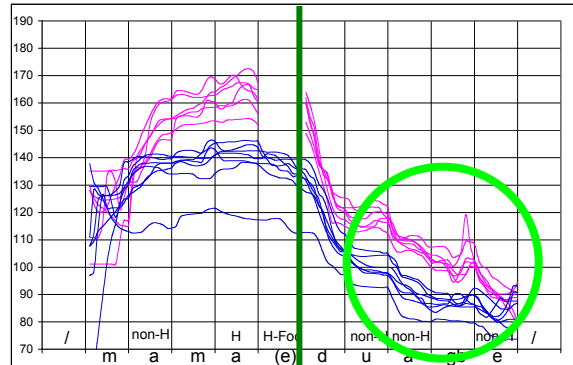
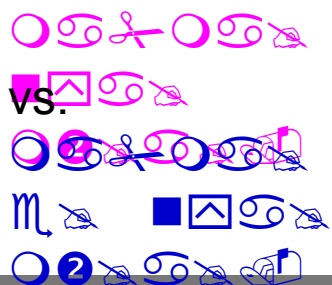
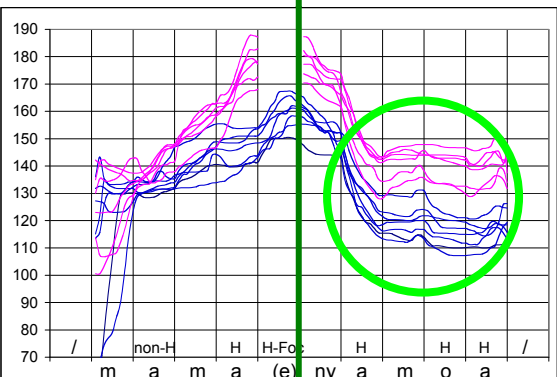
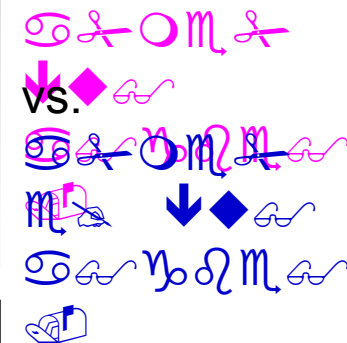
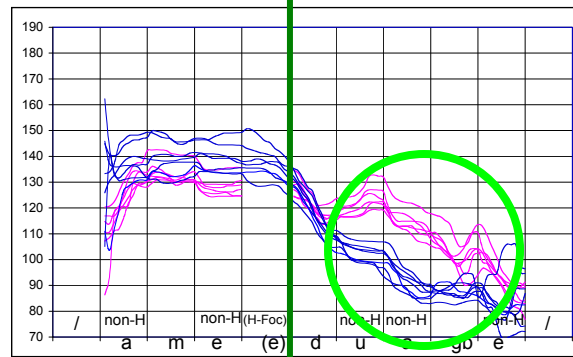
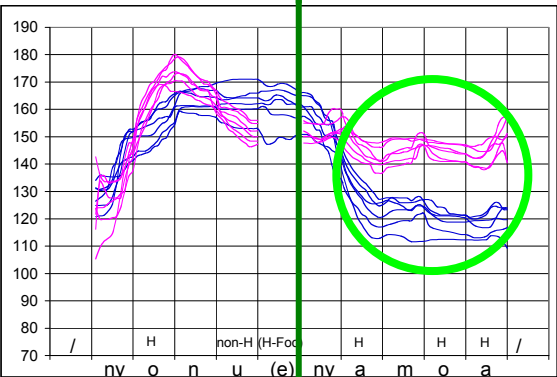
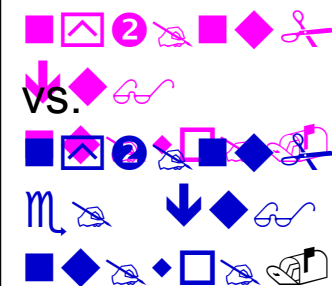
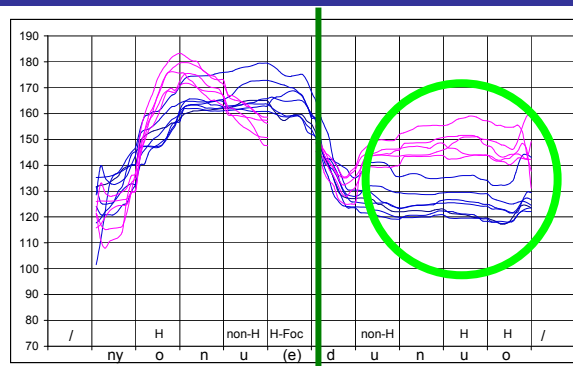
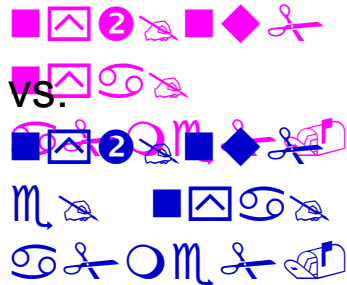
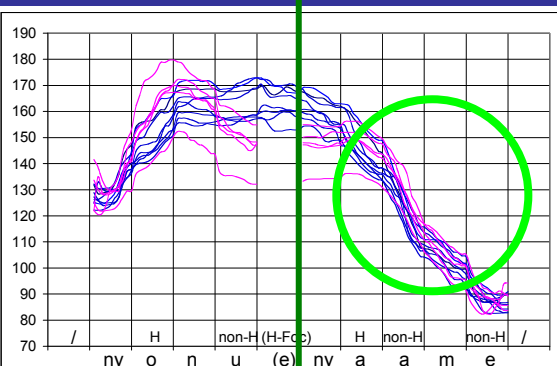
Time-normalized F0 contours

x-axes: phonemes
 y-axes: F0

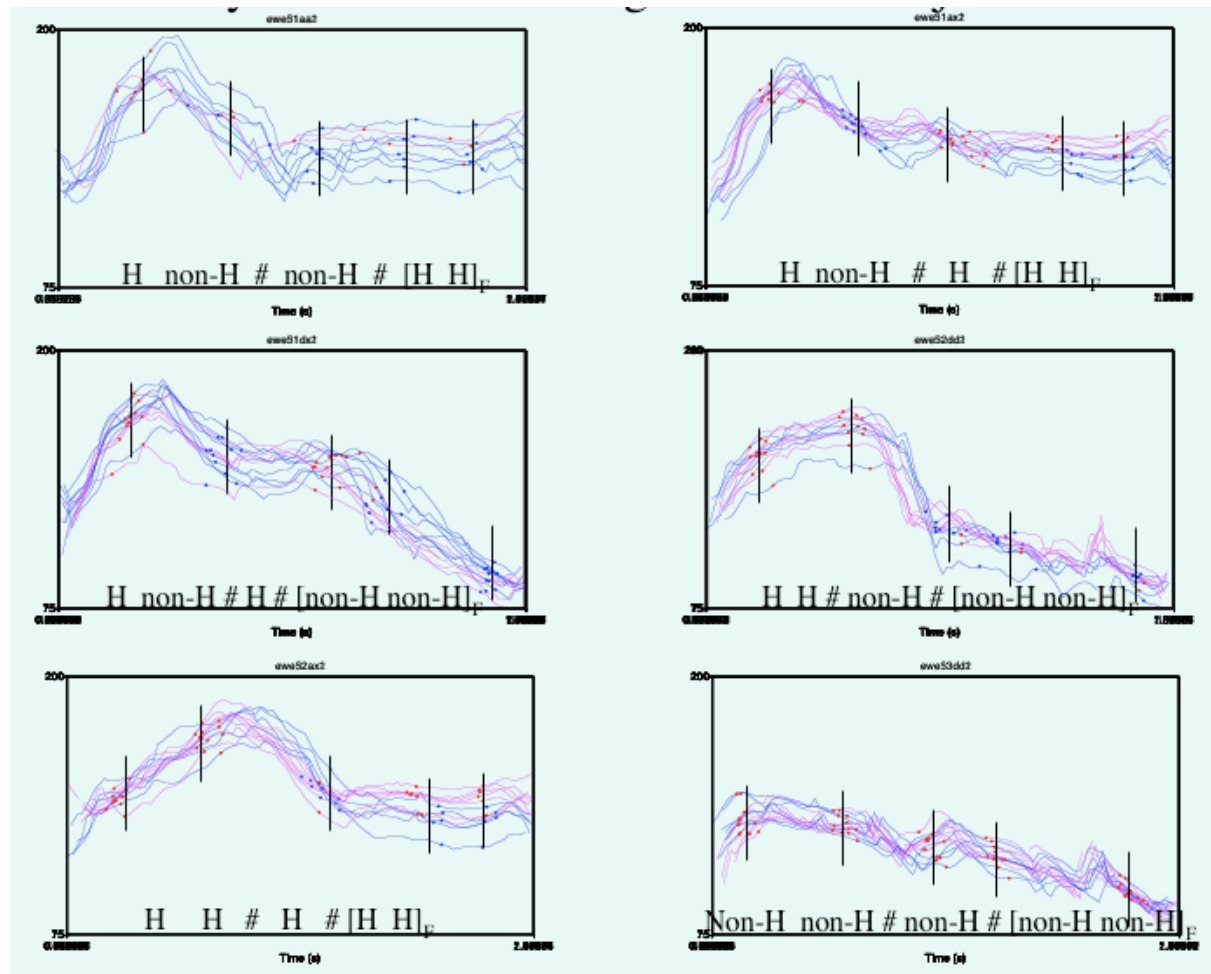


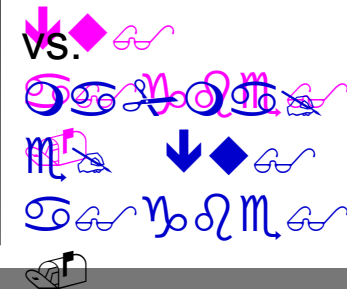
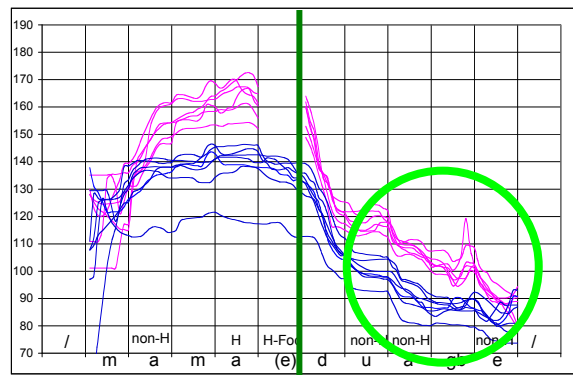
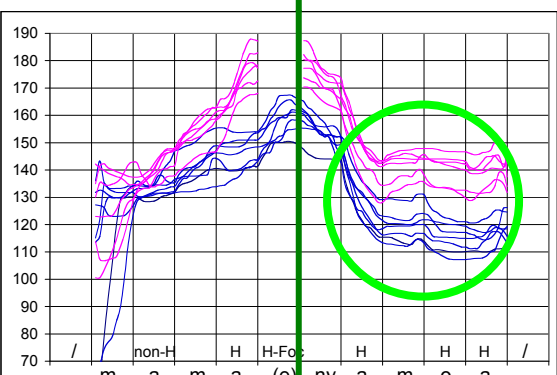
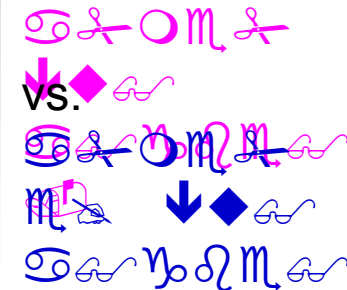
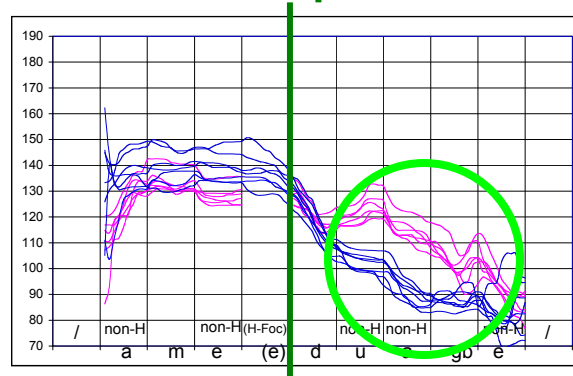
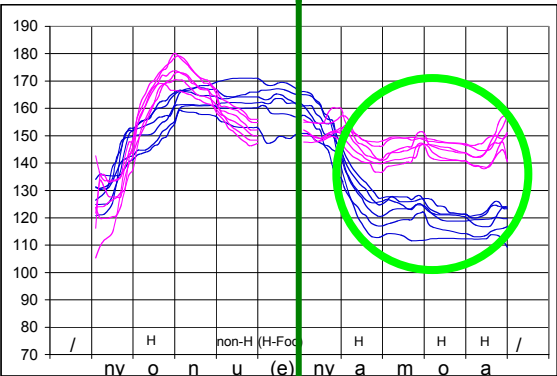
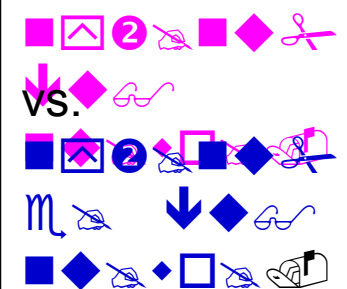
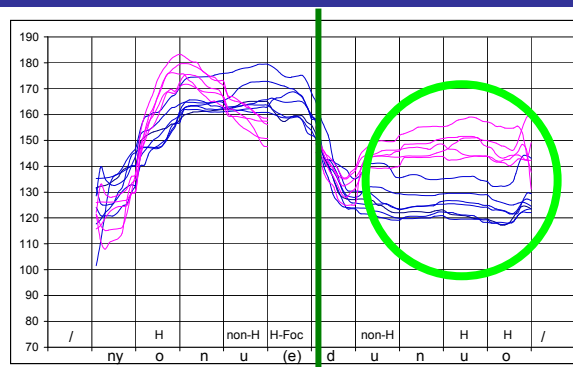
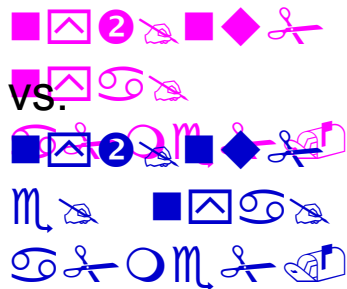
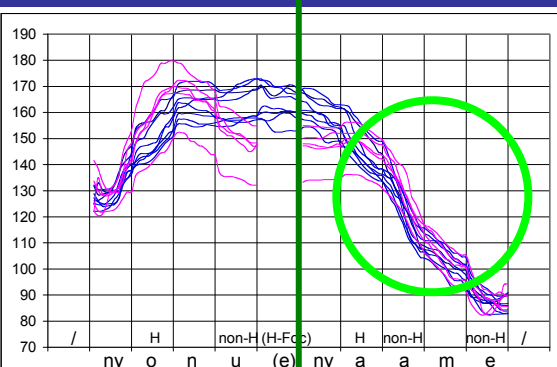
Object Focus (no Marking)





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.

$S_{\text{Foc}} | V O$

$O_{\text{Foc}} | S V$

There is evidence for **F0** (compression of postfocal material) to play a (secondary or tertiary) role.

	[S-é] _{Foc} V O	S V [O] _{Foc}	[O-é] _{Foc} S V
Syntax	?	-	✓
Morphology	✓	-	✓
Phonology: duration	✓	-	✓
F0	✓	-	?

	[S-é] _{Foc} V O	S V [O] _{Foc}	[O-é] _{Foc} S V
Syntax	?	-	✓
Morphology	✓	-	✓
Phonology: duration	✓	-	✓
F0	✓	-	?

	[S-é] _{Foc} V O	S V [O] _{Foc}	[O-é] _{Foc} S V
Syntax	?	-	✓
Morphology	✓	-	✓
Phonology: duration	✓	-	✓
F0	✓	-	?

Thank you!

Dr. Stefanie Jannedy

Project D3 „Signal Parameters Connected to Prominence and Phrasing within Spoken Utterance in Different Languages“

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Project B1 "Focus in Gur and Kwa Languages"

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