Topics in Sign Language of the Netherlands: insights from a corpus study

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Outline

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Introduction

Research questions:

1. What are the formal markers of topics (aboutness and scene-setting) in NGT?
2. What is the function of marked topics (when are topics marked and when are they not marked)?
3. What is the relation between different formal markers of topics (for instance, are different markers realizing different meanings)?
4. What is the function of topic agreement?
Introduction

Topic marking in SL:

- Topics marked syntactically and non-manually in most SL:
  - Sentence-initial position
  - Eyebrow raise and head tilt
- Some SL have been claimed to be topic-prominent
Introduction

Sign Language of the Netherlands (NGT):

- Up to 20,000 signers
- 5 dialects (around 5 schools for the deaf)
- Some research on:
  - Topic marking and topic agreement
  - Focus
  - Other issues of grammatical marking
Previous research

Coerts (1994): a corpus study of non-manual markers:

- Analysis of personal stories and stories based on pictures
- Finding: topics are marked by raised eyebrows. The non-manual is grammatical.
- The notion of topics defined in a strange way.
Previous research

Crasborn, van der Kooij, Ros & de Hoop (2009)

- “Topic agreement”: a pronoun referring back to topic appears in the end of a sentence
- Agreement with both aboutness and scene-setting topics

```
PT_{Right}  VANDAAG  PT_{Right}  #VD  GEBOUW  PT_{Left}  PT_{Right}
He        today      he       V&D    building  there  he
ZIEN  BINNENGAAN  PT_{Left}  MOOIE  TRUI  ZIEN  PT_{Left^{^Right}}
see    enter       there    nice   sweater  see    there/it>he
‘Today he saw a beautiful sweater at the V&D.’
```
Previous research

Crasborn, van der Kooij & Ros (2012)

- In NGT, final prosodic words in utterances have to be at least trimoraic. If the final element is less heavy, compensatory strategies occur:
  - Palms Up sign
  - Modifying movement patterns
  - Adding a pointing sign
- So topic agreement is caused by prosody
Methodology

NGT corpus:
- Selection from Corpus NGT (Crasborn, Zwitserlood & Ros 2008)
- 10 signers from Amsterdam: 5 native, 4 near-native
- Approximately 1 hour of signing

Two tasks (monologues):
- Canary Row stories
- Personal experience stories
Methodology

Annotation in ELAN:

- Glosses
- Sentences
- Activation
- Topics
- Non-manuals:
  - Eyebrows; nods; head tilts; body tilts
- Topic Shift – change in topics between 2 sentences
Methodology
Methodology

Defining topics

2 kinds:

- Aboutness topics
  - All arguments are potential topics
  - Null arguments are likely topics

- Scene-setting topics
  - Time and place descriptions

- All potential topics defined functionally and then formal properties matched
Topic marking

Word order:

- In NGT, aboutness and scene-setting topics are clause initial:
  - [Sst] [Top] [Comm] (sometimes [Top] [Sst] [Comm])

- Topic agreement is present in the corpus
  - [Sst] [Comm IX_{sst}]
  - [Top] [Comm IX_{top}]
Example Top

er
IX [CANARY]_{top} LOOK [NGT1773:73]

‘The canary looks’
Example Sst

[THERE HIGH.BUILDING IX THERE]sst SELF OF WHO? BIRD
‘In the high building on the other side is a bird’ [NGT209:12]
Example Sst Top

[THEN]_{sst} / [IX]_{top} / GO

‘Then he goes away’
Example topic agreement

\([\text{IX-1}]_{\text{top}} \text{STILL } [\text{IX-1}]_{\text{top}}\)

‘I am still’

\([\text{NGT94:1}]\)
Syntactic position for topics

- Objects can be topicalized
- Prosodic break after the topic
- Moved or base-generated?
  - Sentences with gaps are present – maybe movement

\[ \text{IX-1 / IX LOOK-1} \quad \text{[NGT211:12]} \]

‘They look at me.’

- Sentences with resumptive pronouns are present – maybe base-generation

\[ \text{IX-1 PU / IX-1 LOOK.AROUND} \quad \text{[NGT208:11]} \]

‘I look around’
Non-manual marking

- Eyebrow movement – eyebrow raise (as in many other sign languages)
- Eyebrow movement has many functions:
  - Emotions
  - Emphasis
  - Lexical
  - Subordination
  - Questions
Non-manual marking

IS-related marking:

- “You know” expression – information that the singer thinks is familiar to the addressee
- Focus
- Topics
- Clarification
- Both aboutness and scene-setting topics can be marked
“You know” expression
Example Top

\[ \text{er} \]

IX \([\text{CANARY}]_{\text{top}}\)  \text{LOOK}  

\[ \text{[NGT1773:73]} \]

‘The canary looks’
Example Sst

er
IX (WIRE) NOB NOB [NGT27:3]
‘There are nobs on the wire’
Head tilt

- Backward head tilt for topics
- Often (but not always) co-occurs with eyebrow raise
- Some sideward tilts are present as well
The bird also falls down.

‘The bird also falls down.’
Approximately 1400 sentences in NGT

Topic shift and overtness:

- Full NP
- Pronoun
- Null

- Shifted Topic
- Unshifted Topic
Nonmanuals and topic shift

- *Only shifted aboutness topics are marked by eyebrow raise in NGT*
- *Head tilts also only mark shifted topics*
- So probably in NGT eyebrow raise and head tilt are realization of one feature (as suggested by Kooij & Crasborn (to appear))
Topic agreement

- Topic agreement cannot be explained by prosody only:
  - There are other means to make the last prosodic word heavy – why choose for this one?
  - Sometimes a pronoun follows a prosodic word that is already heavy

- *Observation from the corpus: only continuous topics participate in topic agreement*
Topic agreement

A more general phenomenon of doubling in NGT:

1. Clause-internal doubling
   - Verbal doubling (including modal verbs)
   - Argument doubling
   - Wh-word doubling
   - Nouns, adjective, adverbs
   - *Topic doubling*

2. Clause doubling
   - General function: foregrounding (Kimmelman 2012), including foregrounding of the topic
‘I went and at 1 I brought [her] back to school’
Conclusions

Based on a small-scale corpus study

- Topic marking in NGT:
  - Syntactic, non-manual, topic agreement

- Insights from a corpus study:
  - Why marked topics? – for topic shift
  - Why topic agreement? – for continuous topics
  - Eyebrows and head tilt – maybe the same feature

- Corpus is not so handy with syntactic details
References


Extra
Another strategy: IX Top

- In both languages IX sometimes appears before a marked topic, not being marked itself
- Function: re-introducing a non-active topic
- Positions:
  - If it belongs to the topic, why is there a prosodic break?
  - If it does not belong to the topic – what is its position?
Example IX Top

The porter of the high building answers a telephone

‘The porter of the high building answers a telephone’
Another strategy: IX Top

Possible solution:

- The apparent topic is not a topic, but clarification (marked similar to topics)
- The pronoun is the real topic

\[ \text{er} \quad \text{ef} \]

\[ a. [\text{IX}]_{\text{top}} \quad [\text{PORTER OF HIGH.BUILDING}]_{\text{cl}} \quad \text{TAKE HOLD.TELEPHONE} \]

‘The porter of the high building takes a telephone’