Negating Depictive Modifiers in Sign and Speech

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(Not-)At-Issue Modification

Verbal modifiers like *yellow*, *big*, etc. can be either at-issue (1) or not-at-issue (backgrounded, 2):

(1) A: She found her *BIG* trolls in the yard.
    A': She found her trolls that were big in the yard.
    B: No, they were small!

(2) A: She found her big *TROLLS* in the yard.
    A': She found her trolls, which were big, in the yard.
    B: #No, they were small! (Better: Hey wait...)

Depictive co-speech gestures have been noticed to be typically *not-at-issue* (Ebert & Ebert 2014). Tieu et al. (2017) provide experimental evidence for different truth conditions under negation than gestures introduced by the *like this* modifier:

(3) a. John didn't [help]_LIFT his son.
    b. John didn't help his son like [this]_LIFT.

However, such gestures differ from verbal modifiers in (at least) two ways:

❶ They are interpreted via **depictive/iconic** means
❷ They occur in a different **modality** than speech

Question

- Is the tendency for red depictive co-speech gestures to be not-at-issue because they occur in a **different modality** than speech?
  - Without their own time slot (Schlenker 2018a)
- Can be compared to a counterpart that has similar semantic properties but shares linguistic modality
  → Depictive content in sign languages.

Here we compare negation of depictive co-speech gestures in English with negation of depictive classifier predicates in American Sign Language (ASL)

Methodology

Truth Value Judgment Task: Is sentence in video true given the picture? **Consultants:** 7 non-signing English speakers, 4 Deaf ASL signers (3 native/early signers). Each saw all 13 scene-video pairings per language.

Depiction in Sign: Classifier Predicates in ASL

Classifier predicates in ASL convey **gradient iconic information** about movement, location, or shape (Emmorey & Herzig 2003, cf. Supalla 1982). Formal compositional proposals include:

- Demonstration event-modifier (Zucchi 2012, Davidson 2015)
- Lexically-specified iconic function, e.g. GROW (Schlenker 2018a and related)

Context + Sentence Schema

- **Size-and-shape** modifiers: hairstyle (depictive) vs. color (descriptive)

- **Manner-and-path** modifiers: direction (depictive) vs. color (descriptive)

Negation and Classifier Predicates

The (few) existing examples in literature express negation with negative quantifiers (incl. also Schlenker 2018b):

(4) PRO-1 WINDOW ICL-OPEN-WINDOW NOTHING.
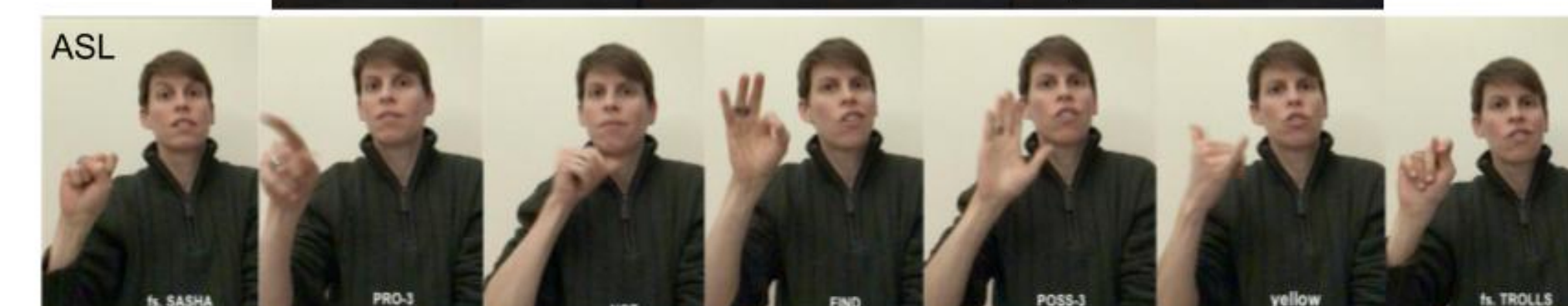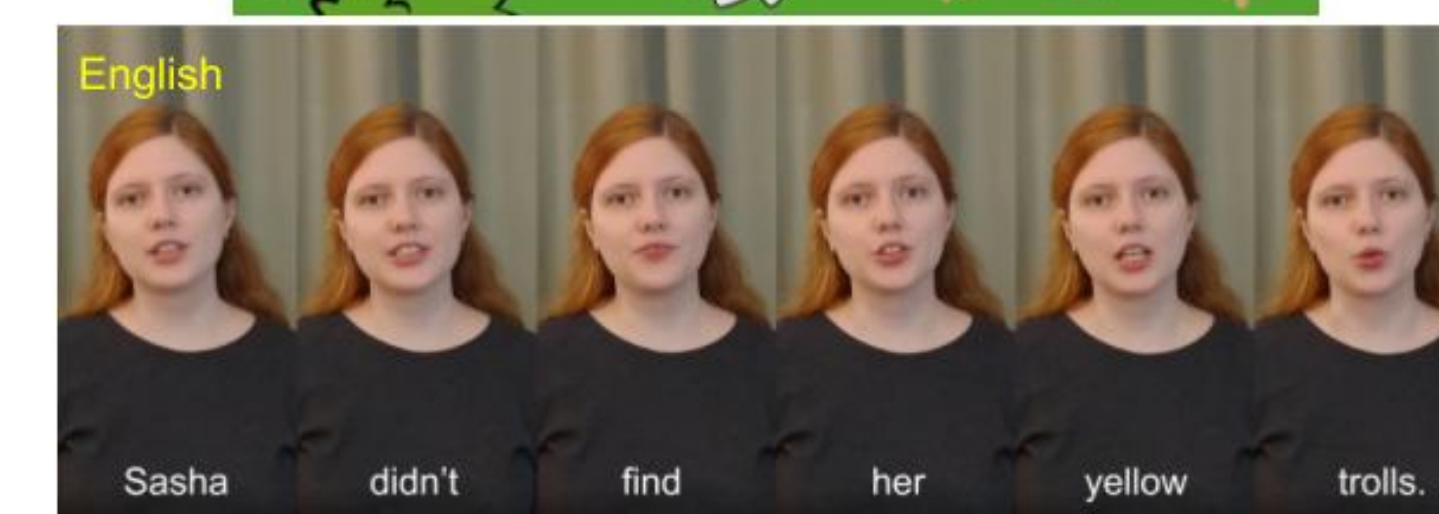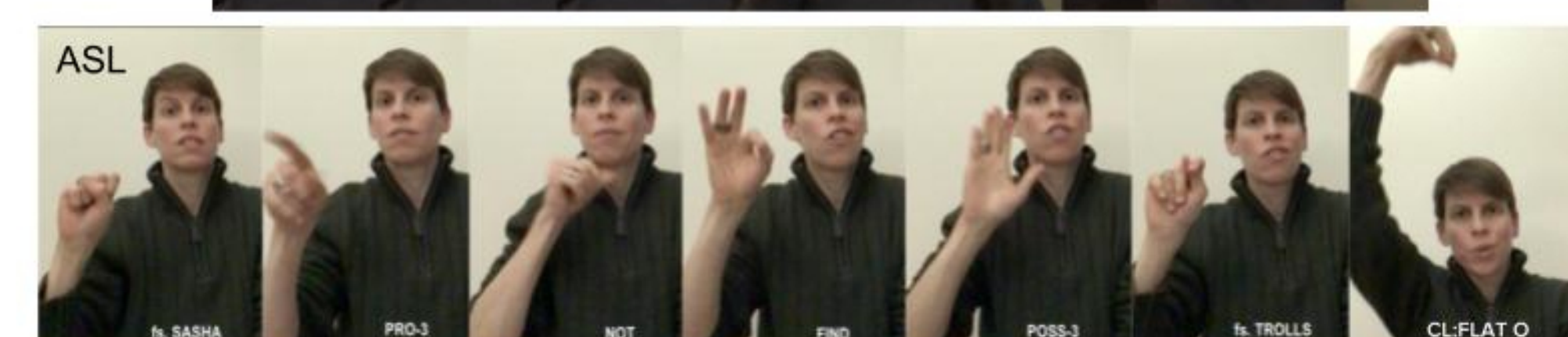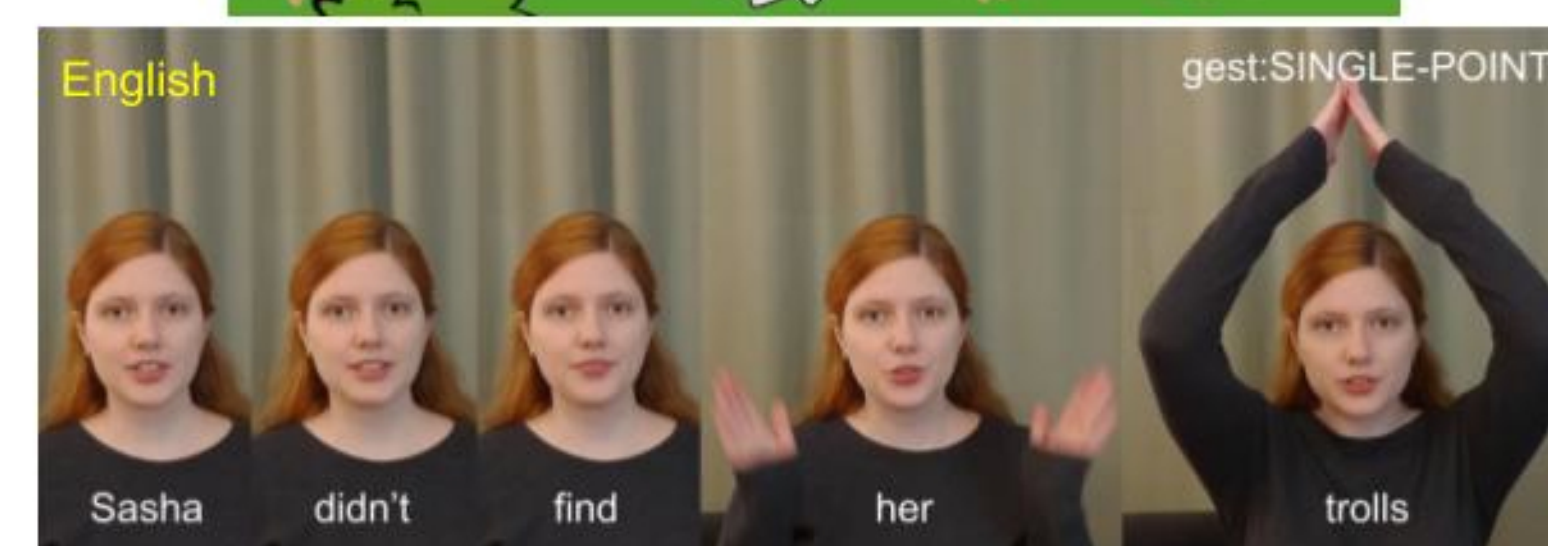   'I did not open any of the window(s).'
    (Wood 1999)

(5) ∅ BOOK ICL-GRAB+MOVE NOTHING
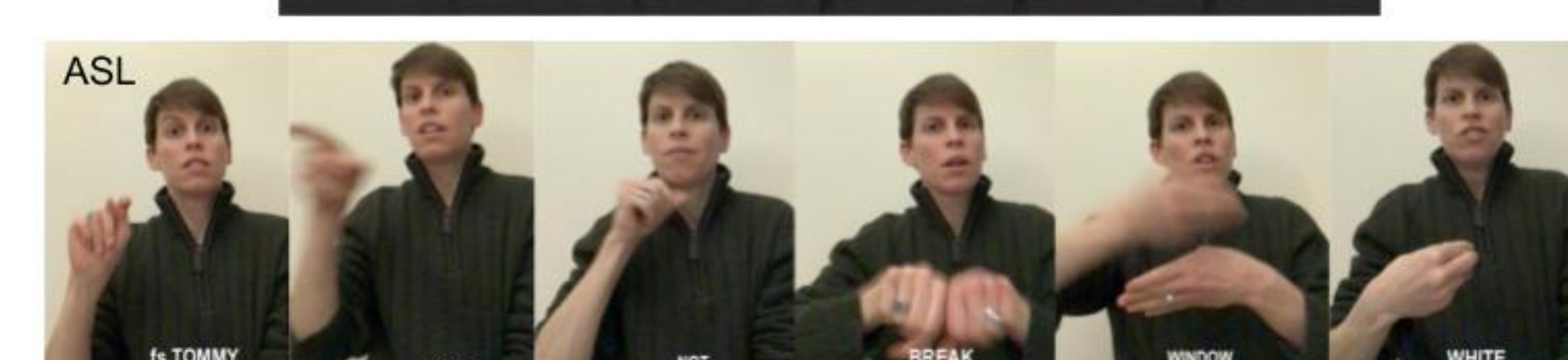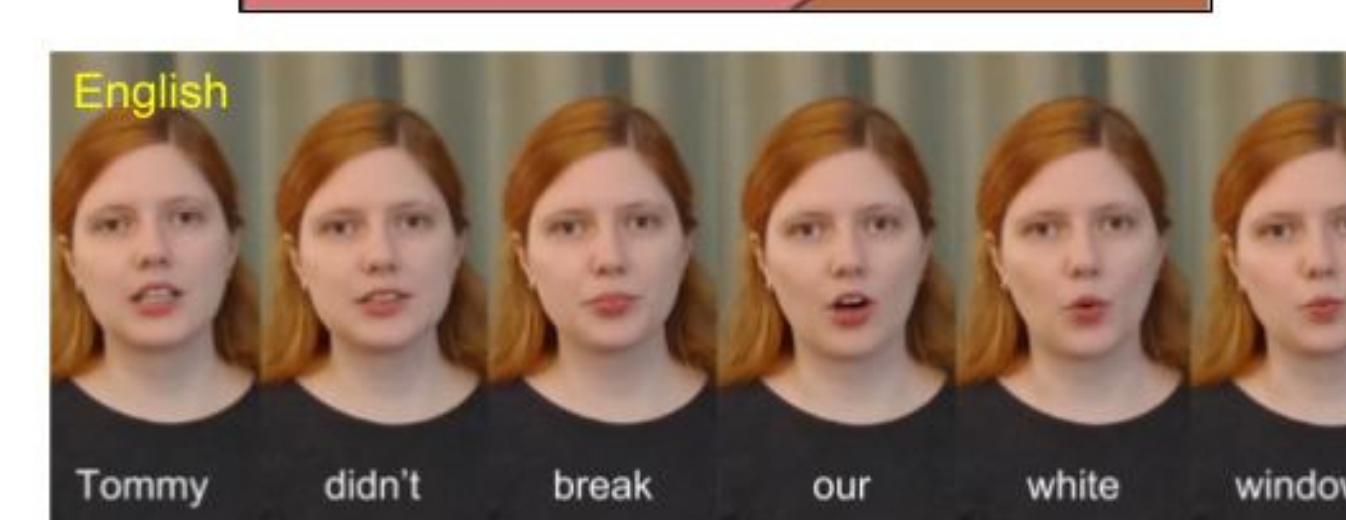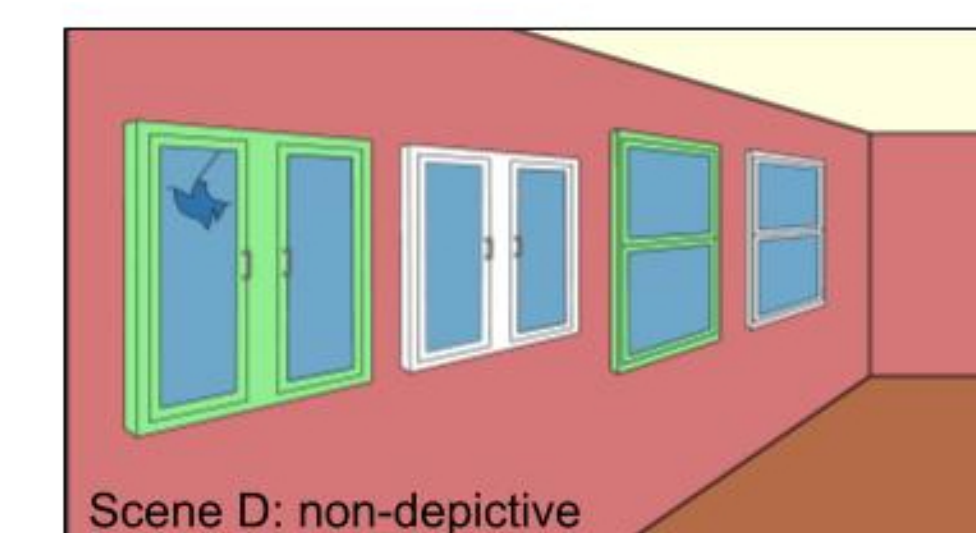   'S/he didn't put any book down (on its side).'
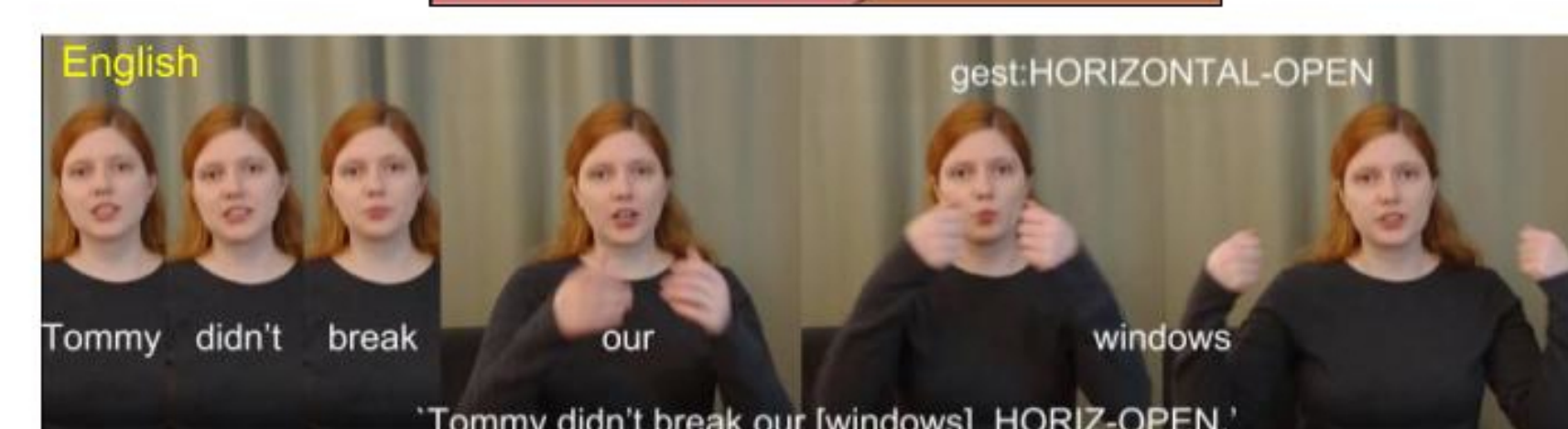   (Benedicto & Brentari 2004)

So, we do too, plus compare with sentential negation
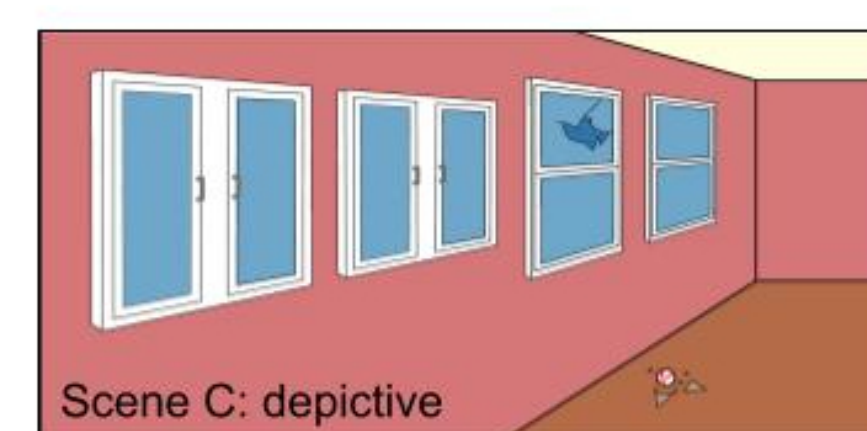
Design Factors

We manipulated the following (for ASL see videos):

- **depictive** vs. **non-depictive** modifier
(6) a. Sasha didn't find her [trolls]_ gest-SG-PT.
    b. Sasha didn't find her yellow trolls.
- type of **negation** (sentential vs. quantificational)
(7) a. Sasha didn't find her [trolls]_ gest-SG-PT.
    b. Sasha found none of her [trolls]_ gest-SG-PT.
- **size-shape** vs. **manner-path** modifier
(8) Tommy didn't break our [windows]_ HORIZ-OPEN. (cf. 7a)
- whether the modifier modified the **main verb**
(9) Tommy didn't [open]_ HORIZ-OPEN our windows. (cf. 9)
- number of objects "found"/"broken" in the scene (**some** vs. **none**)

Results

- English consultants judged **the depictive examples with negation** (e.g. scenes A and C) **false** for both types of modifiers (6/7 consultants), while ASL consultants judged **the depictive examples true** (4/4 consultants).
- Both English and ASL consultants judged **the non-depictive examples with negation** (e.g. scenes B and D) **true** for both types of modifiers (E:7/7, ASL:4/4).
- Other factors (type of negation, size-shape vs. manner-path, etc.) did not influence TVJs, but were sometimes reported to influence naturalness.

Conclusions

❶ Controlled contexts allow for closer comparison of depiction in gestures vs. classifiers
❷ Different patterns for English, ASL contribute further evidence that modality plays role
❸ Analog/depictive content can be the target of operators like negation if in the same mode.