



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

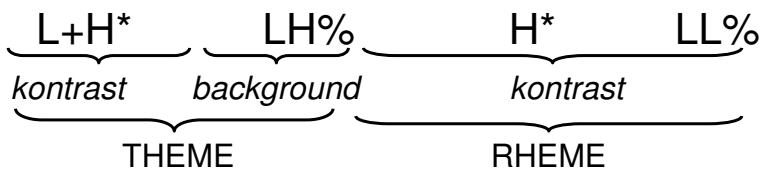
What is Information Structure?

- Terminology:
 - theme/rheme (Halliday, Steedman)
 - topic/focus (Prague school)
 - ground(link/tail)/focus (Vallduvi)
- 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

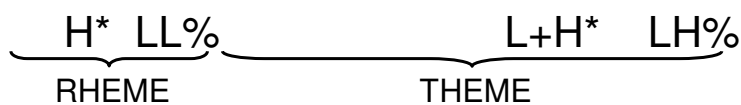
Prosodical Account of IS

Mark Steedman 2000

- I know which result Mark proved, but which result did Marcel prove?
- MARCEL proved COMPLETENESS.



- * MARCEL proved COMPLETENESS.

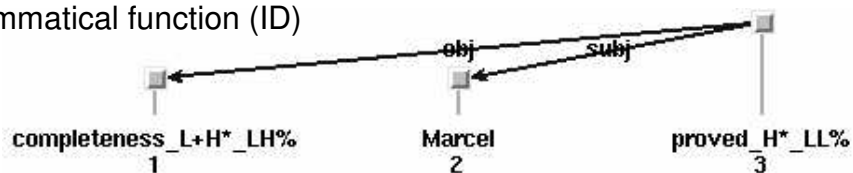


Extensible Dependency Grammar

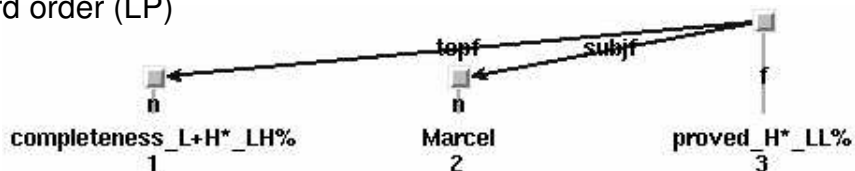
- dependency-based grammar formalism
- multiple dimensions
 - grammatical function (ID)
 - word order (LP)
 - possibly more
- principles
 - one-dimensional (e.g. tree, valency)
 - multi-dimensional (e.g. climbing)

Dimensions

grammatical function (ID)



word order (LP)

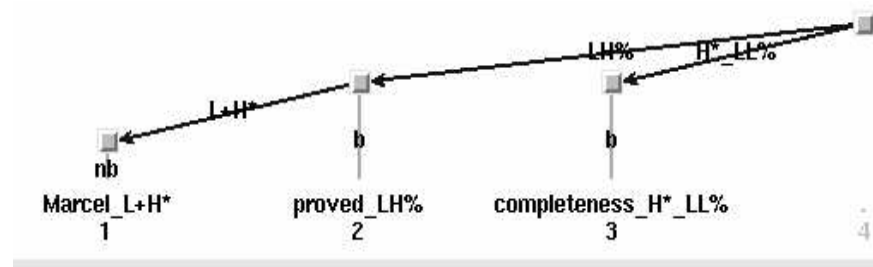


Adding IS to XDG

- 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

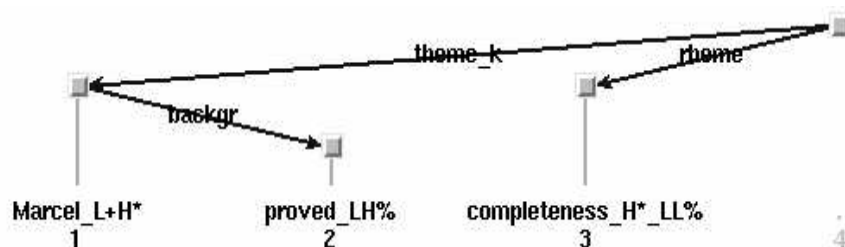
PS Dimension

- 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,



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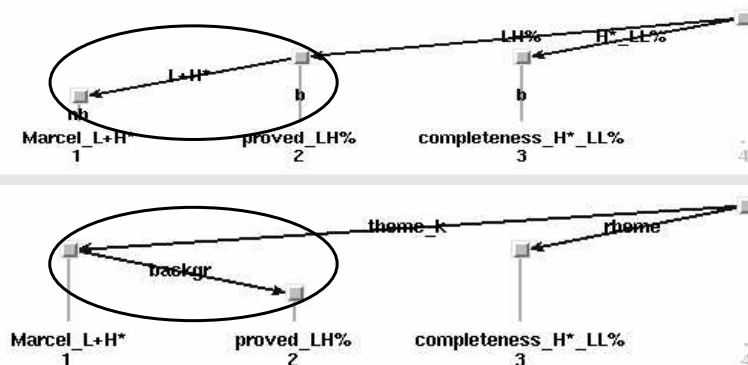
IGK 2004

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IS and PS principles

- Multi-dimensional principles linking PS and IS dimensions:

- "island" (prosodical phrase boundaries cannot be crossed on the IS level)



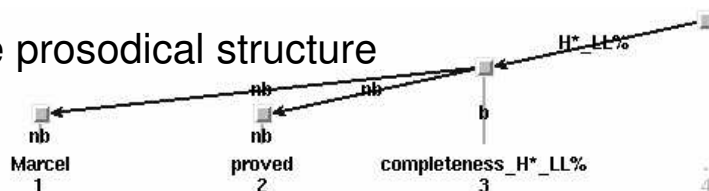
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IGK 2004

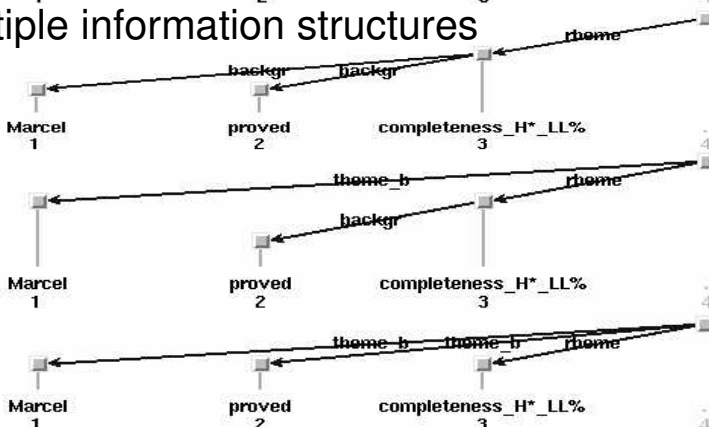
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Unmarked themes

- One prosodical structure

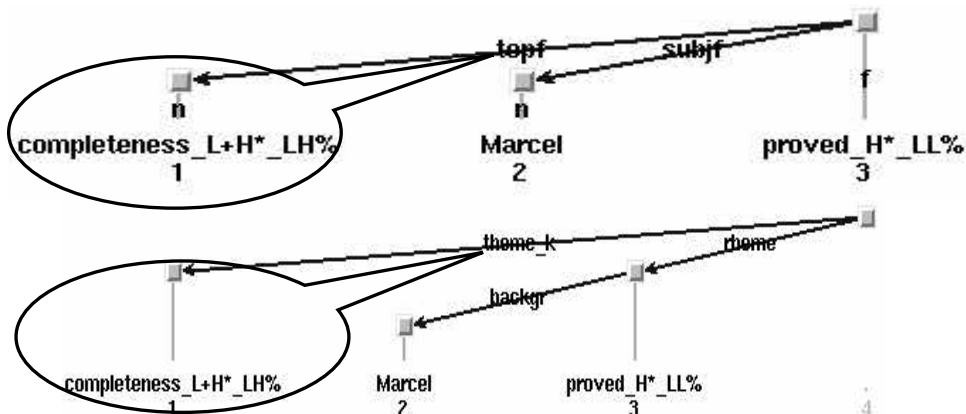


- Multiple information structures



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