Towards an Account of Information Structure in Extensible Dependency Grammar

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Outline of the Presentation

- Information Structure
- Extensible Dependency Grammar
- Information Structure in Extensible Dependency Grammar
What is Information Structure?

- Terminology:
  - theme/rheme (Halliday, Steedman)
  - topic/focus (Prague school)
  - ground(link/tail)/focus (Valduvi)
- Theme: the part of utterance that connects it to the previous discourse
- Rheme: the new contribution, the part of the utterance that advances the discourse
- Manifestations of IS: word order, intonation, special lexical items

Prosodical Account of IS

- I know which result Mark proved, but which result did Marcel prove?
- MARCEL proved COMPLETENESS.
  - \[ \text{L+H}^* \quad \text{LH}\% \quad \text{H}^* \quad \text{LL}\% \]
  - \( \text{kontrast background kontrast} \)
  - THEME RHEME
- * MARCEL proved COMPLETENESS.
  - \[ \text{H}^* \quad \text{LL}\% \quad \text{L+H}^* \quad \text{LH}\% \]
  - \( \text{RHEME THEME} \)
Extensible Dependency Grammar

- dependency-based grammar formalism
- multiple dimensions
  - grammatical function (ID)
  - word order (LP)
  - possibly more
- principles
  - one-dimensional (e.g. tree, valency)
  - multi-dimensional (e.g. climbing)

Dimensions

grammatical function (ID)

word order (LP)
Adding IS to XDG

- Add information structure (IS) dimension, and specify its interaction with other dimensions of XDG (e.g. LP)
- To account for the prosodical approach
  - introduce a prosodical (PS) dimension
  - specify multidimensional principles between the IS and the PS dimensions

PS Dimension

- Edge labels: L+H*LH%, H*LL%, L+H*, H*, LH%, LL%, nb
- Node labels: b, nb
- One-dimensional PS principles: tree, valency, order (boundary tones last in the phon phrase)
IS dimension

- Edge labels: rheme, theme_k, theme_b, backgr
- Obligatory rheme, optional theme
- One-dimensional IS principles: tree, valency,

IS and PS principles

- Multi-dimensional principles linking PS and IS dimensions:
  - "island" (prosodical phrase boundaries cannot be crossed on the IS level)
Unmarked themes

- One prosodical structure

- Multiple information structures

Interaction between IS and LP

- Multidimensional principle “linking”: topicalised material on LP is theme on IS
Conclusions

- Added account of IS to XDG
  - Added IS dimension
  - Added PS dimension
  - Added one-dimensional principles for IS and PS dimensions
  - Added principles linking the IS dimension to PS and LP dimensions

- To be explored – possible interaction between IS and SC dimensions