Analysis of Relative Clause Constructions (RCC) in Turkish Sign Language (TİD) in Discourse Modes

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33. Jahrestagung der Deutschen Gesellschaft für Sprachwissenschaft (DGfS)
Georg-August-Universität Göttingen 23. - 25. Februar 2011
Outline

• Introduction
  – RCCs in Sign Languages
  – RCCs in TiD
• Methodology
• Discourse Modes
• Proposal: Interaction between RCCs and Discourse Modes
• Analysis using (Segmented) Discourse Representation Theory
• Conclusion and Discussion
Relative Clause: Working Definition

- “A Relative Clause (RC) is a **subordinate clause** which delimits the reference of Noun Phrase (NP) by specifying the role of the referent of that NP is in the role of the referent of that NP in the situation described by the RC“ (Andrews 2008, p.206)

- “What distinguishes relative clauses from other subordinate clauses is that there is a **direct link** between an element in the relative and in the matrix.“ (de Vries, p.1)

- IHRC vs. EHRC
Overview on RCCs in Sign Lgs

• American SL (ASL):

• Italian SL (LIS):
  – Branchini 2006: PE clauses, IHRC
  – Cecchetto et al. 2004: Correlatives
  – Brunelli 2006: EHRC (External Head Relative Clause)

• Hong Kong SL (HKSL):
  – Tang et al. 2010: IHRC

• Brazil SL (LIBRAS):
  – Nunes & de Quadros 2004 (in Branchini et al 2007) EHRC
RCCs in TİD

- **TİD: IHRC**
  - Nonmanual cues:
    - cheek-raise and tensed upper lip
    - Squint: Shared Information
      (Dackovsky & Sandler 2009)

- (Optional) Relative Pronouns
  - co-occur with raised eyebrows
  - optional mouthing: /o/ (open lip)
Second and third women, both of whom are married too, were chatting.
Methodology

Corpus-Based Data:

- Naturalistic data (approx. 3 hours video)
  - Free storytellings
  - sign vlogs (publicly accessible in internet)

- monologues in various discourse modes:
  - narrative, descriptive and information modes (Smith 2003)
Annotation and Transcription: iLex
Discourse modes

• **Narrative**
  – Consists episodes, events and states in sequences, which are temporally related to each other

• (movie 8 code 242)
  __________________________________________ rc
  – [FIRST, GET-PREGNANT CANNOT OLD] PROREL, GET-PRENANT.

  • The first (woman), who cannot get pregnant and is old, got pregnant.

(Smith 2001 p.186)
Discourse modes

• **Description**
  – Introduces states and events into universe of discourse. Tense is anaphoric to an established time.

• [movie 7 code 0035]
  – [RELATIVE FACTORY CEMENT_i WORK FACTORY_i] PROREL_i BEAUTIFUL GOOD RELIABLE.
    • The cement factory where my relatives works is good, reliable.
Discourse modes

- **Informative**
  - Introduces generalizing statives, which are atemporal

- (movie 18 code 0011)

  - [HOUSE SOME PAPER WALL\textsubscript{i} EXIST] PROREL\textsubscript{i} FOR REMOVE
  - The wall papers which some houses have should be removed
Discourse modes

• Report
  – Like Narrative, concerned with events and states, but in Report mode Speech Time determines the temporal advancement.

BEISPIEL HIER
Semantic-Discourse Functions of RCCs

• Head
  – **Introduction**: bringing out new Head
  – **Reintroduction**: a referent brought into focal consciousness

• Modifying Clause
  – **Identification**: establishing the referent
  – **Reidentification**: given referents are reintroduction
  – **Characterization**: express additional descriptive information about head

(Aksu-Koç & Erguvanlı Taylan 1998, p. 277)
Proposal

• RCs exhibit distinct semantic and pragmatic functions in certain discourse modes.

  – (1) RCCs exhibit more frequently in narrative contexts
  – (2) RCCs in TİD
    • Narrative: Reidentification
    • Descriptive & Information: Characterization
Token Analysis

- Token Analysis:
  - 106 RC-constructions (out of 2456 chunks)

<table>
<thead>
<tr>
<th></th>
<th>RC occurrence</th>
<th>Chunk</th>
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<tbody>
<tr>
<td>Narrative</td>
<td>92</td>
<td>1965</td>
</tr>
<tr>
<td>Description</td>
<td>4</td>
<td>31</td>
</tr>
<tr>
<td>Information</td>
<td>9</td>
<td>175</td>
</tr>
<tr>
<td>Report</td>
<td>4</td>
<td>93</td>
</tr>
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</table>
Functions of RCCs in Discourse

• According to the data, RCCs in TİD is observed to have two basic discourse functions:
  – RCCs as discourse deixis (*Characterization*)
    • No discourse anaphora
  – RCCs as anaphora (*Reidentification*)
    • Referents or events have reference within the text.
    • Justified with *SDRT*
Segmented DRT
(Asher & Lascarides 2003)

• Framework for the examples involving anaphora and other kinds of semantic disambiguities

• in Rhetorical Structure

• Discourse referents is also involved, we can interrelate the labels ($\pi_1 \ldots \pi_k$).
**Context:** (in a village) There are three women. One of them is single while two of them are married. Single ones is jealous of these married women because they are visiting each other.

Second and third women, both of whom are married too, were chatting.
SDRS
Segmented Discourse Representation Structures

• ....
• $\pi_3$: There were three women knowing each other for years
• $\pi_4$: One woman was married
• $\pi_4$: Another woman married thereafter
• $\pi_5$: The one was still single
• ....
• $\pi_{10}$: Second and third women, both of whom are married too, visited each other.
Rhethorical Structure Theory
Mann & Thompson (1988)

π₃

elaboration

π₄  narration  π₅  narration  π₆

elaboration

π₁₀
## Results

<table>
<thead>
<tr>
<th></th>
<th>Head</th>
<th>Modifying Clause</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>Introduced</td>
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<tr>
<td>Narrative</td>
<td>12</td>
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<td>Description</td>
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<td>1</td>
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<tr>
<td>Report</td>
<td>4</td>
<td>-</td>
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<tr>
<td>Information</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>
Conclusion

• RCCs => narrative context
  – Refers to the entities which are introduced earlier
  – REINTRODUCTION

• descriptive and informative modes => disambiguation / clarification
  – Shared information with addressee
  – CHARACTERIZATION

• RCCs in TİD should be analyzed at semantic/discourse level.
Comparison
TİD vs. Turkish

• RCCs in TİD in narrative context
  – (Re)identification

• RCCs as discourse anaphora
  – Modality specific?

• Turkish Relative Clauses in narrative context
  – Aksu-Koç & Erguvanlı Taylan 1998
  – Characterization
Implications

• Modality dependent features
  – Nonmanual elements
  – Functions: (probably) reidentification

• Language specific features
  – Syntactic constructions
  – Semantic functions
References


Additional slides
Interaction between RCCs and Discourse modes

• Smith (2003)
  – Five main discourse modes:
    • (i) Narrative
    • (ii) Description
    • (iii) Report
    • (iv) Information
    • (v) Argument
RCCs within (S)DRT framework

- Discourse Representation Theory (Kamp and Reyle 1993)‘s core function:

  - to assign meaning to natural language texts and discourses
  - to account for the contextual dependency of meaning
Discourse Anaphora

• RCCs as anaphora (see the example SDRS)
• Chafe (1987) Cognitive Constraints on Information Flow
  – Activation: „active“, „inactive“, „semi-active“
  – linguistic constituents with grammatical cues: given information (Chafe 1987) (In this case RCCs)

• Strongly observed in narrative context
Comparison

• TİD RCCs
  – Reidentification

• Turkish RC
  – Characterization (Aksu-Koç & Erguvanlı Taylan 1998)
    • [+ human] animate referents
    • [- human] temporal locative expressions

    • [- definite]: evaluative function (voice shift)
      – i.e. someone

• (Re)Identification (Which one?) vs. Characterization (How?)