

On prosody and reported speech

TOWARDS AN
EXPLORATORY METHODOLOGY

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A bit of theory

Speakers “do not always explicitly introduce different ‘voices’ with reporting verbs or quotative constructions. Instead, figures are often ‘brought on stage’ for the first time merely by being animated, without, for instance, a prefatory *he said* or *she said*. [...]

The figure’s ‘voice’ must be reconstructibly different from the current speaker’s own ‘voice’”. (Couper-Kuhlen, 1997, p. 13)

→ Prosodic and paralinguistic features

A bit of theory

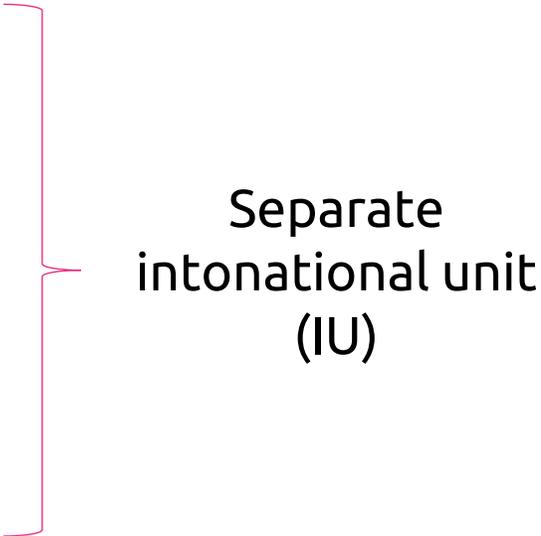
“Prosodic and paralinguistic effects are in fact **deictic** to a certain extent: they involve speaking within a given range of relative loudness, pitch and tempo [...] and with a given voice quality.” (p. 14)

A bit of theory

- Prosodically, reported speech can be more or less **integrated into the quotative frame**. This helps establishing a distance from the narrator's own voice.

- The **degree of prosodic integration** depends on several features (Genetti, 2011):

- Positioning of prosodic and syntactic boundaries
- Patterns of terminal contours
- Changes in:
 - Loudness
 - Pitch range
 - Register
 - Timing



Separate
intonational unit
(IU)

Objectives

- **Determining** if reported speech is prosodically detached from the quotative frame in storytelling in [LANGUAGE].

If it is,

- **Identifying** in which cases.
- **Describing** how (acoustically/phonetically).

Acoustic correlates of perceptive variables

Perceptive

1. Pitch variations
2. Pause duration
3. Speech rate
4. Loudness variations

Acoustic

- F0 (Hz, st)
- Time (s)
- Syllables or phonemes/s (including pauses)
- Intensity (dB)

1. Pitch variations

Reported (direct) speech in English and other European languages:

- Higher pitch range than indirect speech
(ΔF_0 , i.e. $F_{0_{\max}} - F_{0_{\min}}$)
- Pitch reset (with respect to previous IU)
- Register change (with respect to previous IU)

2. Pause duration

Reporting events can also be separated from non-reported speech by pauses.

→ 0.325s in average after reports
(vs. 0.244s elsewhere)

(Oliveira & Cunha, 2004)

3. Speech rate

- Changes in speech rate (number of syllables/second). 🤔

4. Intensity variations

- Intensity measurements rely heavily on good audio quality. 😞

Paralinguistic features

- Changes in voice quality are also often used to signal reports:
 - Creaky voice
 - Breathy voice
 - Falsetto
 - Other types of non-modal phonation

Typological issues

- Word order seems to affect the placement of IU breaks.
 - (cf. Malibert & Vanhove, 2015)
- Tonal languages with downdrift, where pitch reset does not necessarily mark the start of a new IU.

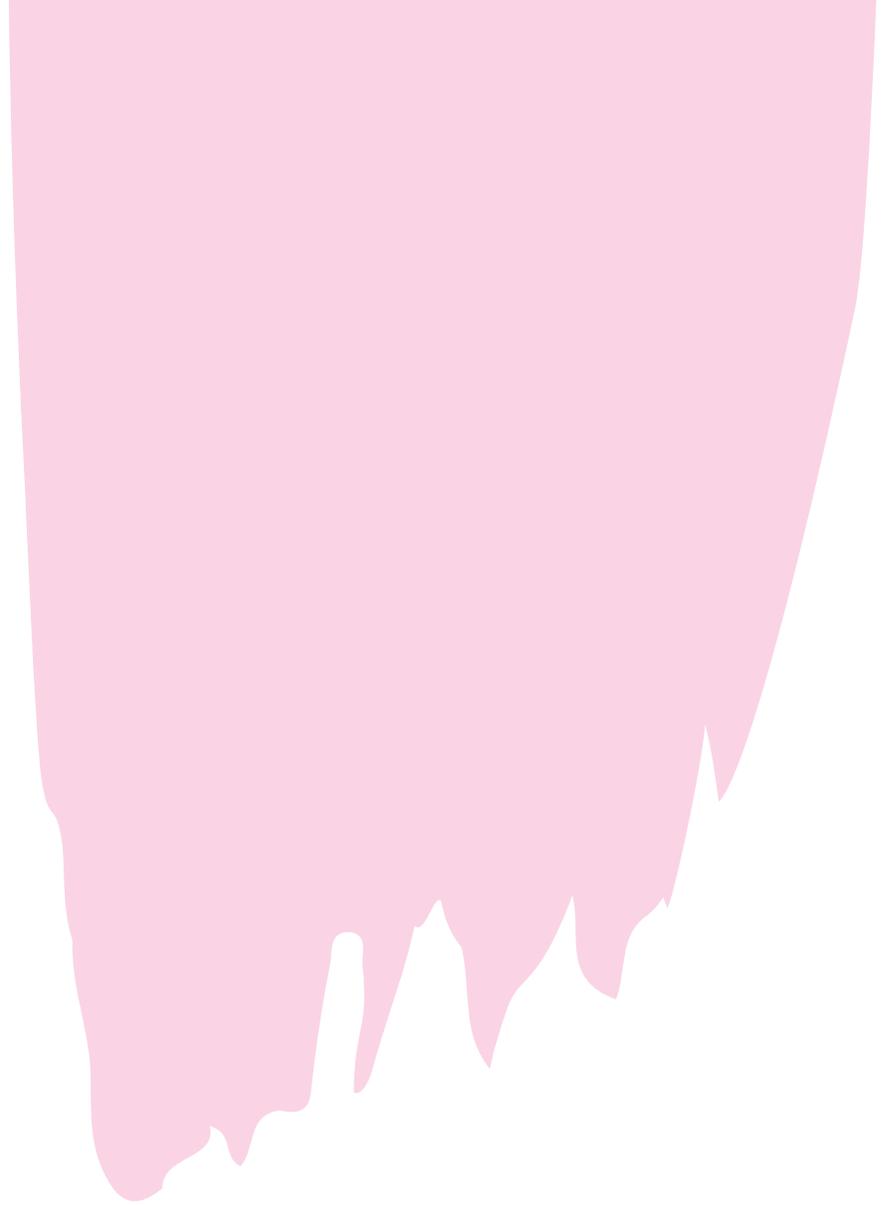
Prosodic “universals”?

- 1) Variable prosodic behavior:** Prosody signals reported speech as a complement of morphosyntactic cues. In absence of the latter, prosodic cues tend to be present.
- 2) Length:** Short speech reports tend to be more integrated into the quotative frame.

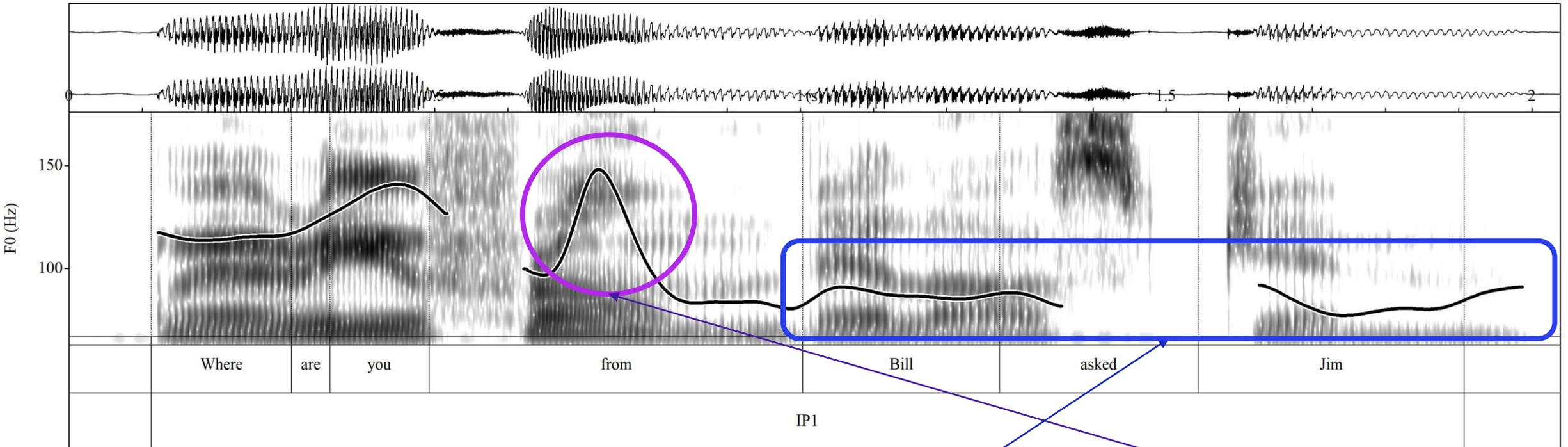
(Genetti, 2014)

A few examples

IN CONVERSATIONAL ENGLISH



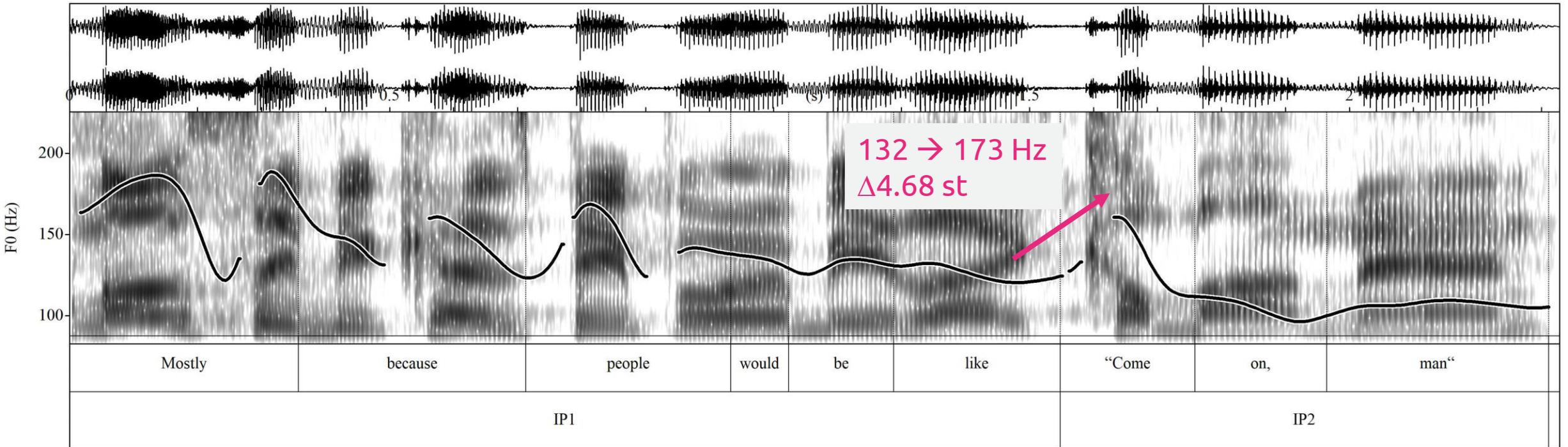
English Intonation: an Introduction (Workbook)



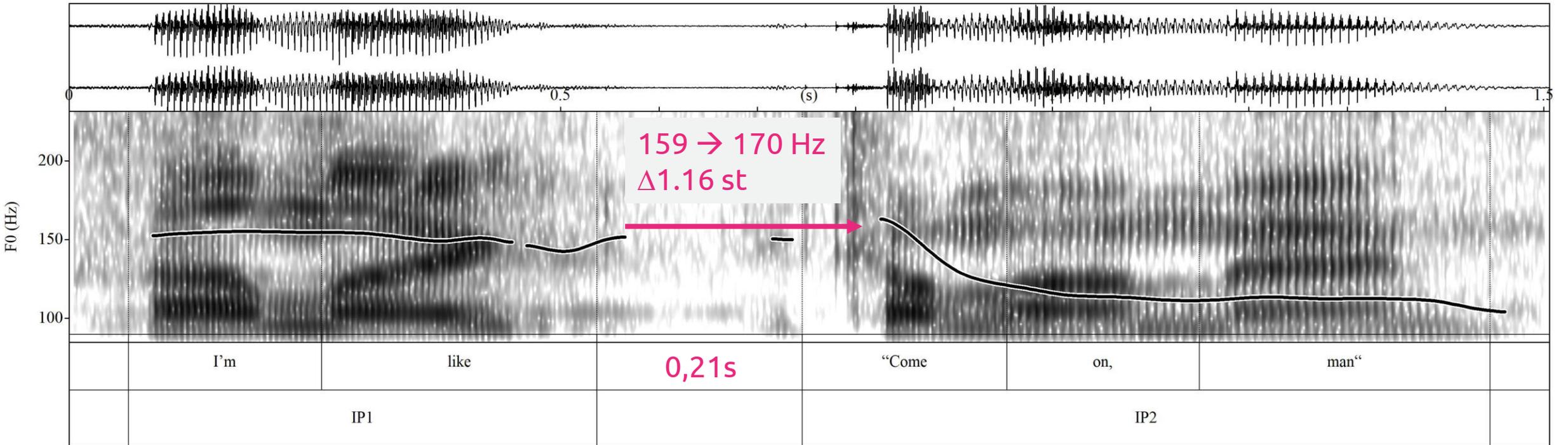
“When reporting clauses [...] follow quoted words, they are usually out of focus. The nucleus goes on the appropriate item among the quoted words, and the reporting clause forms a tail to the IP. [...]

There is often a rhythmic break between the quoted words and the reporting clause.” (Wells, 2006)

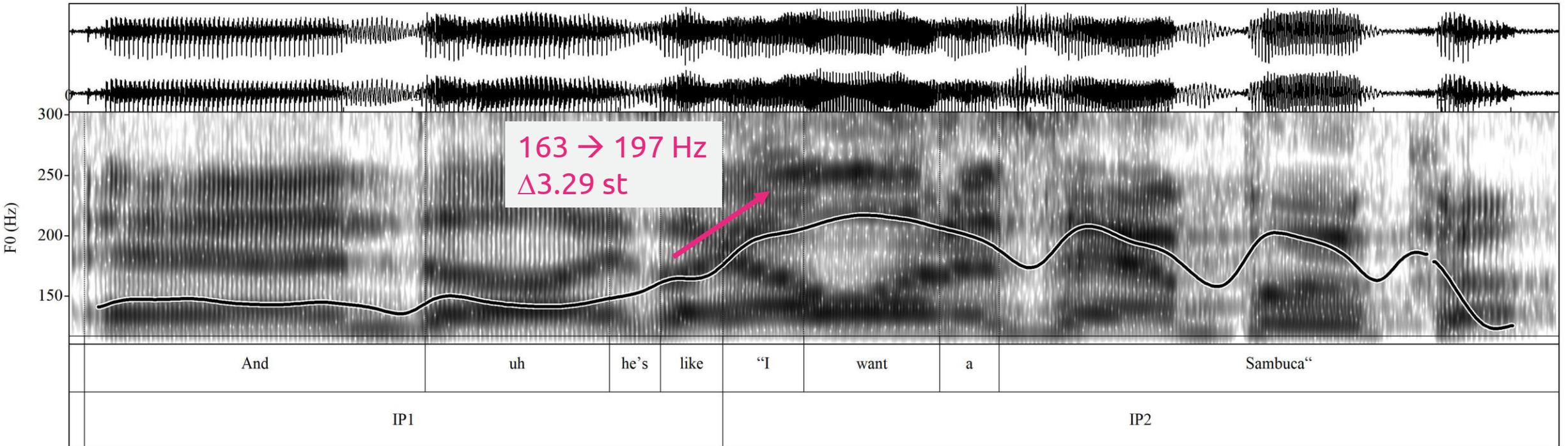
The Graham Norton Show



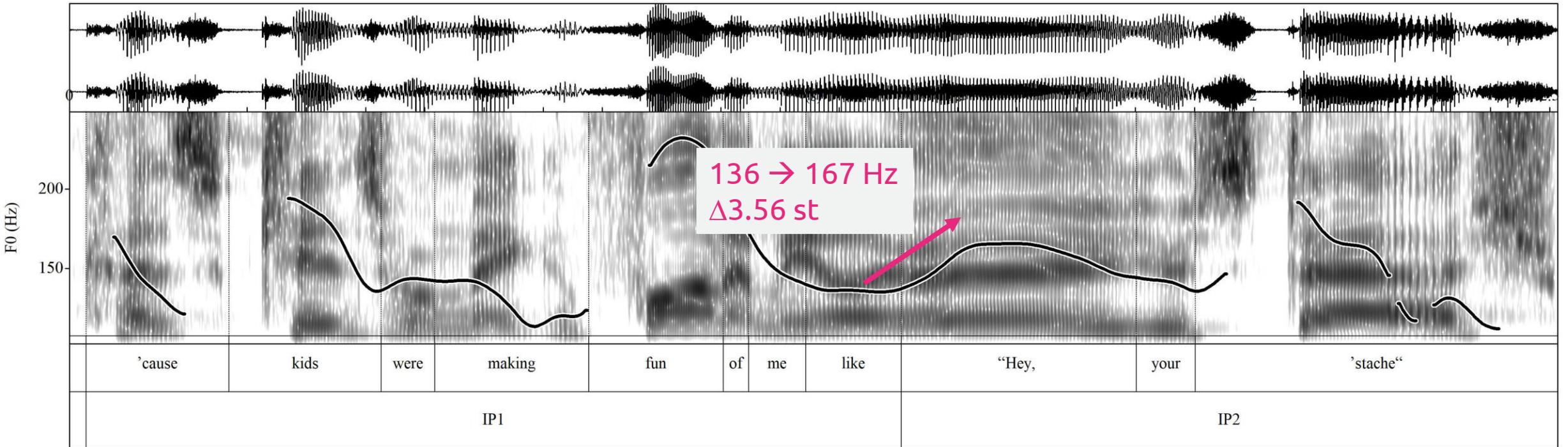
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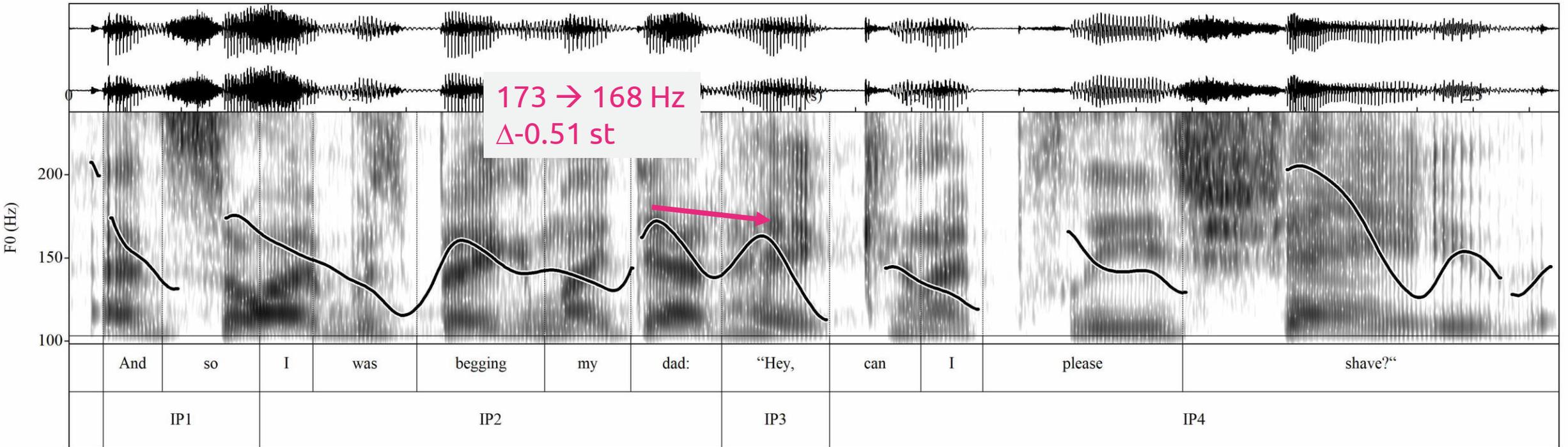
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The Graham Norton Show



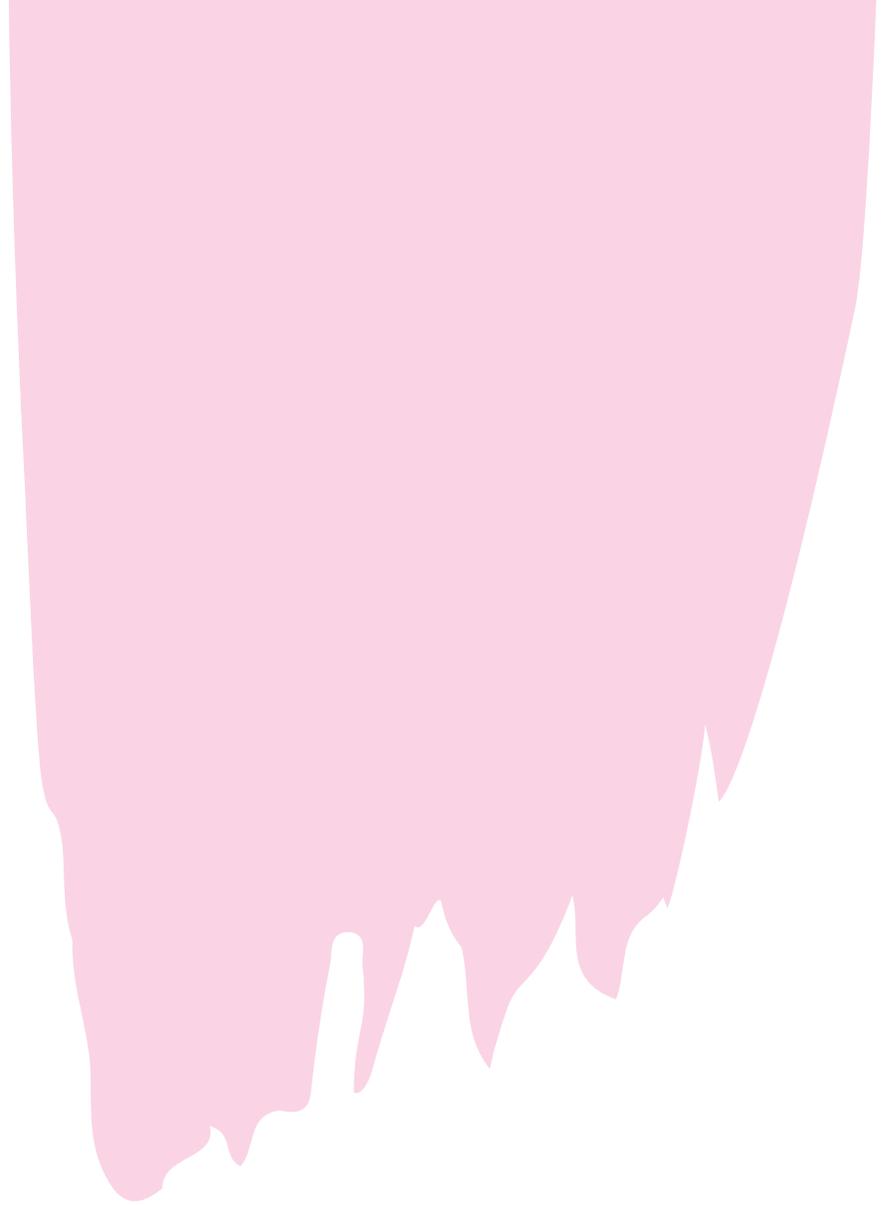
Caveat

Performing analyses and IU segmentations requires some knowledge of the prosodic system of a language:

- Is the language stress-timed or syllable-timed?
- What is the default nucleus placement?
- Are specific contours associated to specific meanings?
- In tonal languages: is there tonal downdrift? (pitch resets)
- Etc.

An exploratory methodology

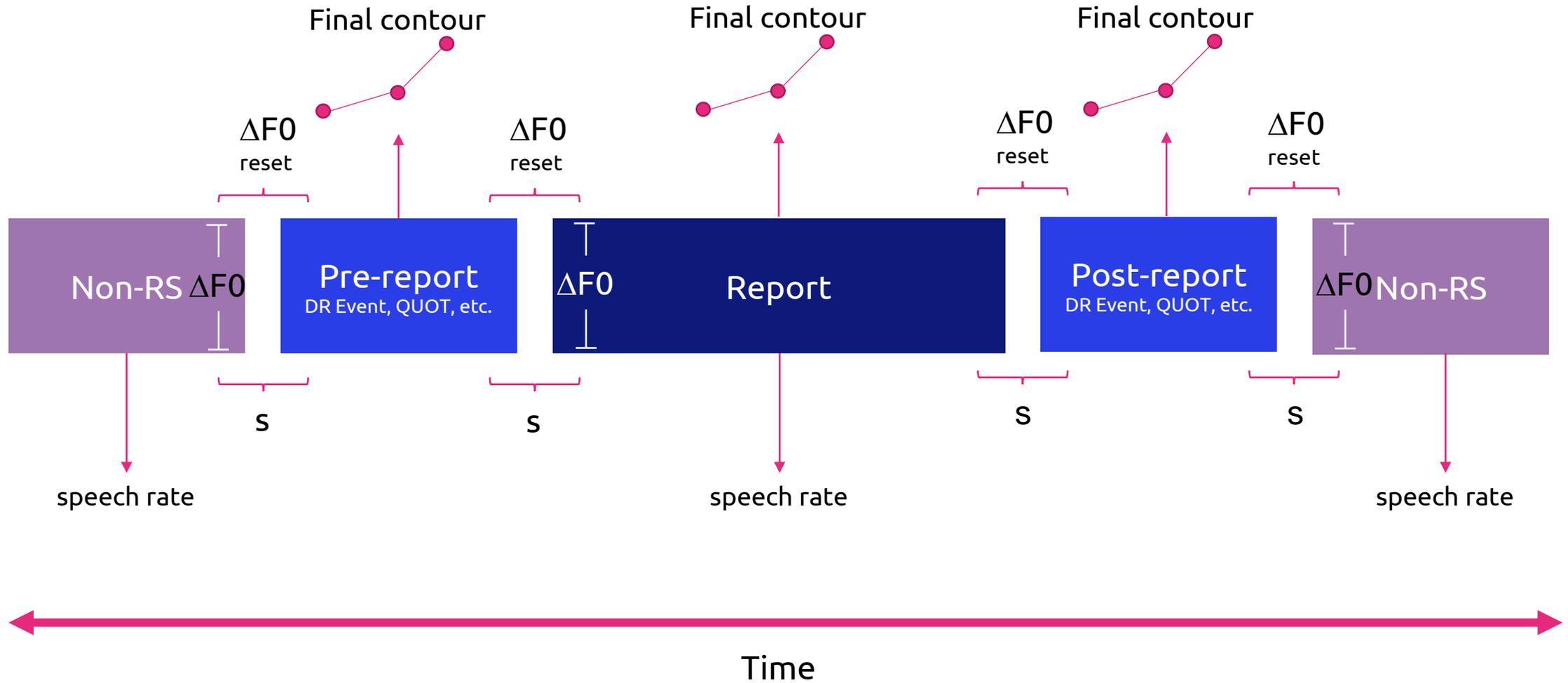
A PROPOSAL



A bottom-up approach

- Annotating and extracting EVERYTHING to see if regularities arise.

A bottom-up approach



A bottom-up approach

Step 1

Based on the collected data, we can make a **descriptive analysis** to see if any trends appear.

A bottom-up approach

Step 2

We can then establish categorical variables:

Length of RS:

Short: 1 – 3 syllables

Medium: 3 – 10 syllables

Long: 10+ syllables

Length of pauses:

No pause

Short: 0,10 – 0,30 s

Medium: 0,31 – 0,50 s

Long: 0,51+ s

ΔF_0 reset:

Absent: -3 semitones

Present: +3,1 semitones

ΔF_0 :

Small: -3 semitones

Medium: 3,1 – 5 semitones

Large: +5 semitones

Speech rate:

Slow

Medium

Fast

Final contour:

Rising

Low-rising

Falling

High-falling

Level

A bottom-up approach

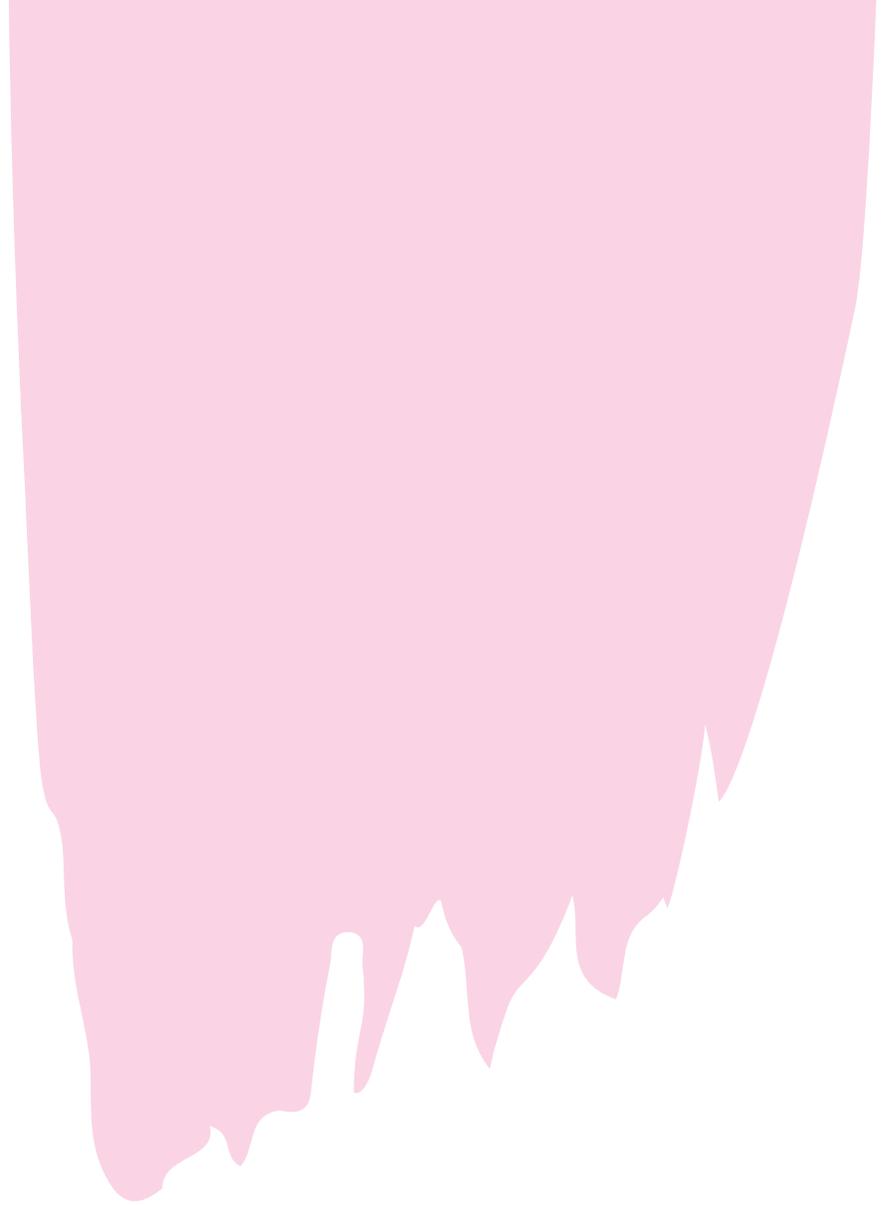
Step 3

Confronting these new variables with variables we already know and wish to explore:

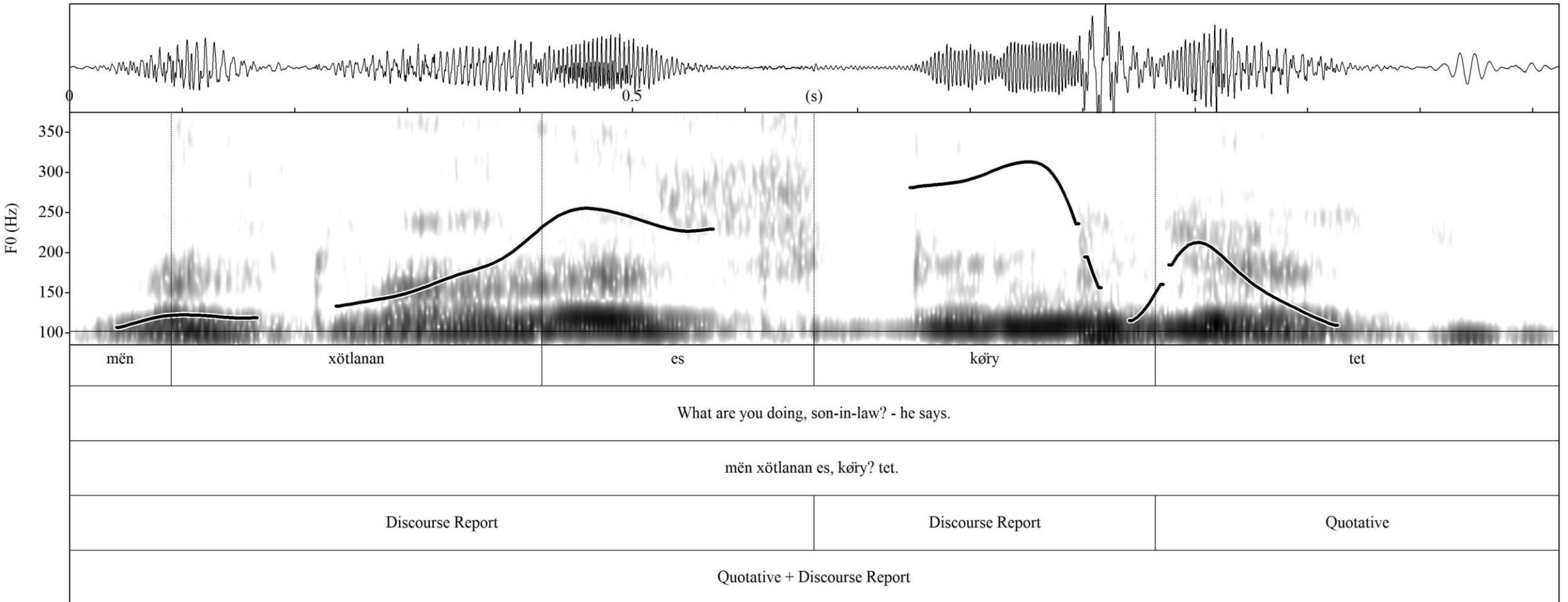
- **Presence of pre/post-report/DR Event:**
 - Yes
 - No
 - **Type of elocution:**
 - Read-aloud
 - By heart
 - Spontaneous?
 - **Speaker**
 - **Tonal language:**
 - Yes
 - No
 - **Language family**
- } Cross-linguistic analysis
→ Establishing a typology?

A few more examples

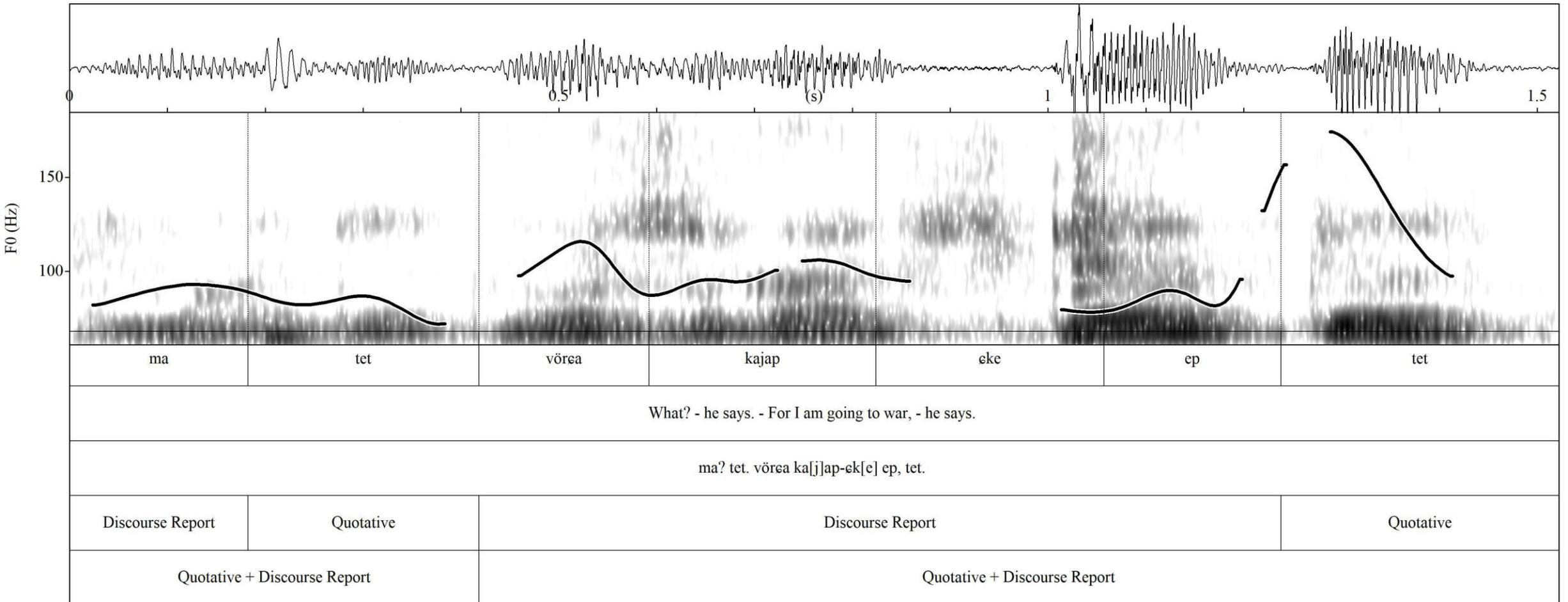
CHUVASH AND
UT-MA'IN



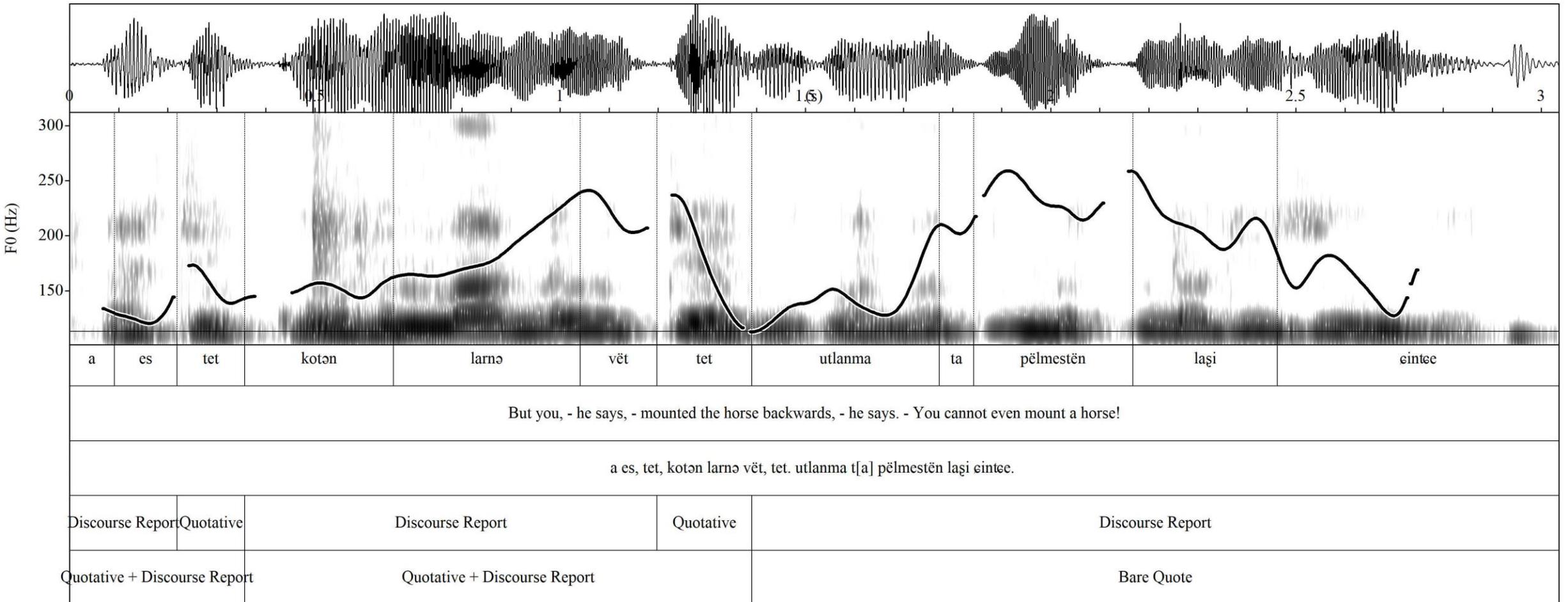
Chuvash



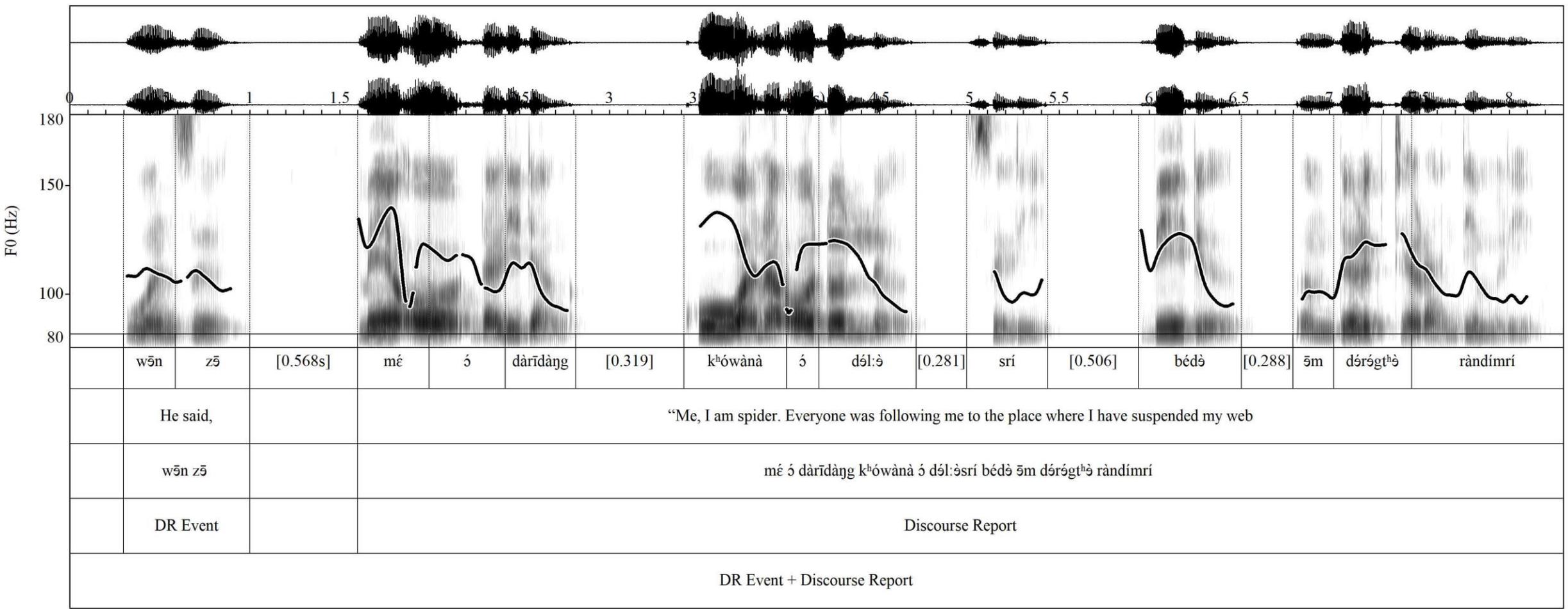
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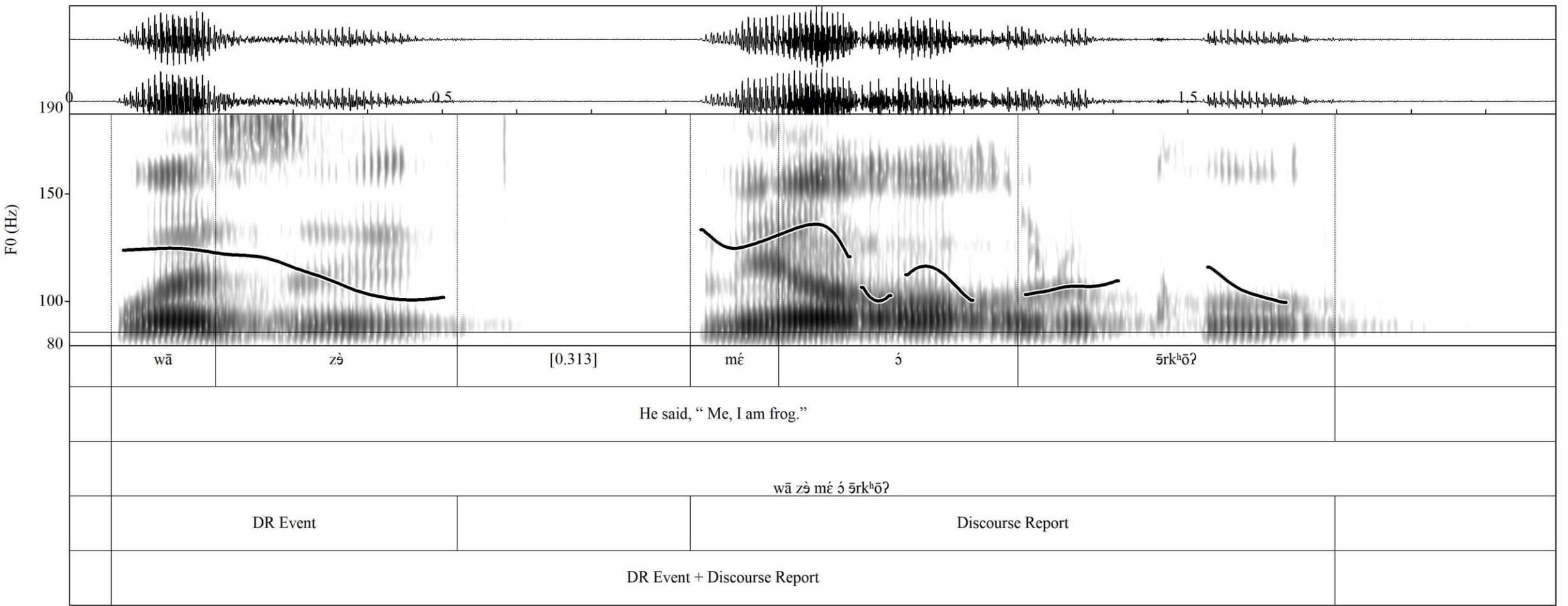


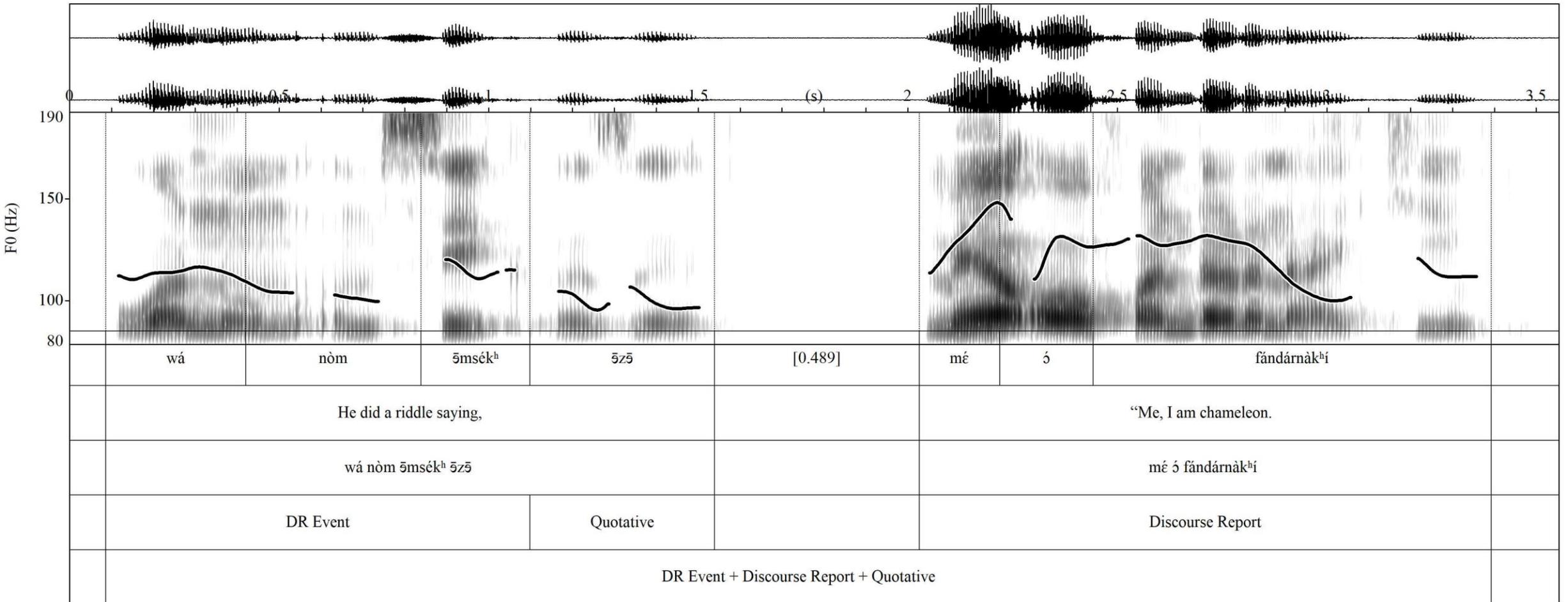
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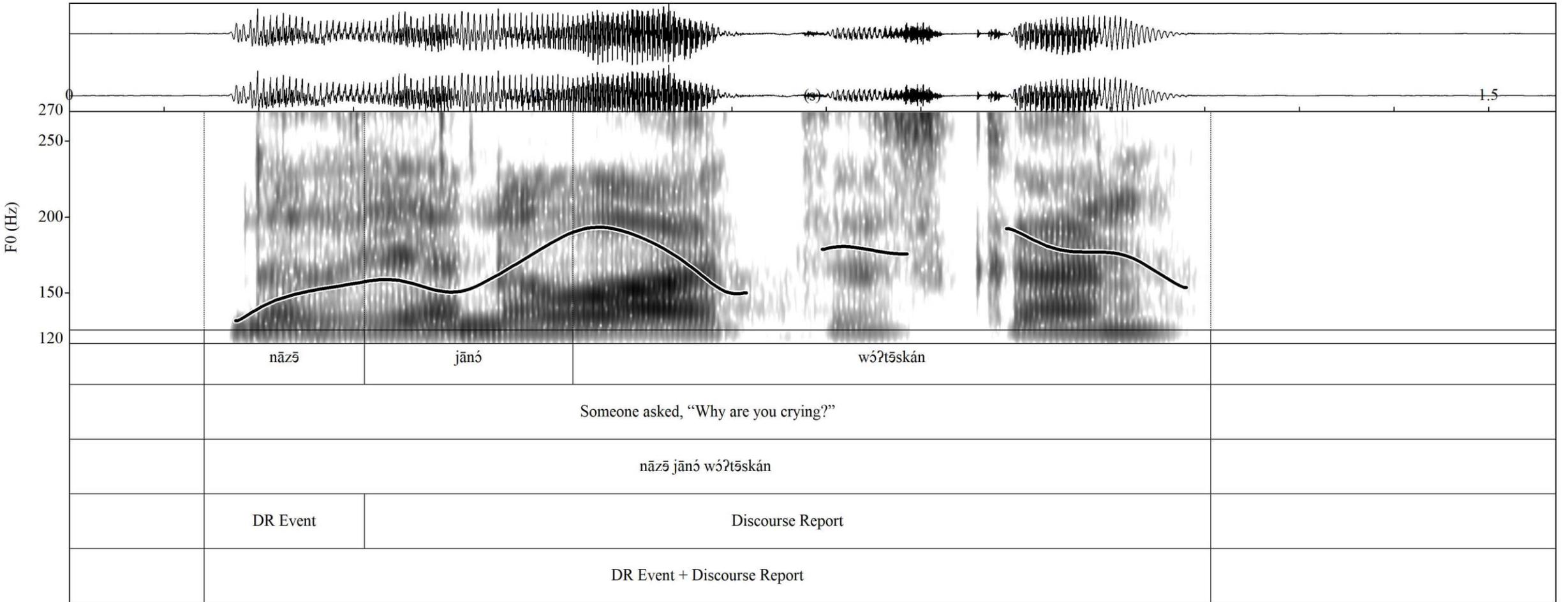


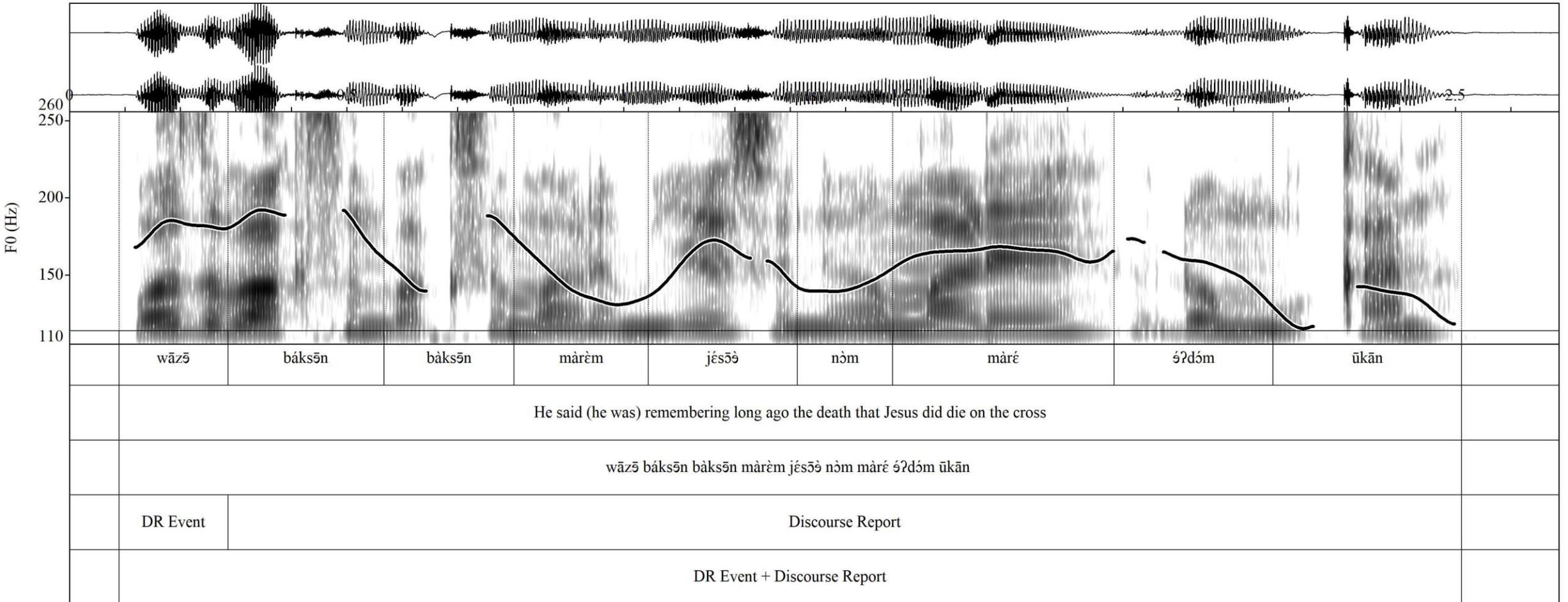
ut-Ma'in











References

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- Genetti, C. (2014). Direct speech reports and the cline of prosodic integration in Dolakha Newar. *Himalayan Linguistics*, 10(1).
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- Wells, J. C. (2006). *English intonation: An Introduction*. Cambridge University Press.