Affirming and rejecting assertions in German Sign Language (DGS)

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THE ISSUE
Response particles do double duty:
- They AFFIRM and REJECT
- They signal that the answer expresses a POSITIVE or a NEGATIVE sentence.
- The meaning of yes and no is unclear in response to a negative assertion (‘negative neutralization’; Kramer & Rawlins 2009).

Different languages seem to make different choices in how far yes/no preferentially signal affirmation/rejection or polarity. What exactly the preference patterns are is underexplored.

CURRENT RESEARCH
1. Which response elements form part of the polar response system of DGS?
2. What meaning is contributed by a) manual particles, b) mouthing, and c) nonmanuals?
3. How are response elements combined a) simultaneously and b) consecutively?

PREREVIOUS STUDIES
Experimental results for German and English responses to negative assertions:
- German (Claus et al. 2017): Clear pattern in rejections, but great inter-individual variation in affirmations:
  - Affirmations: ja > nein (majority); nein > ja (minority)
  - Rejections: doch > nein > ja
- US English (Brazoveanu, Farkas & Roelofsen 2013):
  - Affirmations: no > yes

THEORY: THE FEATURE MODEL (Roelofsen & Farkas 2015)
- Polarity is encoded via absolute [+/-] and relative [AGREE/REVERSE] features, which map onto response particles:
  - English: [+/-] & [AGREE] → yes, [-] & [REVERSE] → no

- Feature mapping proceeds according to ranked OT constraints:
  - REALIZE MARKED FEATURES, AVOID AMBIGUITY, EXPRESSIVENESS, REALIZE RELATIVE FEATURES, REALIZE ABSOLUTE FEATURES

DESIGN
Dialogue Completion Task to elicit semi-spontaneous responses to positive and negative assertions
- Participants: 24 (near-) native DGS signers (17f, 7m, aged 18-55)
- 2 x 2 design: antecedent polarity x response type (pos./neg.)
- 24 Items x 4 conditions = 96 trials, distributed over 2 lists
- Annotated so far: Responses to negative assertions (576 tokens)

PROCEDURE & SAMPLE MATERIALS
Participants watched videos in DGS involving the two characters Peter and Alex.
- Video of narrator:
  - Peter and Alex are elementary school teachers. They’re organizing a school party with the help of some of the parents. Alex just learnt that the parents have already bought the beverages. A little later, Peter and Alex discuss the tasks assigned to the parents.
- Video of Peter: PARENTS DRINK ALREADY FETCH
  - The parents have bought the beverages already.
- Video of Alex: PARENTS DRINK FETCH NOT-YET
  - The parents haven’t bought the beverages yet.

Results: First response elements (REs)

Types of RE
- rejecting [REVERSE]
- affirming [AGREE]
- polarity-indicating [+], [-]
- ambiguous

Analysis of ambiguous REs
- JA ‘yes’
- NEIN ‘no’
- Can encode absolute or relative features. Show a clear preference for realizing absolute (truth-based) features
  → REALIZE RELATIVE FEATURES ranks highly

Reducing ambiguity
- Fewer ambiguous REs in responses to negative antecedents (p < 0.001 in affirmations)
  - A second RE may disambiguate an ambiguous RE1. In affirmations, RE2 is unambiguous more often following negative antecedents than positive ones (p < 0.05)
  - Nonmanuals (head movement, brow movement, mouthing) occur more frequently with negative antecedents
    → AVOID AMBIGUITY is operative

Analysis of head movement
- After neg. antecedents, head nods and shakes occur in affirmations and rejections; clear preference for encoding relative features (p < 0.01)

Head movement shows concord with RE1:
- Rare mismatches indicate division of labor:

References

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