**INTRODUCTION**

Cross-linguistic research on spoken languages has found a strict ordering of inflectional categories in the clausal spine (Cinque 1999, 2006):

- The higher the scope of a category is, the higher up it will be located in the clausal structure.
- For German Sign Language Bross & Hole (2017) suggested that this hierarchy is mapped onto the body:
  - Higher categories above T are expressed non-manually in DGS (e.g., speech-act marking, epistemic modality).
  - Scalarity (evaluation as being much/little), a category right below epistemic modality, is expressed with the cheeks.
- Categories below T are expressed manually, first concatenating from left to right, finally from right to left.

- However, Bross & Hole (2017) only looked at a sample of seven categories (speech acts, evaluation, epistemic modality, scalarity, deontic, and root modality).

The goal of the current study here was to investigate more categories.

**HYPOTHESES**

The following three hypotheses were tested:

1. High categories (i.e., categories above T) are expressed non-manually.
2. Intermediate categories (i.e., categories below T and above Voice) are expressed manually, either concatenating from left to right or from right to left.
3. Lower aspectual categories (i.e., categories below Voice) find their expression via the manipulation of the movement path of the verb sign.

The following data is based on the literature and elicitations/grammaticality judgments by seven native signers.

**REFERENCES**


**RESULTS OF THE CURRENT STUDY**

**Descending the Cinquean hierarchy: above T**

- All categories above tense are expressed non-manually.
- They are expressed non-manually only or with a combination of non-manual marking and a manual adverb (1).

(1) \[ h_{\text{honest}} \]

\( \text{(HONESTLY)} \)

\( \text{INDEX}_{1} \)

\( \text{INDEX}_{3} \)

BOOK KNOW

‘Honestly, I don’t know this book.’

- The non-manuals have their intensity peak clause-initially.
- The only exception is scalarity (much/little): this category is expressed on the verb only.
- All speaker-oriented categories convey not-at-issue meaning: non-manuals therefore always express not-at-issue meaning (Bross & Hole 2017).

Cinque’s categories above Tense all find non-manual expression.

**Descending the Cinquean hierarchy: below T/above Voice**

- All categories in this domain are expressed manually only.
- All categories are expressed with manual adverbs concatenating from left-to-right.
- The only true post-verbal adverbs are Voice adverbs (e.g., WELL).

**Descending the Cinquean hierarchy: below Voice**

- Aspectual categories below Voice (e.g., celerative II/frequentative II) find their expression via manipulating the movement path of the verb sign (i.e., by bound morphemes).

(2) \( \text{PAUL FAST HAND-RAISE} \)

‘Paul quickly raises his hand.’

Celerative I

(3) \( \text{PAUL HAND-RAISE}_{\text{FAST}} \)

‘Paul quickly raises his hand.’

Celerative II

(4) \( \text{PAUL PAM MARIA OFTEN INSULT} \)

‘Paul insulted Maria often.’

Frequentative I

(5) \( \text{PAUL PAM MARIA INSULT}+,++ \)

‘Paul insulted Maria many times in a row.’

Frequentative II

**SUMMARY**

Left: categories investigated in Bross & Hole (2017); right: current study.