German nach-Particle Verbs in Semantic Theory and Corpus Data

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Introduction

Interaction between the interpretation and the argument structure of the German verb particle nach

Argument structure: /nach - direct

- 1st interpretation: "The student copied the teacher's dancing."
- 2nd interpretation: "The student followed the teacher dancing.

A different argument structure shows different interpretations and thereby triggers different argument structures.

Claim by Haselbach (2011)
- The student danced the teacher's dancing.
- The student copied the teacher's dancing.

A different argument structure shows different interpretations and thereby triggers different argument structures.

The highest hurdle is repeated after

Examples confirming Haselbach's hypothesis
- "The prosthetic leg can be replicated for the patient at a later point in time." slows nachfertigen
- "I'm very happy, many others gawped at me." lassen sich nachsehen
- "In former times, many others gawped at me." lassen sich nachsehen

Future Work
- Integration of analyses from other parsers, e.g. rule-based FSP
- Usage of architecture for other phenomena, e.g. other verb particles
- Feedback to parser

Resources and Architecture

Database: B3DB
- Generic representation of different annotation levels
- Implemented as PostgreSQL database
- Database is able to handle concurrent manual annotations

Corpus: DeWaC
- 4 million sentences containing the string "nach"
- Deity-particles parsed with BeniNet's statistical parser
- Extracted from 280,000 sentences containing ca. 1,800 relative nach-particle verb lemmas

Architecture

- Parser corpus
- Manual annotation of nachverbs

Identification of divergence between parsing and hypothesis

Prediction from Theory vs. Corpus Occurrences: Examples

<table>
<thead>
<tr>
<th>Lemma</th>
<th>Prediction</th>
<th>Occurrences with dative</th>
<th>Occurrences without dative</th>
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<td>nachgehen</td>
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DBLP
- "The highest hurdle is repeated after"
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References