

Events in the semantics of non- deverbal nominalizations

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AG3 - The semantics of derivational morphology: Theory, methods,
evidence

Introduction: Event-related nominalizations

- How do these words get their meaning? How are they interpreted?
- Participants of events or whole events selected by nominalizing affix
 - (1) *employee* (Barker 1998)
→ participant selection
 - (2) *Markham sets down the rules about park befoulment.* (Plag et al. 2018: 474)
→ whole event selected

Events in nominalizations

- Event inherited from semantic representation of base verb (Plag et al. 2018, Löbner 2013)
- Semantic representation provides events and event participants for nominalizing affix
- Nominalizing suffix creates different meaning of derivative
 - by selection of participant
 - by selection of event

<i>employer</i>	AGENT
<i>employee</i>	PATIENT
<i>employment</i>	EVENT

Formalization: Frames

- Possible to model semantic representation of base word and derivative
- Show element selection in event by affix
- General format: attribute-value-structures

Formalization: Frames

- Attribute Value Matrix (AVM)

(3) *John employed Paul.*

<i>employ</i>	<i>employing-action</i>
	AGENT [1] <i>John</i>
	PATIENT [2] <i>Paul</i>
	...

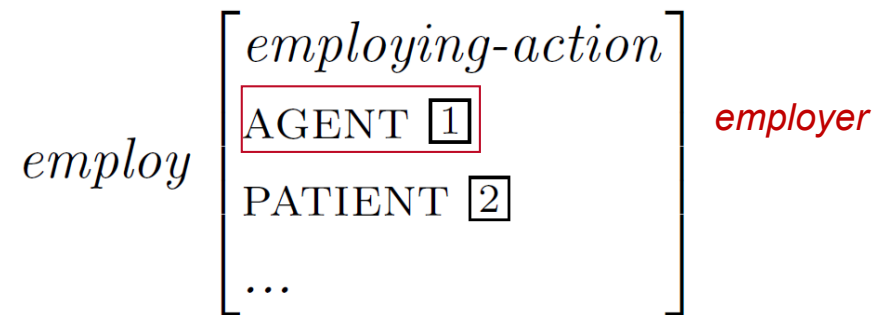
Formalization: Frames

- Attribute Value Matrix (AVM)

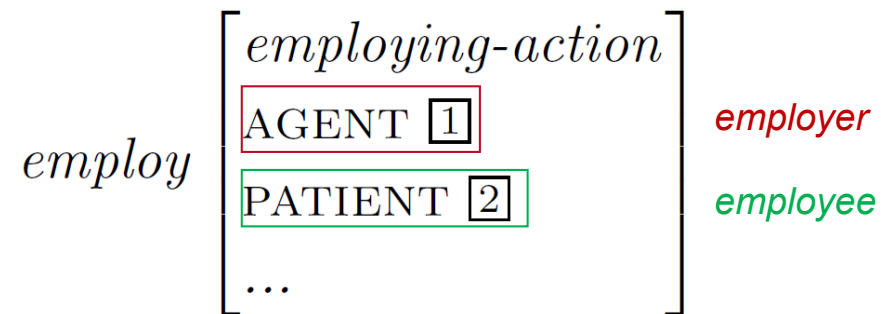
(3) *John employed Paul.*

<i>employ</i>	<i>employing-action</i>	
	AGENT [1]	<i>John</i>
	PATIENT [2]	<i>Paul</i>
	⋯ attributes	<i>values</i>

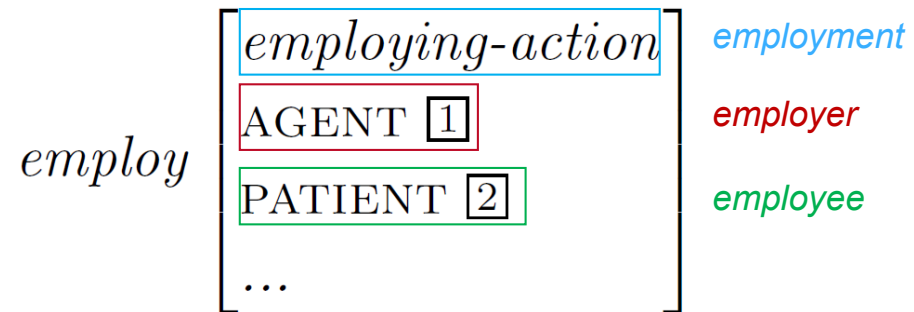
Formalization: Frames



Formalization: Frames



Formalization: Frames



Problem: Non-verbal bases

- Research tends to focus on deverbal nominalizations (e.g. Barker 1998; Kawaletz & Plag 2015)
- What about formations like *debtee* (→ *debt*), *biographee* (→ *biography*)?
- Many nominalizing suffixes also attach to non-verbal bases (Plag 1999, 2004; Bauer et al. 2013)
- Non-verbal bases as *debt* not straightforwardly eventive
- What do we know about non-verbal bases?
- “the verbal relation is **implied by context** or **can be inferred** from the nature of the non-verbal base. [...] Such interpretations follow from the sort of activities that the base nouns **could conceivably be involved in.**” (Bauer et al. 2013: 233)

→ Vague description

Research questions

- Is it possible to find an event in the semantics of non-verbal base words?
- If yes, how can we model the semantic representation of these eventive structures in the non-verbal base?
- Focus on nominal bases and *-ee* derivations

Data set

- Data from BNC (Davies 2004) and COCA (Davies 2008)
- 17 denominal derivatives

debtee

biographee

covenantee

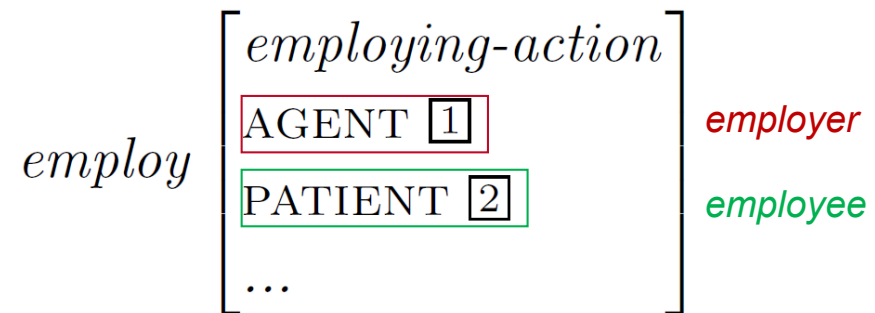
bargee

tutee

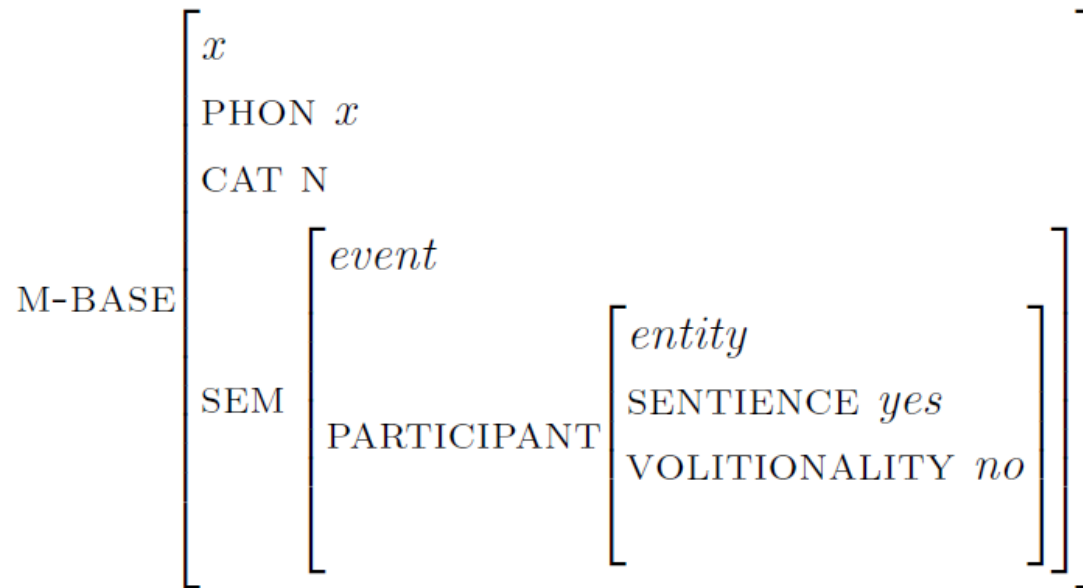
mentee

Restrictions -ee

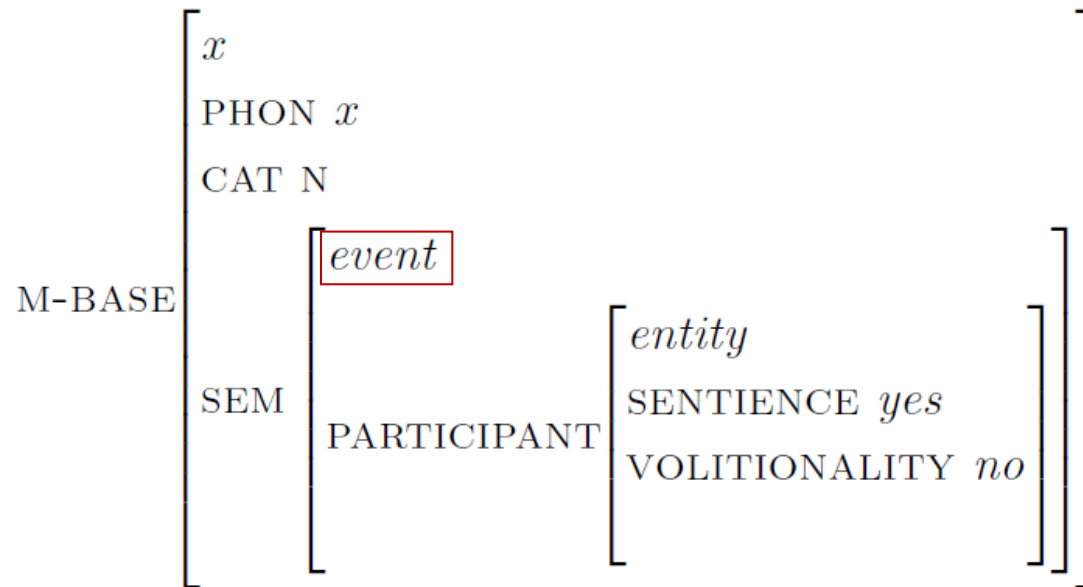
- select non-volitional and sentient participant (Barker 1998)
- Example: *employee*



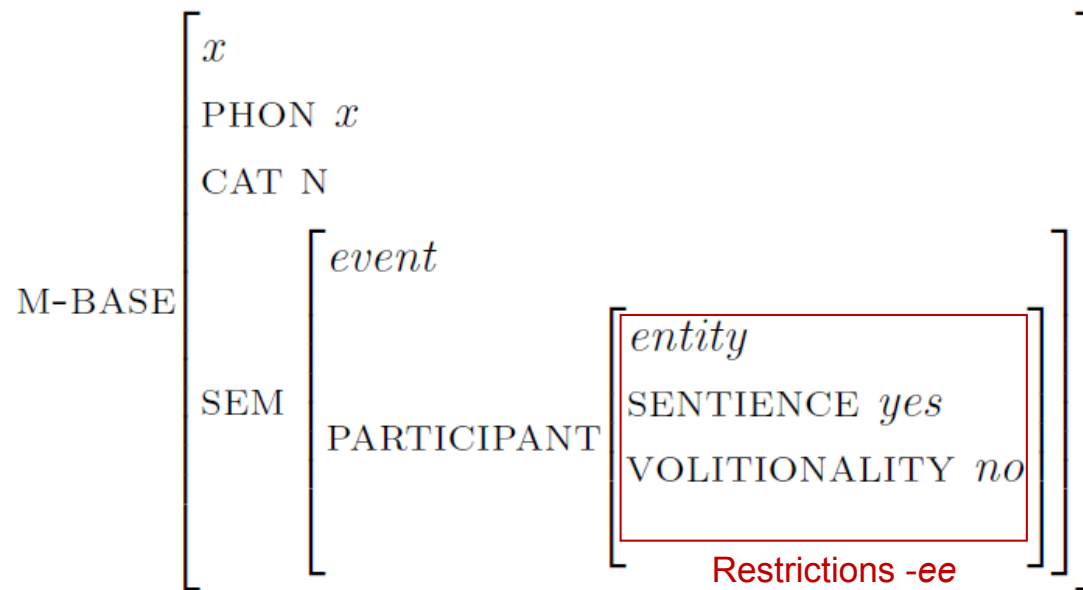
Restrictions on base words



Restrictions on base words



Restrictions on base words

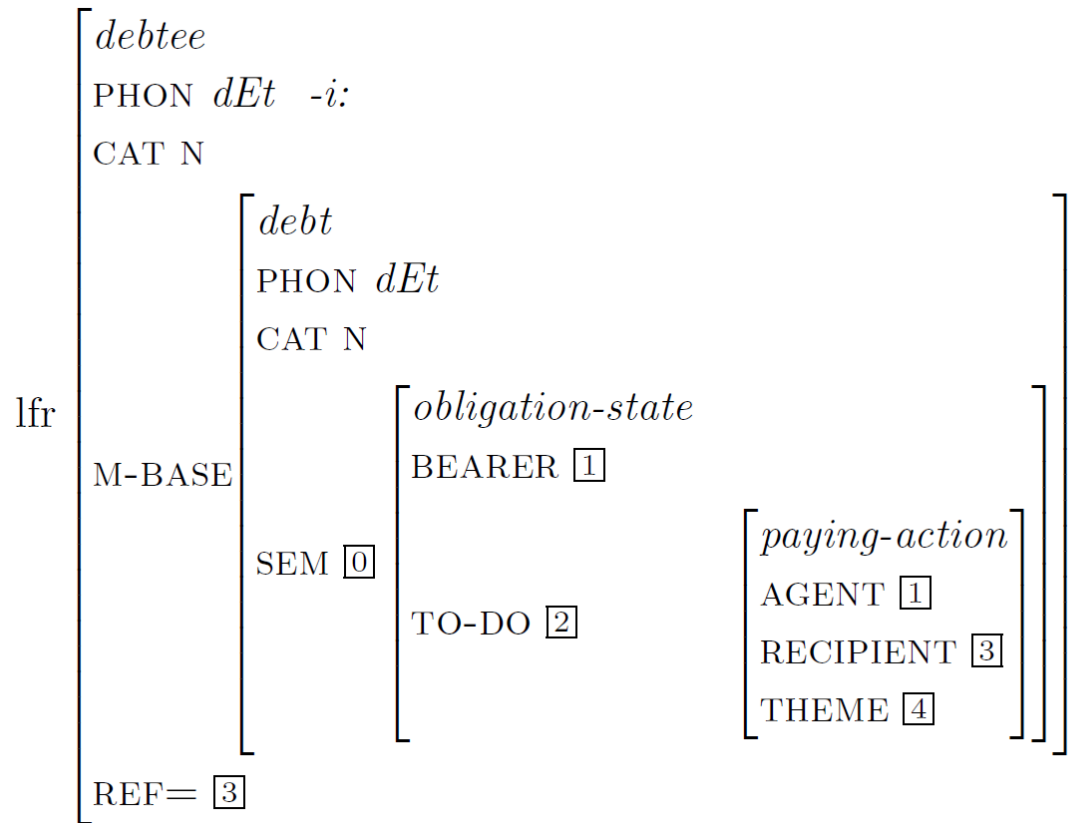


Analysis of *debtee*

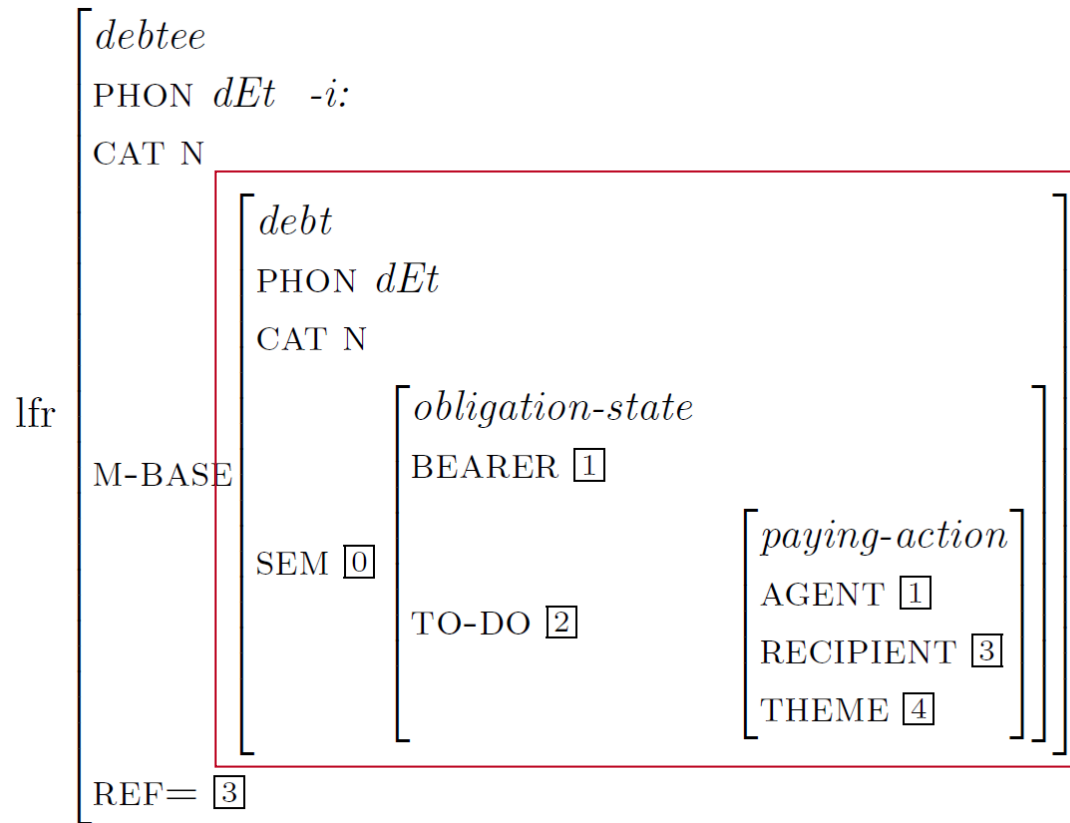
(4) The '*debtee*' is an old word for the creditor or payee. (BNC)

- *debtee* is the person who gets something back
- Base *debt* not clearly eventive at first sight
- OED definitions *debt*:
 - 1. "That which is owed or due: a sum of money or a material thing; a thing immaterial."
 - 2. "A liability or obligation to pay or render something; *the condition of being under such obligation.*"
- Already decomposition by definition
- Second definition describes a state → *debt* as *obligation-state*

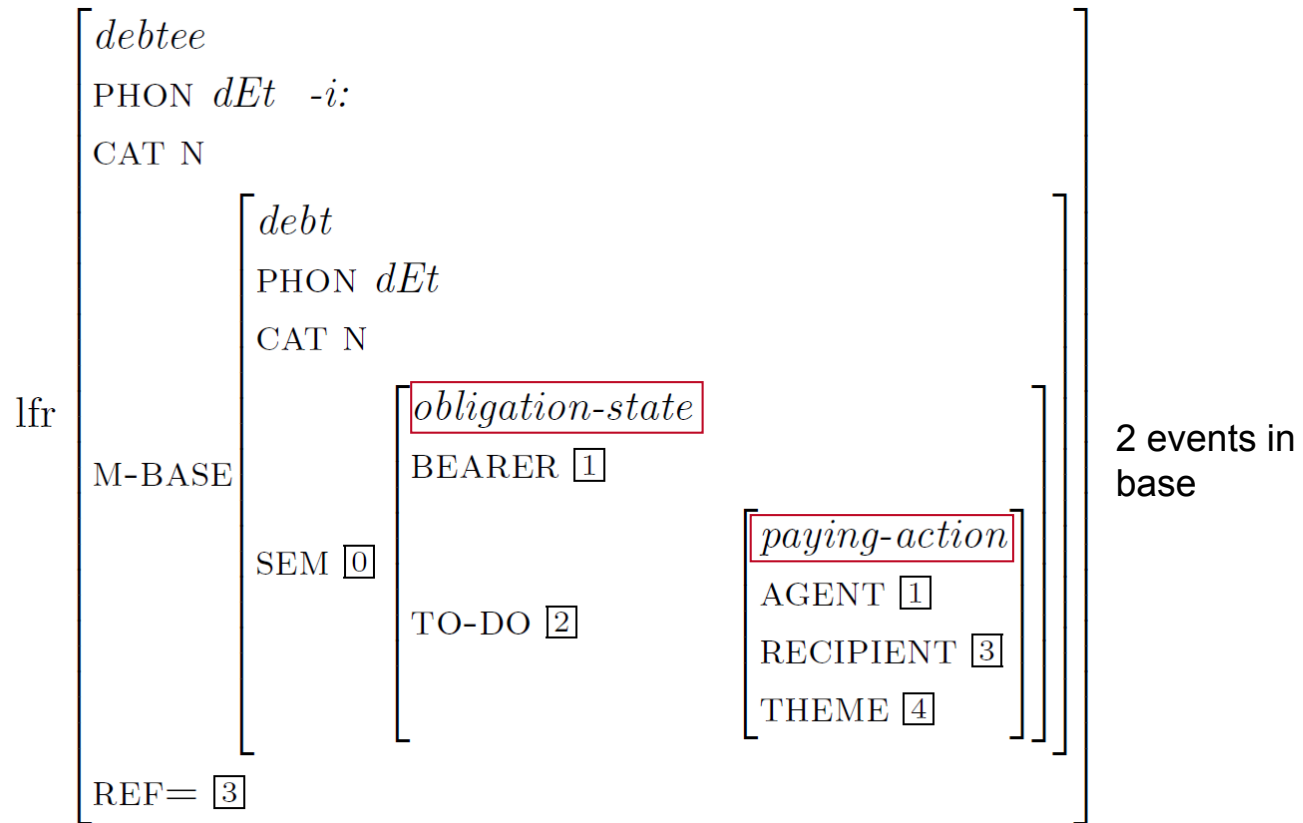
Analysis of *debtee*



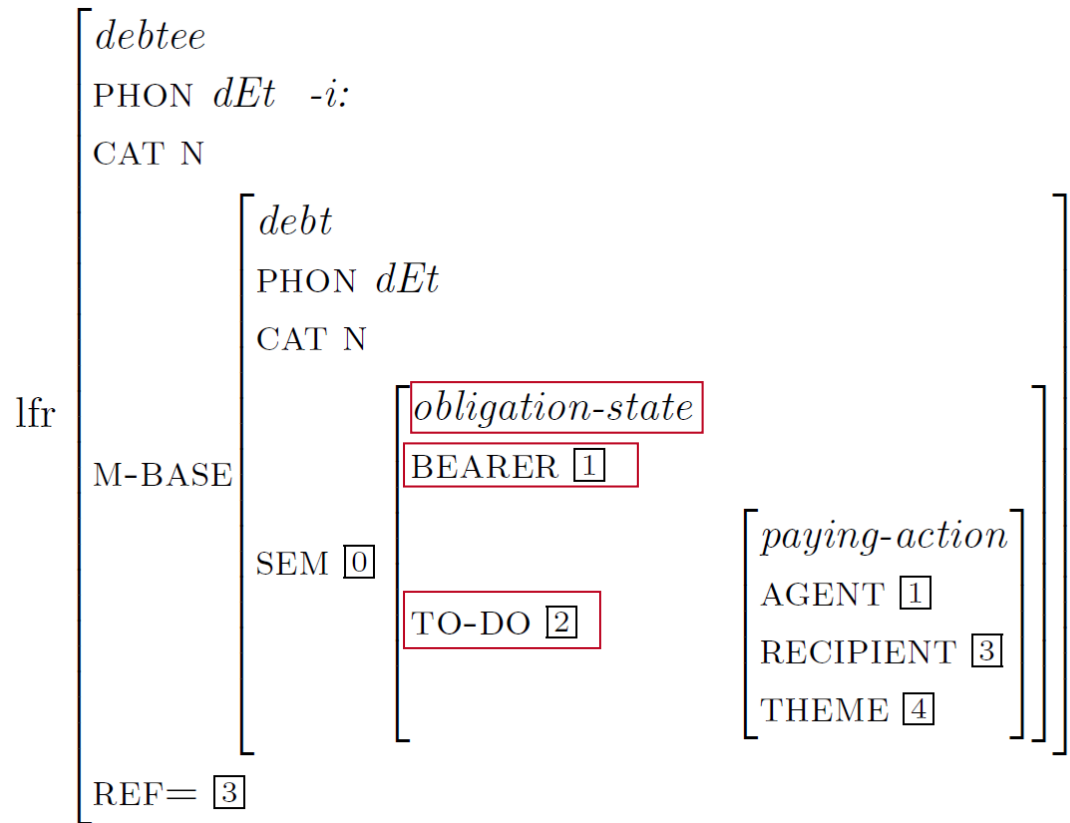
Analysis of *debtee*



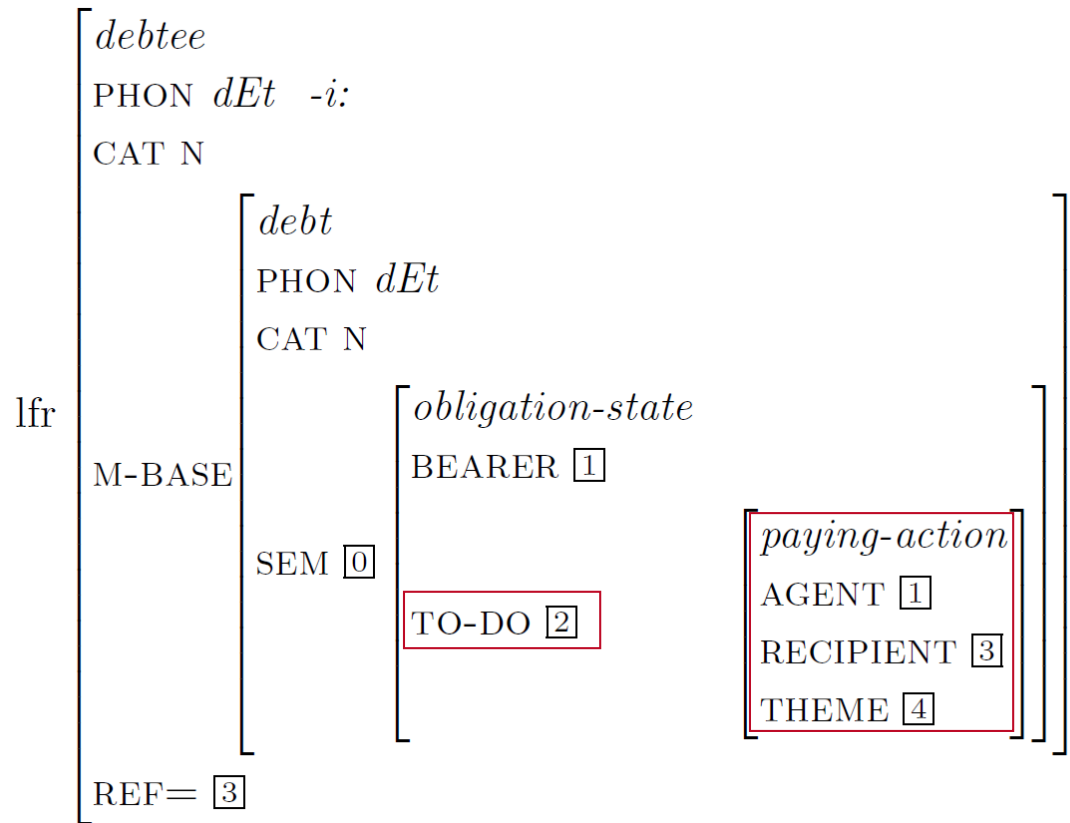
Analysis of *debtee*



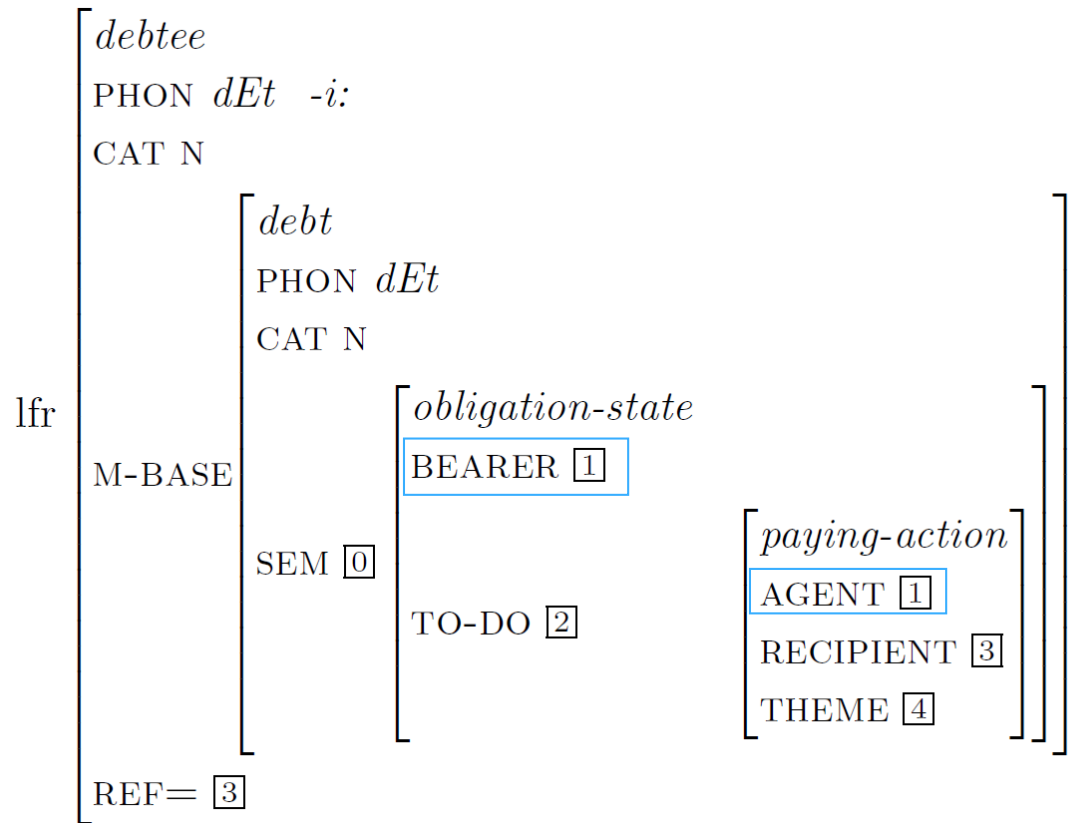
Analysis of *debtee*



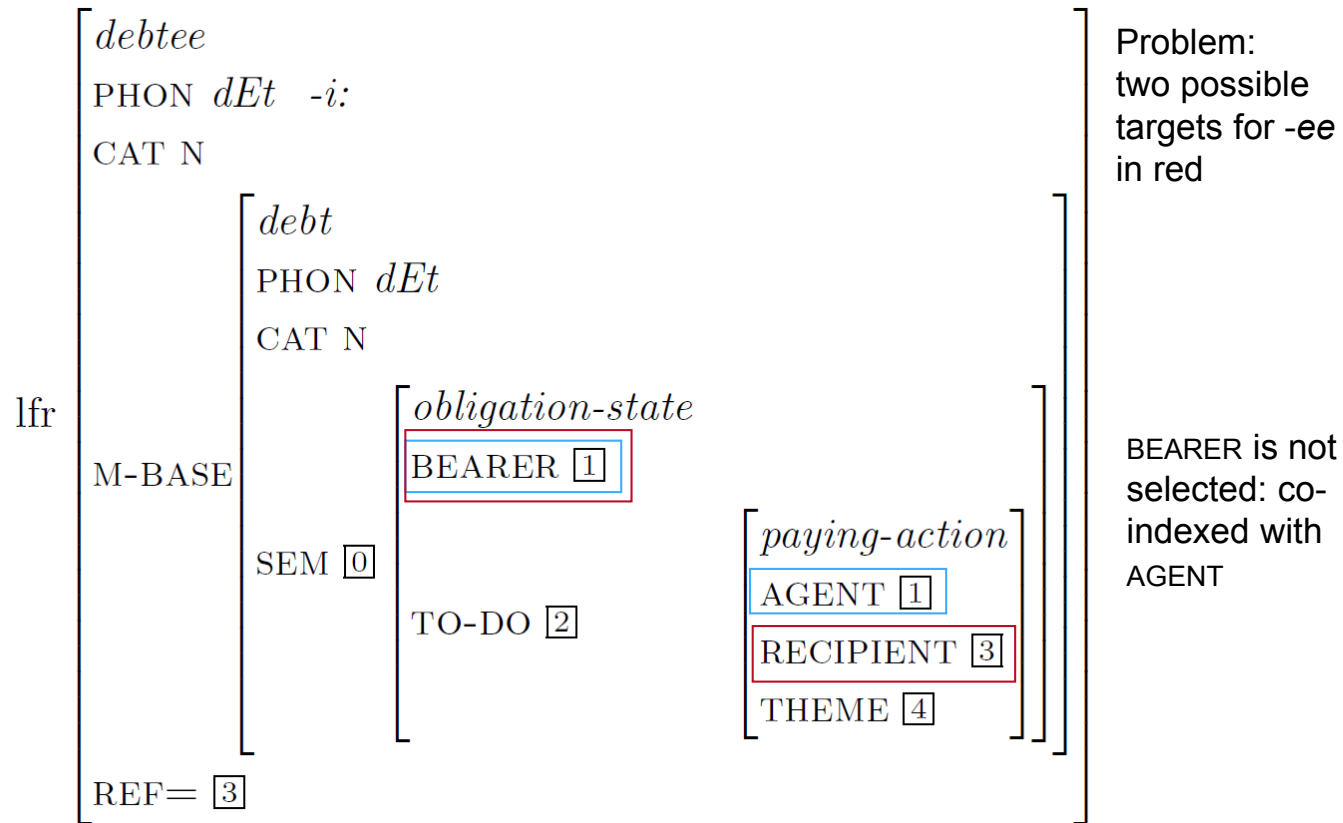
Analysis of *debtee*



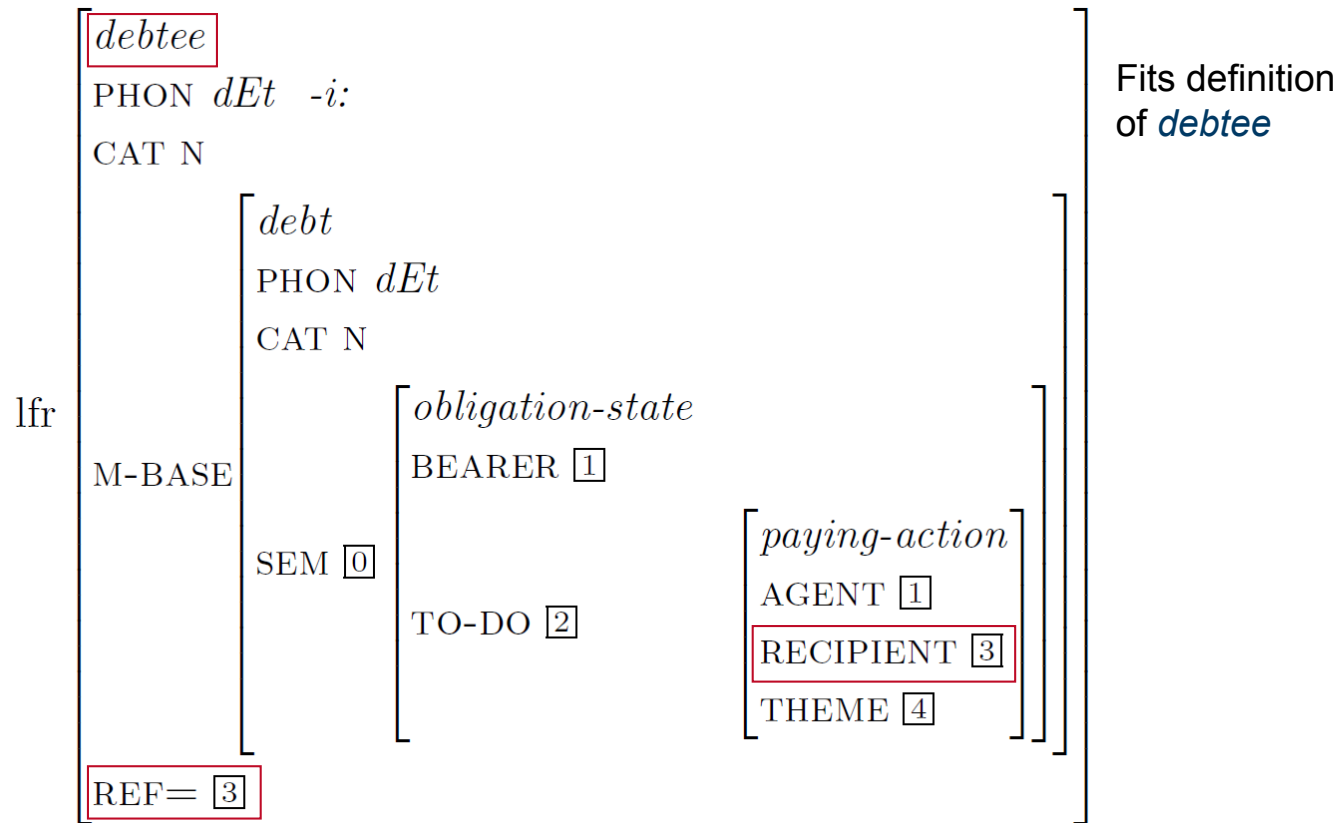
Analysis of *debtee*



Analysis of *debtee*



Analysis of *debtee*



Subset: Complex *-er* bases for *-ee* derivatives

- Complex word as base for nominalizations
- *-er/-or* event structure for *-ee* formation
- Different participant selected
 - *tutor* → *tutee*
 - *mentor* → *mentee*
 - *batterer* → *battere*
- *-ee*-noun paradigmatically related to *-er/-or*-noun (Bauer et al. 2013: 524)

Summary

- Nominalizations by non-verbal bases may have event-related interpretations.
- Decomposition reveals event structure and participants for the interpretation of the nominalization.
- Frame semantics useful tool for decomposition of derivatives and bases

Implications

- Same issue for other nominalizations
- Blueprint for analysis of other event-related nominalization with non-verbal bases
 - nominalizing suffixes *-age*, *-ance*, *-ation*, *-er*, *-ment*, *-ure*
 - noun-to-verb-conversion
- Frame semantics as unified format for analysis of nominalizations

References

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Thank you!

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Appendix – Data set

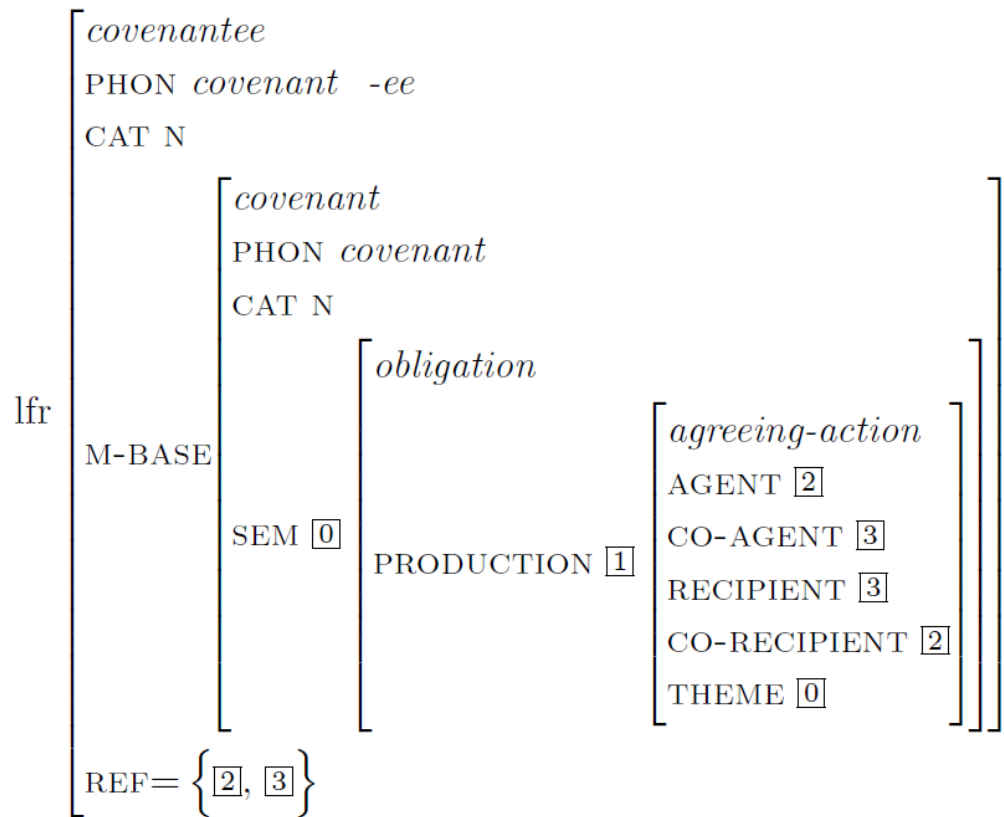
BNC

Tokens	Lemma
149	absentee
10	bargee
1	billetee
1	biographee
14	covenantee
4	debtee
51	franchisee
279	mortgagee
6	tutee

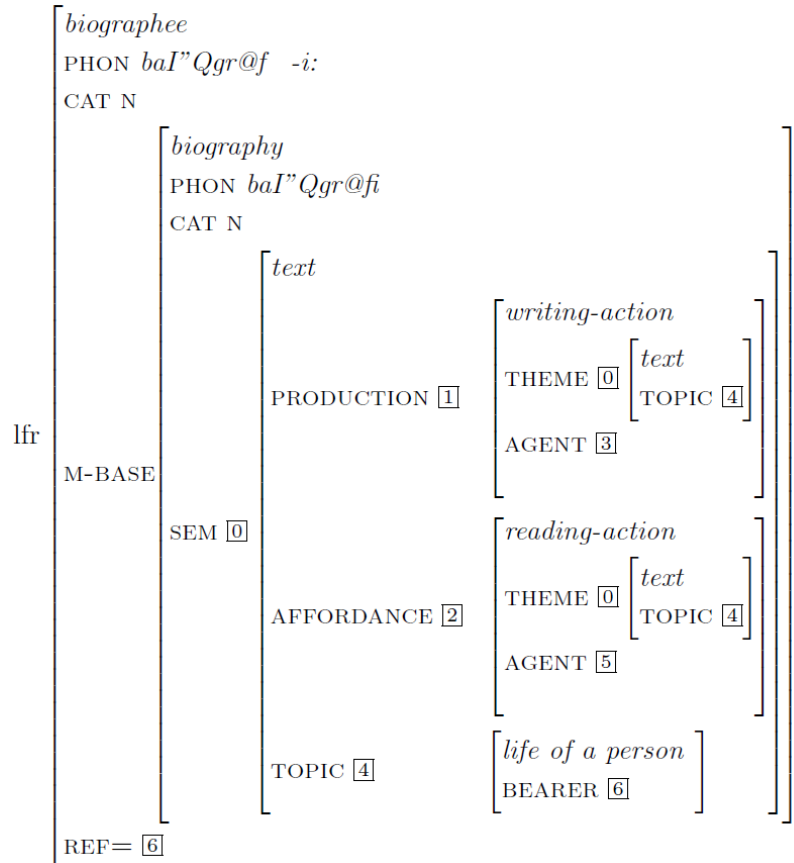
COCA

Tokens	Lemma
29	awardee
1	batteree
13	billee
4	counselee
1	mastectomee
2	mentoree
213	mentee
166	parolee
84	patentee

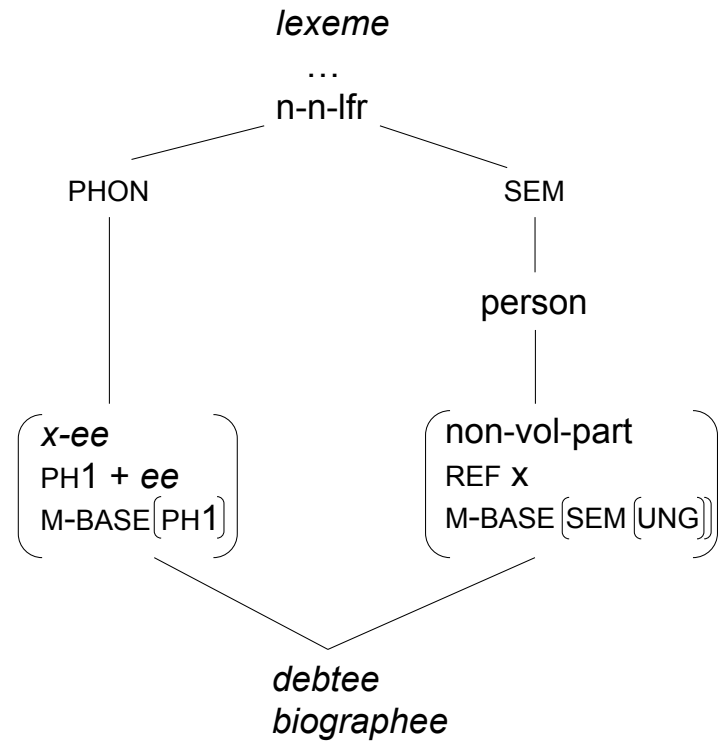
Appendix – *covenantee*



Appendix – *biographee*



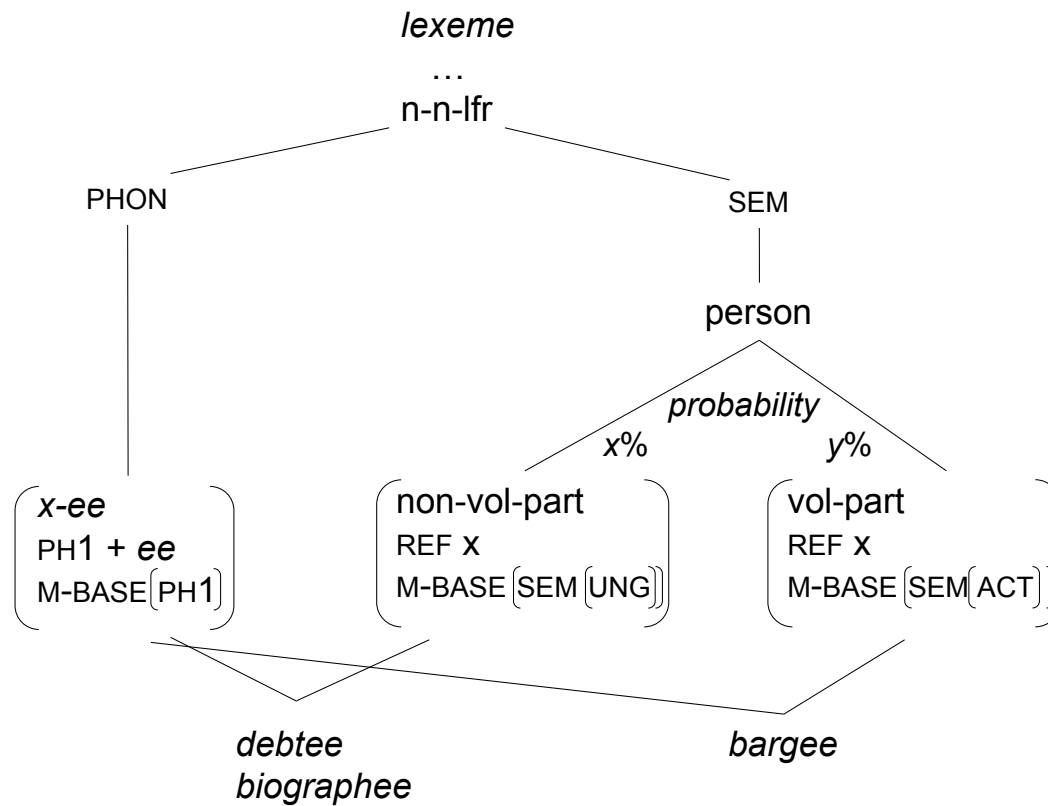
Appendix – Inheritance hierarchy



UNG=UNDERGOER

non-vol-part= non-volitional participant

Appendix – Inheritance hierarchy



UNG=UNDERGOER
ACT=ACTOR

Data collection

- Problem: word class of base? Lots of conversions!
- Way out: frequency as measure of prominence in mental lexicon
- Oxford English Dictionary (OED 2018) checked for possible base forms
- Bases which occur both as a verb and as a non-verbal category checked by frequency
 - COCA (Davies 2008) and COHA (Davies 2010) frequencies for possible base forms
 - As soon as the verbal base represents over 30% of all tokens of the base forms → base excluded

<i>charge</i>	Tokens	Percentage
V	8265	31
N	26469	69

Number of attestations by word class in COCA

Data collection

- Percentage criterion not always reliable
- Frequency threshold? Proportion vs. Absolute frequency
- Unclear cases sorted out by hand
 - Meaning of derivative related to verb rather than to noun (e.g. *internee*)
 - Noun obsolete although more frequent than V (e.g. *legate*)
 - High token frequency of Verb (e.g. *interview, report*)