

## Overview

This project analyzes the correspondence between intonation and syntax/semantics of **direct speech** and **indirect speech** (both with and without “indexical shift” in Uyghur (Turkic: China, Kazakhstan).

- I. Develops a new field diagnostic that differentiates between **direct quotation** & **indexical shift** (that is far less taxing on consultants!).
- II. Suggests modifications to the syntactic analysis of Uyghur indexical shift in Shklovsky & Sudo (2014) (henceforth S&S).

## Prior Research

In Uyghur indexicals (e.g. pronouns) can be shifted to a context distinct from the one in which they are uttered (see Sudo 2010):

- 1) Ahmet [ket-tim] di-di.  
Ahmet leave-pst.1sg say-pst.3  
“Ahmet said I<sub>Ahmet</sub> left.”
  - 2) Ahmet [kim-ni ur-dum] di-di.  
Ahmet who-acc hit-pst.1sg say-pst.3  
a) “Who did Ahmet say I<sub>Ahmet</sub> hit?” | b) “Ahmet said, “Who did I hit?”.”
- Interpretation (a) is not a direct quotation because wh-questions cannot take matrix scope from inside a quote (=indexical shift).

In non-shifted contexts, the embedded subject is marked with accusative case and the verb has default 3<sup>rd</sup> person agreement.

- 3) Ahmet [meni ket-ti] di-di.  
Ahmet I.acc leave-pst.3 say-pst.3  
“Ahmet said that I<sub>speaker</sub> left.”

- When subjects are accusative-marked and the embedded verb does not agree, **no indexicals shift**.
- When subjects are nominative w/ normal agreement on verb, **indexicals must shift** (either as direct quotes or indirect speech w/ indexical shift).

## Uyghur Intonation (Major & Mayer 2018)

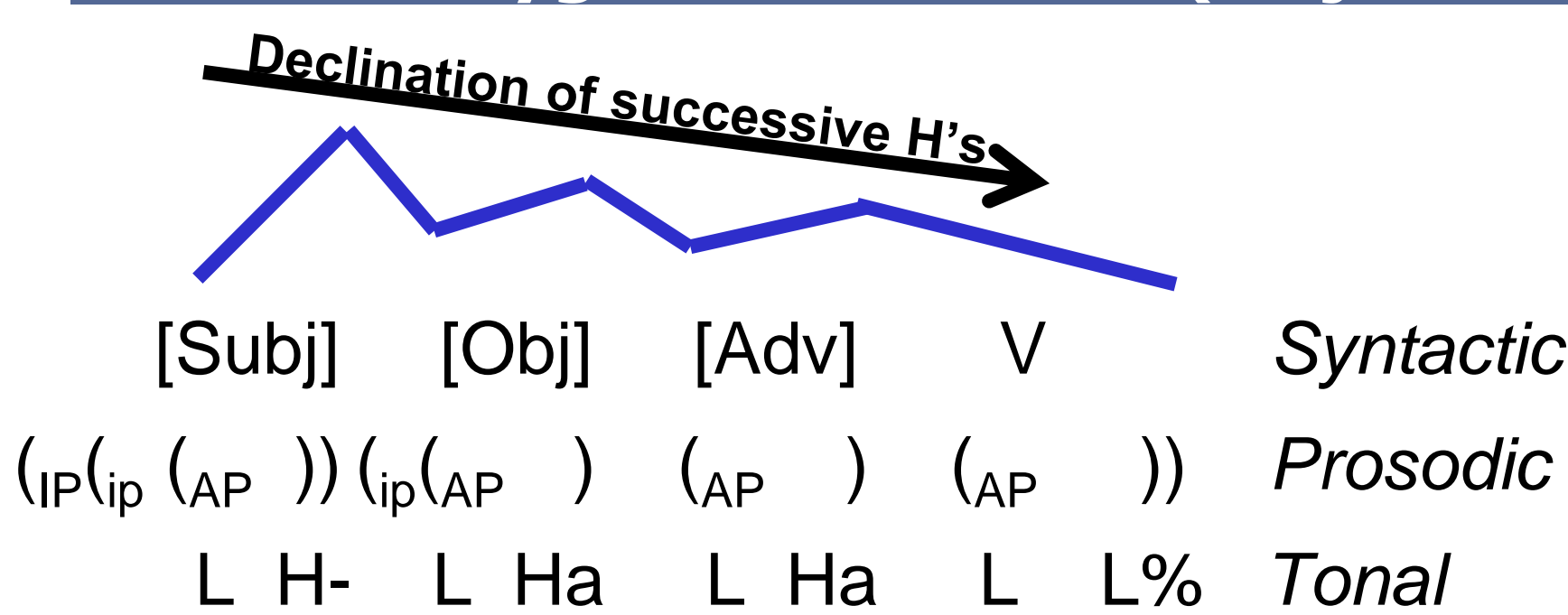


Fig. 1: Schematized Uyghur Declarative Pitch Track

- Intonational Phrase (IP)**
- L% Declarative
  - H% Interrogative
- Intermediate phrase (ip)**
- H-
- Accentual Phrase (AP)**
- L (left edge)
  - Ha (right edge).

## Methodology

- We constructed discourses that were read by three different speakers.
- Each discourse was compatible with either a **direct quotation** reading or **EC with indexical shift** (**crucially not both!**).
  - We recorded both declarative and interrogative target sentences.

## Intonational Analysis

- Shift:** [TP [Subj<sub>matrix</sub>] [[CP Op. [TP (Subj<sub>NOM</sub>) V ]] V<sub>matrix</sub>]]  
(IP<sub>(IP H-)</sub> (IP L/H%))
- Quotation:** [TP [Subj<sub>matrix</sub>] [[CP Op. [TP Subj<sub>NOM</sub> V ]] V<sub>matrix</sub>]]  
(IP (IP...L/H%) (IP H%))
- No Shift:** [TP [Subj<sub>matrix</sub>] [[Subj<sub>ACC</sub>] [CP Op. [TP t<sub>i</sub> V]] V<sub>matrix</sub>]]  
(IP (IP L%))
- i. The EC and matrix verb form a single unit independent of the matrix subject.
  - ii. The EC phrases separately from the matrix subject and matrix verb.
  - iii. The matrix subject and accusative embedded subject form an IP.

- Direct quotes are preceded by an IP boundary and end in a high tone.
- For indexical shift, matrix subjects phrase normally (H-), set off from remainder of utterance.
- Accusative subjects form an IP with matrix subjects ending in L% in non-shifted cases.

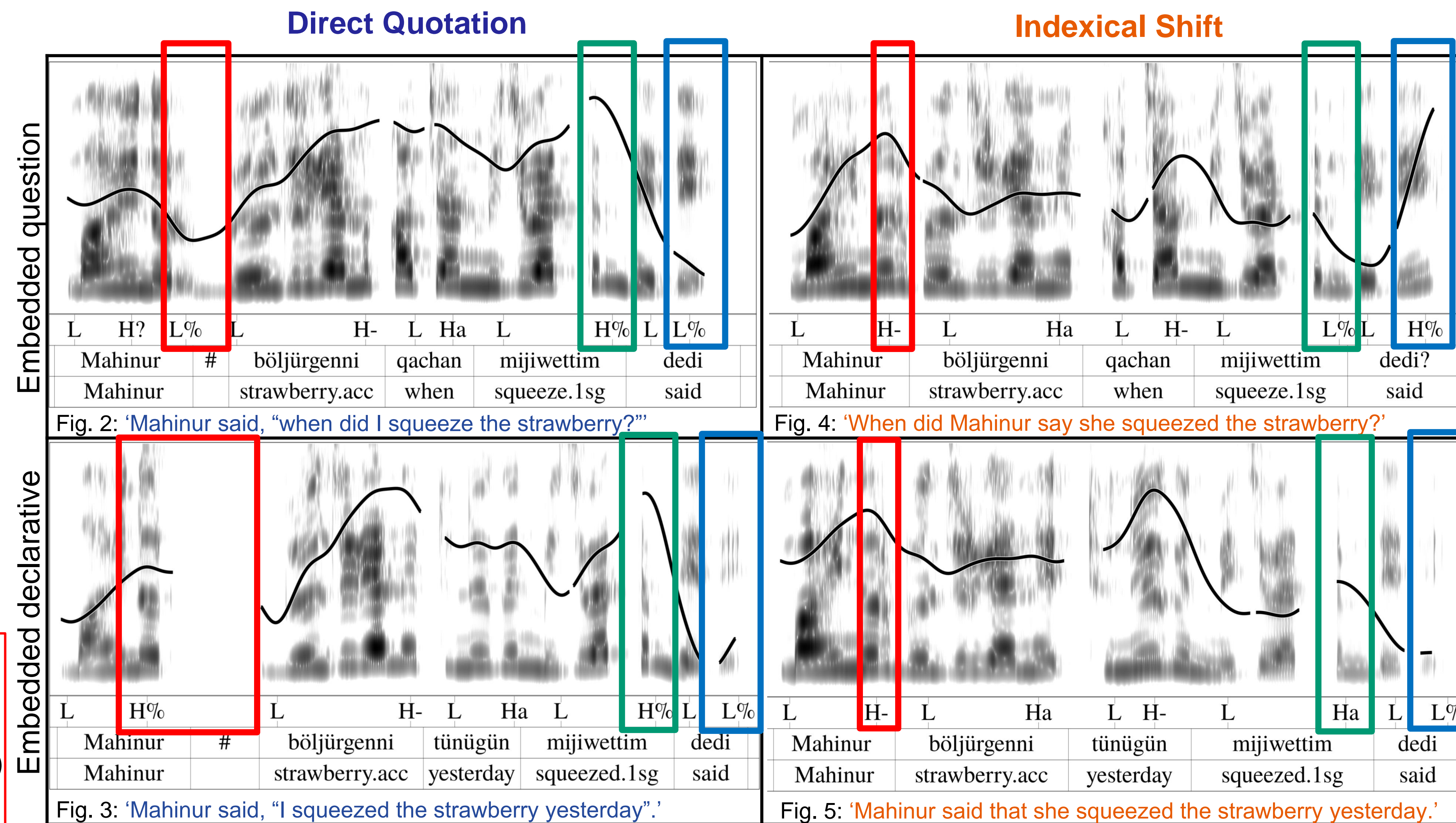
## Direct Quotation vs. Indexical Shift

### Direct Quotation

- Embedded clause begins an IP.
- **Large boundary before embedded clause.**
- **Right edge of embedded clause: H%**
- **Right edge of the matrix clause: L%**
- Mimicry is acceptable.

### Indexical Shift

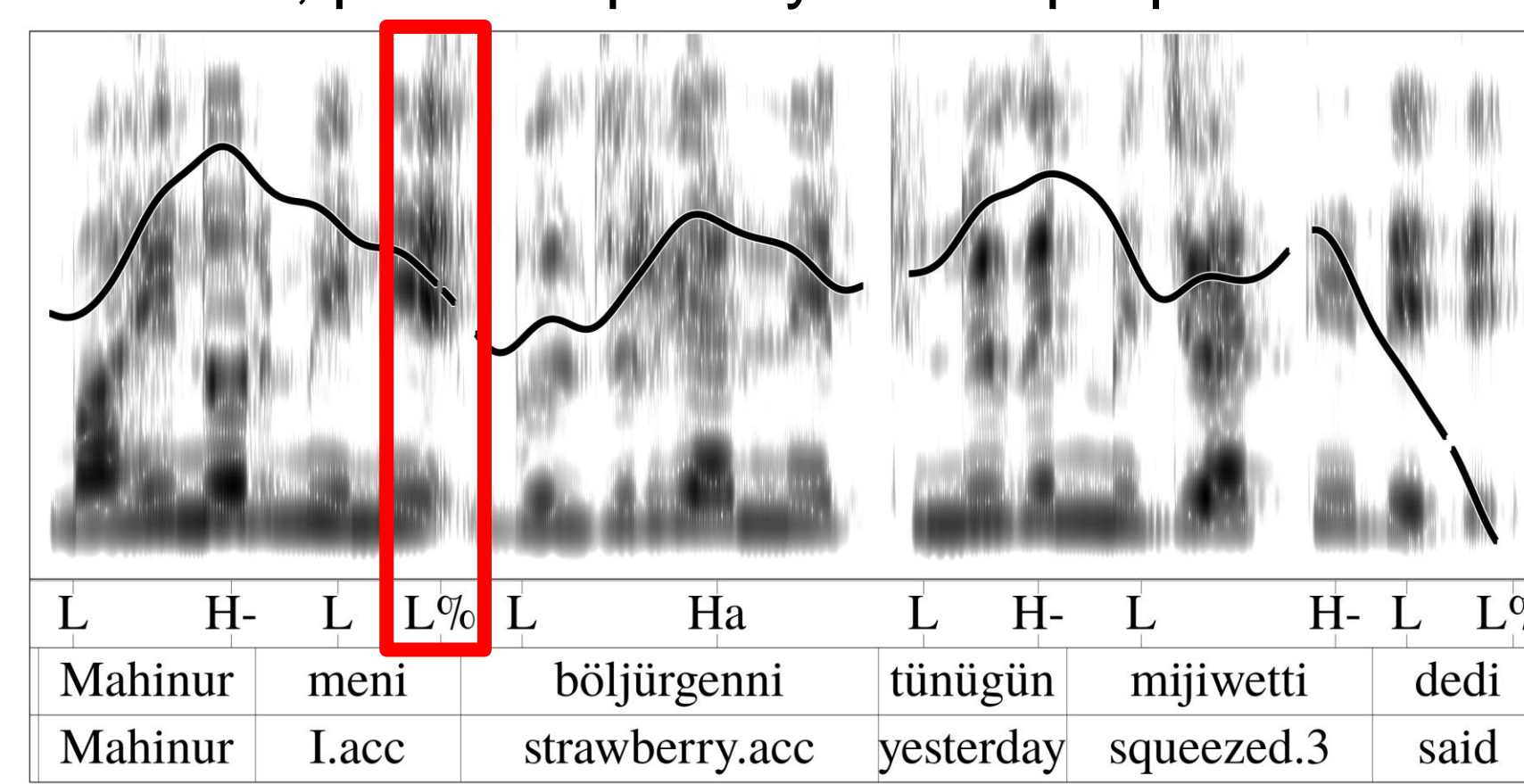
- No evidence that embedded clause begins IP.
- **Small boundary before embedded clause.**
- **Right edge of embedded clause varies.**
- **Right edge of matrix clause: H% for interrogatives, L% for declaratives.**
- Mimicry is not acceptable.



## Indirect Speech: No Shift

The absence of indexical shift is marked by intonation, plus morpho-syntactic properties:

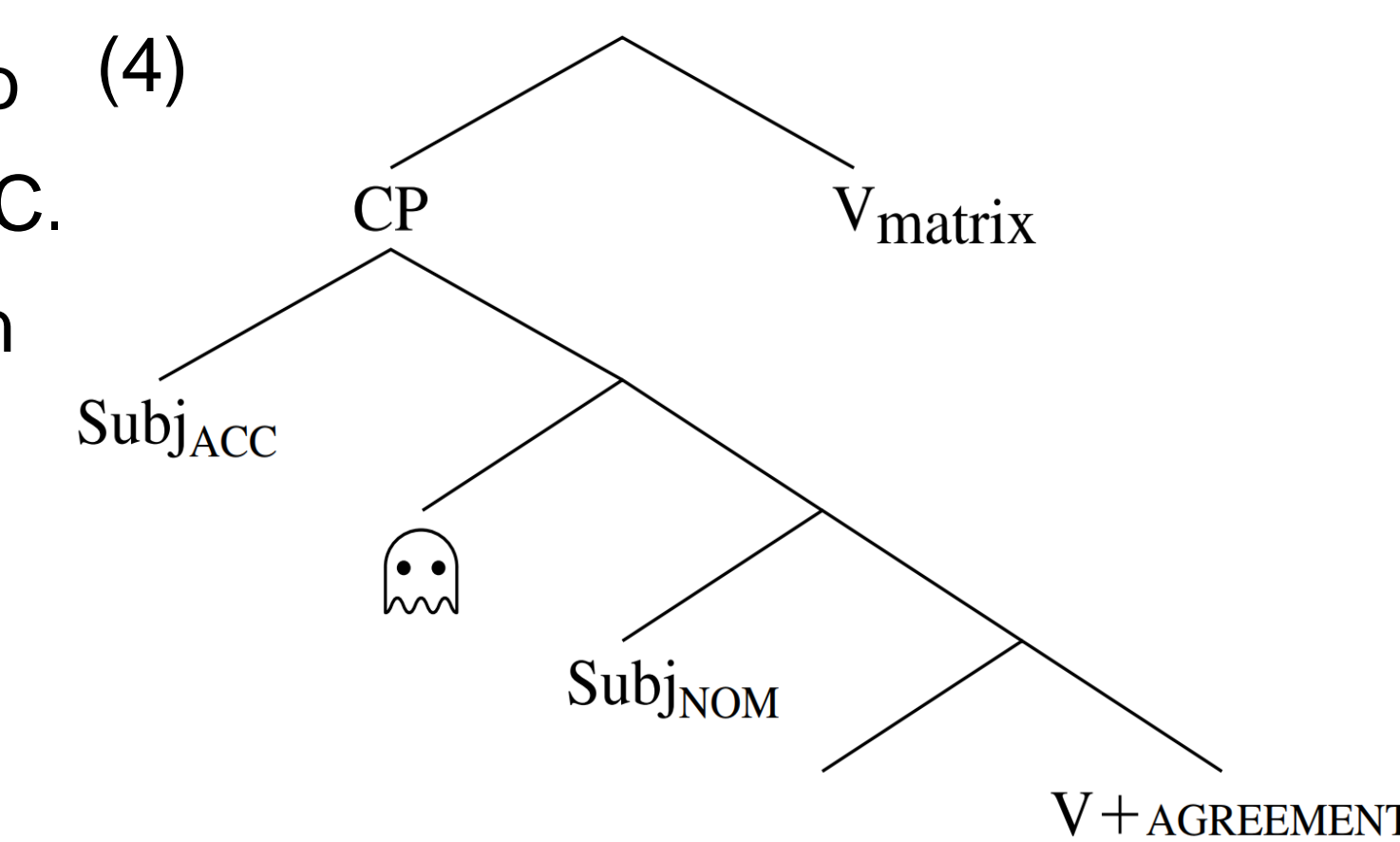
- Embedded subject is accusative.
- Verb is invariably 3<sup>rd</sup> person with accusative subjects
- **Accusative subject marked with IP-final L% on right edge.**
- Pro-drop is banned.



## Syntactic Analysis

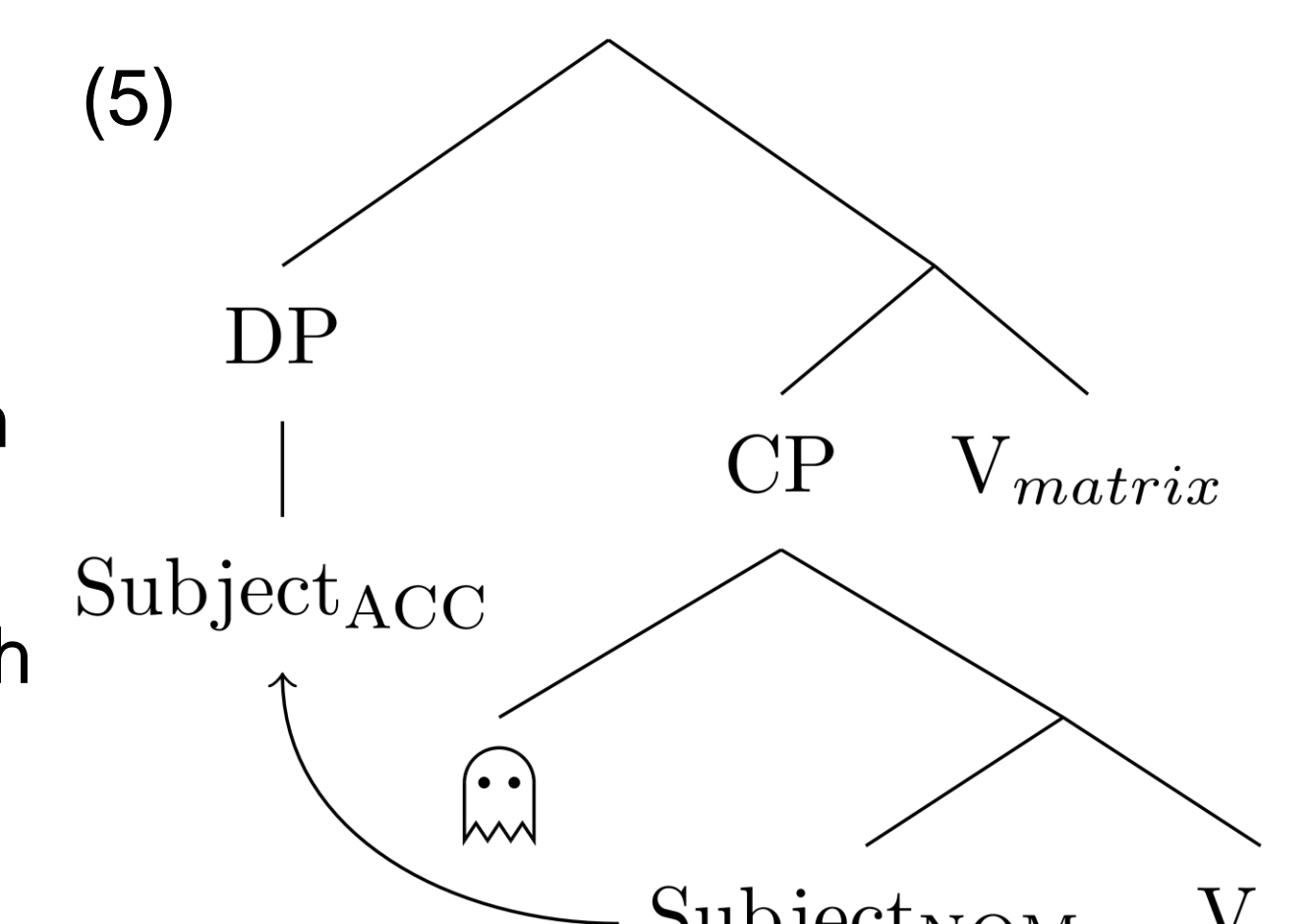
S & S argue for the analysis in (4):

- Accusative subjects raise to a high position inside the EC.
- Nominative subjects remain in spec, TP of EC.
- Only indexicals within the scope of the operator, shift (accusatives are too high).



The intonational data here suggests that we modify the analysis of S&S, as shown in (5), assuming a framework that favors a mapping between syntax and prosody (e.g. “Match Theory”):

- The accusative subject raises into the matrix clause.
- The presence of the monster in the left periphery coincides with a particular prosody.
- This structure is compatible with accusative subjects phrasing with matrix subjects.



## Conclusion and Discussion

- Intonation can be used as a field diagnostic to differentiate between quotation and indexical shift.
- The wh-question test and NPI test are extremely taxing for speakers, especially with multiple indexicals.
- This is a more natural way for speakers to provide data and get accurate judgments!
- The intonational data/analysis suggests modifying the analysis of S&S in favor of the analysis in Major (in preparation):
  - i. EC subjects get accusative case from the verb ‘say’
  - ii. The monster is only conditionally present.
- This study opens the door for comparative work with other shifting languages and with other related phenomena (e.g. parentheticals, (partial) quotation, free indirect discourse, etc.)

## Selected References

- [1] Major, Travis & Connor Mayer (2018). “Towards a phonological model of Uyghur intonation”. *Proceedings of Speech Prosody 9*.
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