

# Negative polarity as a trigger for the development of modal meaning

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# Introduction

- Development of modal meanings by **verbo-nominal patterns** :

*verb +*

*be/have*

noun +

*way*

*wonder*

*doubt*

*question*

complement

*predicate*

*clause*

# Introduction

- Development of modal meanings by **verbo-nominal patterns** :

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"My dear," said she, "you *have no need* of making any apology. I am not in the least offended." (CLMET 1710-1780)

# Introduction

- Development of modal meanings by **verbo-nominal patterns (VNP)** with noun *need*
- Previous studies: focus on modal auxiliaries *þurfan/need* (Van der Auwera & Taeymans 2004, 2006; Taeymans 2005; Loureiro-Porto 2009, 2010)
- VNPs with *need* appear as part of **chain of replacements**: personal verb *need* replaced negatively polar *þurfan* & polarity neutral VNPs (*him is þearf þæt, him is ned þæt*).
  - facilitated by an earlier replacement: noun *þearf* by the noun *neod* (Van der Auwera & Taeymans 2004: 330, 2006: 48-50; Taeymans 2005; Loureiro-Porto 2010)
  - **polarity** (assertive vs non-assertive) as a factor determining the replacement, not linked to increased grammatical status of AUX or VNP
  - diachronic window: Old English, Middle English, Early ModE (1710)

# Introduction

Our study:

- Old English up to Present-day English
- Role of polarity (positive vs negative):  
negative polarity triggers the development of (more abstract) modal meaning  
*cf. no doubt* (Simon-Vandenberghe 2007; Davidse et al. Forthc.), *no question* (Davidse & De Wolf 2012)
- 'systemic' nature of grammaticalization  
Modal meaning expressed by VNPs comes to interact with negation much like with AUX:
  - external negation (absence of obligation)
  - internal negation (prohibition)

# Structure of the talk

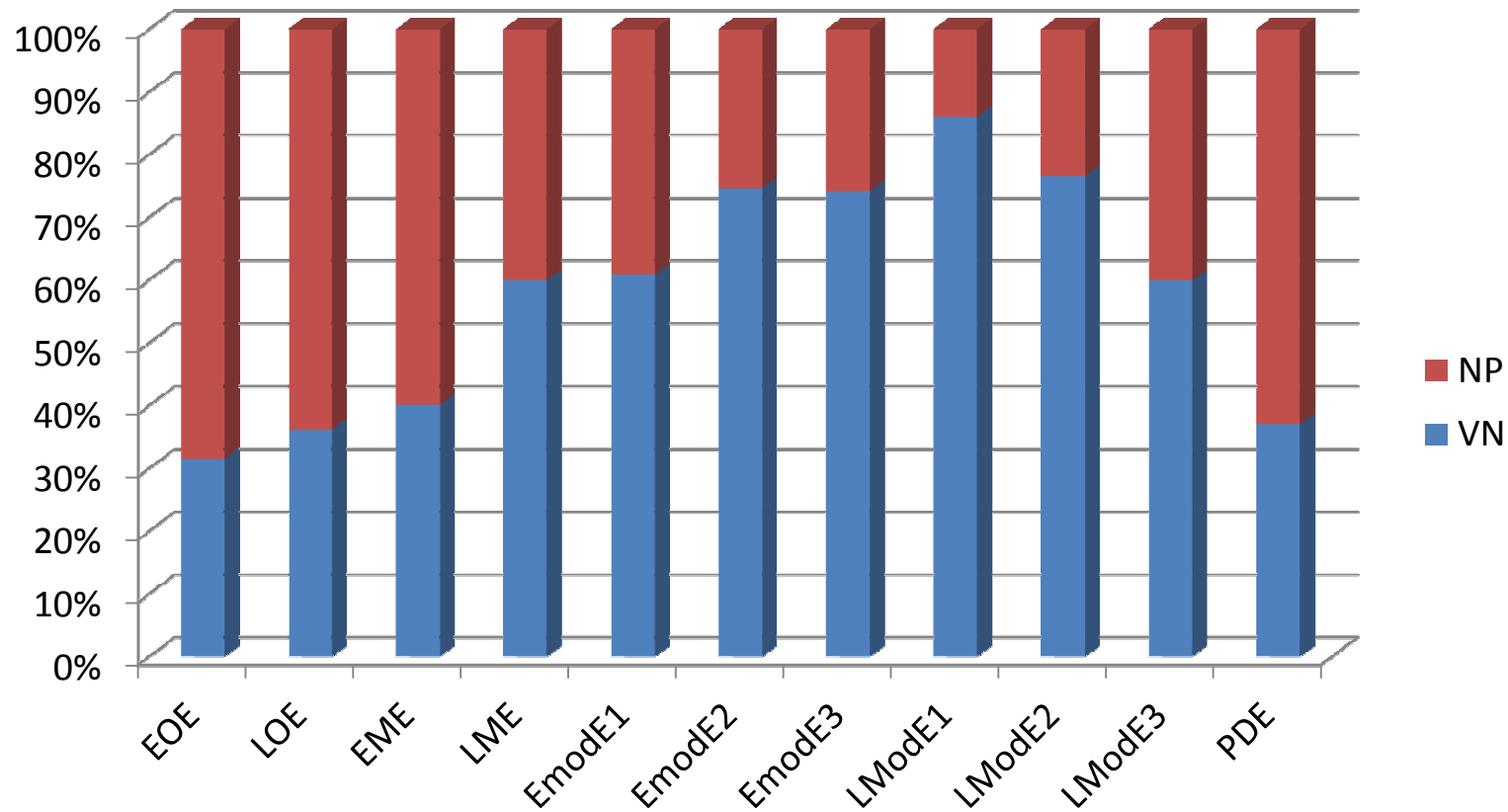
1. Corpora
2. Noun *need* in verbo-nominal patterns
3. The semantic range of VNPs with *need*
4. The semantic developments of VNPs per structure type
5. Conclusion

# 1. Corpora

Sub-period	Time span	Corpus	Number of tokens
OE	750–1150	<i>York-Toronto-Helsinki Parsed Corpus of Old English Prose (YCOE)</i>	1.44 mln
ME	1150–1500	<i>Penn-Helsinki Parsed Corpus of Middle English, Second Edition (PPCME)</i>	1.15 mln
EModE	1500–1710	<i>Penn-Helsinki Parsed Corpus of Early Modern English (PPCEME)</i>	1.80 mln
LModE	1710–1920	<i>Corpus of Late Modern English texts (Extended version) (CLMETEV)</i>	14.97 mln
PDE	1972–2005	<i>Wordbanks Online Corpus (WB) (only British subcorpora)</i>	259.50 mln

## 2. *need* in verbo-nominal patterns

- The noun *need* is increasingly found in VN-patterns up to LModE (but frequency drops in LModE2-PDE):





## 2. *need* in verbo-nominal patterns

period	VN	VN %	NP	NP %	total
EOE	6	31.6	13	68.4	19
LOE	89	36.2	157	63.8	246
EME	87	40.1	130	59.9	217
LME	145	59.9	97	40.1	242
EmodE1	59	60.8	38	39.2	97
EmodE2	47	74.6	16	25.4	63
EmodE3	23	74.2	8	25.8	31
LModE1	74	86.0	12	14.0	86
LModE2	213	76.6	65	23.4	278
LModE3	311	59.9	208	40.1	519
PDE	111	37.0	189	63.0	300

## 2. *need* in verbo-nominal patterns

- Structural patterns: focus on 2 types
  - (1) **HAVE**-structures (*have (no) need*)
  - (2) **BE-exist** structures (analysed as predicative in Loureiro-Porto 2010)
    - there BE (no) need*
    - it BE (no) need*
    - (no) need BE*
    - (no) need happens*

*Excluded:*

- (3) *if/when/as/etc. need BE (without compl):* rightly analysed as 'idiomatic' by Loureiro-Porto (2010)

## 2. *need* in verbo-nominal patterns

- Structural patterns: focus on 2 types
  - (1) **HAVE**-structures (*have need*)
  - (2) **BE-exist** structures (analysed as predicative in Loureiro-Porto 2010)

*there BE (no) need*

*it BE (no) need*

diachronic predecessors

*(no) need BE*

*of there BE need*

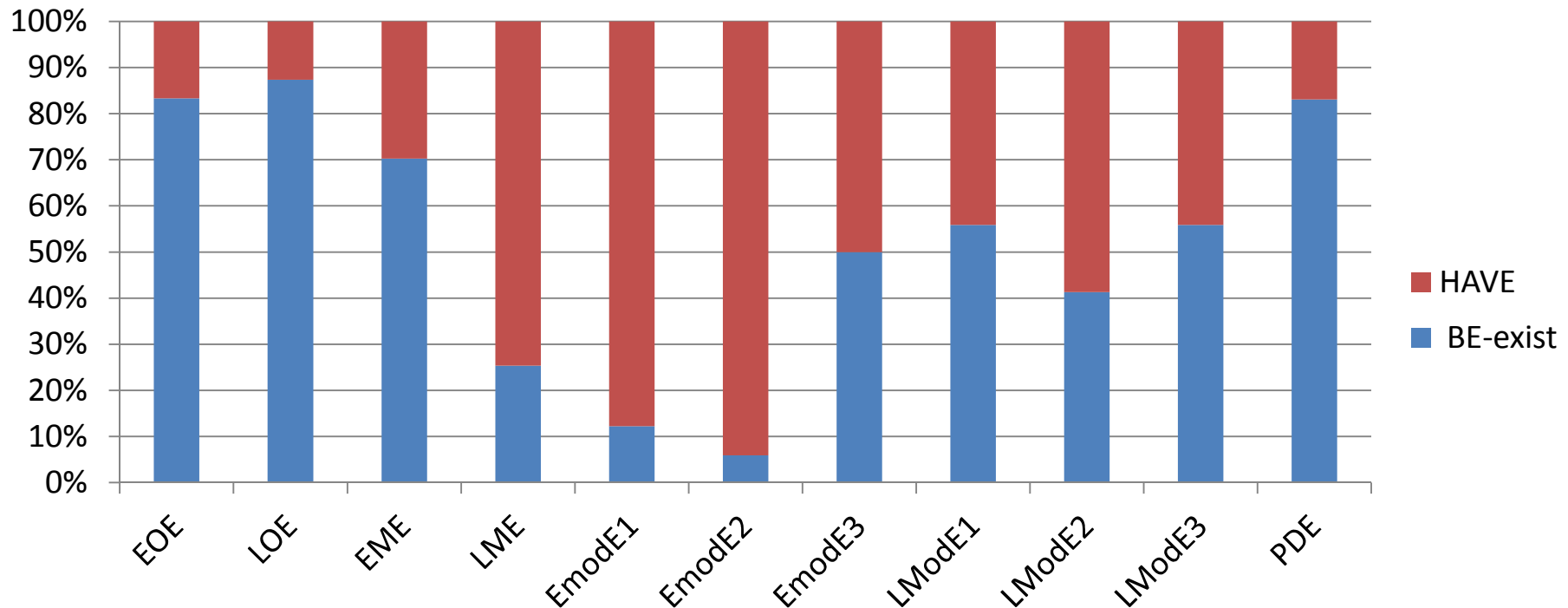
*(no) need happens*

*Excluded:*

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## 2. *need* in verbo-nominal patterns

- study by Loureiro-Porto (2010) (OE → EModE): *be need* is replaced by *habban neode*: change from oblique Exp to nominative Exp (cf. development of impersonal (SBL) cxns)
- Our results: increase of **BE-exist** structures as of EModE3



## 2. *need* in verbo-nominal patterns

- We looked at positive and negative variants of these patterns
- Formal marking of **negation**:
  - adnominal 'no' (*no need*) is by far most frequent
  - alternatives: *little need*, negation on main verb
  - negative element in postmodifier (*need of no judge*) is very infrequent and invariably correlates with lexical meaning (1500-1570)

### 3. The semantic range of VNPs with *need*

### 3. The semantic range of VNPs with *need*

- Broad categories: lexical, dynamic, deontic meaning
- Cross-cut by polarity:
  - Within **positive sphere** of the semantic domain: 5 semantic subtypes
  - Within **negative sphere** of the semantic domain: 7 semantic subtypes

# 3. The semantic range of VNPs with *need*

## 3.1 Positive polarity

### (1) lexical meaning

(1) *I thoughte I wolde take some spendyng money wyth me for I wot not what **nede** I shall haue therof* (PPCEME 1500-1570)

→ need of an entity

### (2) participant-inherent need (dynamic)

(2) *You **had more need** to sleepe then eat* (PPCEME 1570-1640)

→ need of realization of a State-of Affairs (SoA), inherent in participant ('you need to sleep; physical need') (cf. Nuyts 2006: 3)

### (3) participant-imposed or situation-inherent necessity (dynamic)

(3) *gif **hit neod beo** þæt læwede men for worces þingan þæder in gangon, swa hi gedon hæbbon, swa beon hi on ofeste utweard* (YCOE 1050-1150)

'If there is need for lay people to go in there [i.e. the monastery] for matters of work, as soon as they are ready, they are going away in haste'

→ need of realization of an SoA, inherent in the situation ('if the circumstances were such that laypeople had to come to the monastery, e.g. the monks needed to build s.th.') (cf. Nuyts 2006: 3)



### 3. The semantic range of VNPs with *need*

#### 3.1 Positive polarity

**(4) dynamic + inference of obligation (deontic)**

(4) *owyr Lord seyde to hir, "Dowtyr, it is gret nede to prey for hir, for sche hath ben a wykkyd woman & sche xal be ded."* (PPCME 1420-1500)

→ need imposed by the situation (the woman has been wicked) + inference that the SoA is deemed desirable by speaker (deontic) (cf. Nuyts et al. 2010)

**(5) deontic: obligation/desirability**

(5) *And for þis alle cristene men han nede to knowe byleue of þe gospel, and so to knowe þe lif of Crist, and þe wisdom of hise wordis* (PPCME 1350-1420)

→ the need to know the belief of the gospel can hardly ever be conceived of as being imposed by the situation

→ rather, it is the speaker who considers it desirable on moral grounds that the SoA be realized (cf. Nuyts et al. 2010)

# 3. The semantic range of VNPs with *need*

## 3.2 Negative polarity

### (1) lexical meaning

(6) *Nis Gode nan neod ure æhta* (YCOE 950-1050)

'God has no need of our possessions/There is no need to God of our possessions'

→ absence of need of an entity

### (2) absence of participant-inherent need (dynamic)

(7) *but there is a kind of borrowers in this Citie which feede Vsurers as the bellows kindle the fire; for they haue no neede to borrow, but because they would bee rich* (PPCEME 1570-1640)

→ absence of need of realization of an SoA inherent in participant

('they have no need to borrow; they can get around without borrowing')

### (3) absence of participant-imposed or situation-inherent necessity (dynamic)

(8) *Worde was caryed to the churche, where syr Olyver was at mase and yt was no nede to yntrete hyme to come; for with speed bothe he and my lady hys whyffe departyd owte of the churche* (PPCEME 1500-1570)

→ absence of need to entreat Sir Oliver because of the circumstance that he is on his way already

### 3. The semantic range of VNPs with *need*

#### 3.2 Negative polarity

##### (4) absence of dynamic necessity + inference of absence of obligation

(9) *And he sayde nay, for sothe he had no nede [to confess], and sayde he stele neuer ox ne cow ne hors, ne neuer dyd no greues synne* (PPCME 1420-1500)

→ there are no circumstances that compel him to confess (he did not steal anything) + implicature: *he*-person exempts himself from the obligation to confess

##### (5) absence of dynamic necessity + inference of prohibition

(10) *But yf thou wylt gyue nature that she nedeth, and replenish her to [the] ful, then is it no nede for the to seke for the abunda[n]ce of fortune, for nature is contentyd with verye lytle thynges. And if thou wylte choke nature wyth to muche, eyther [that] thou geuyst will be vnpleasaut, or hurtfull unto the* (PPCEME 1500-1570)

→ there are no circumstances that compel you to look for the abundance of fortune (nature is happy with small things) + implicature: don't do it!

### 3. The semantic range of VNPs with *need*

#### 3.2 Negative polarity

##### (6) absence of obligation (~ *needn't*) (EXTERNAL NEGATION)

(11) *"My dear," said she, "you **have no need** of making any apology. I am not in the least offended, and am convinced you will never deny me what I shall desire."*  
(CLMET 1710-1780)

→ 'I exempt you from making any apology'; hic et nunc, speaker as modal source

(12) *'**There's no need** to ask my pardon,' replied her friend* (CLMET 1780-1850)

##### (7) prohibition (~ *mustn't*) (INTERNAL NEGATION)

(13) *but the dangers and difficulties our children are beset with, after they are got forth into the world, are enow – **little need is there** to expose them to unnecessary ones in their passage to it.* (CLMET 1710-1780)

→ 'absence of circumstances to expose children to unnecessary difficulties' is not relevant

→ absence of obligation ('we don't have to expose them'): not relevant

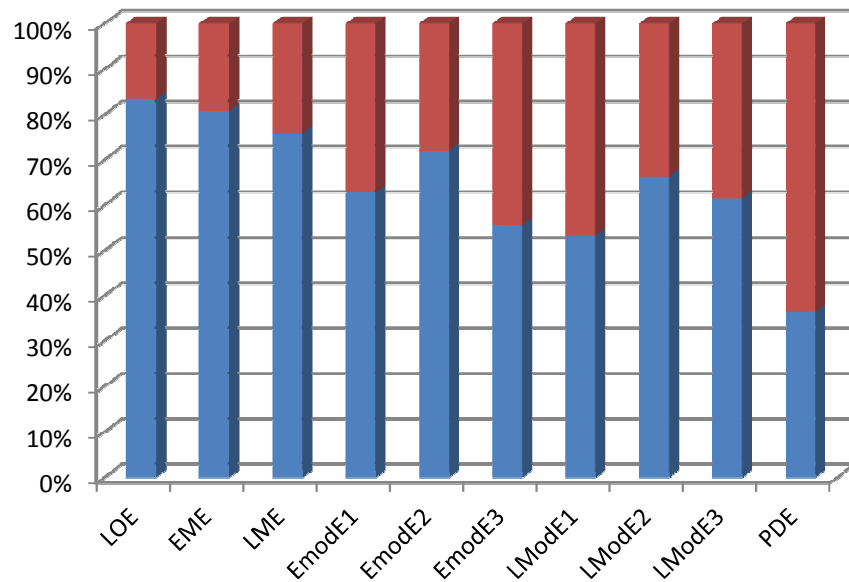
→ rather: 'there is no justification for exposing our children ...'

→ prohibition

## 4. The semantic developments of VNPs with *need*

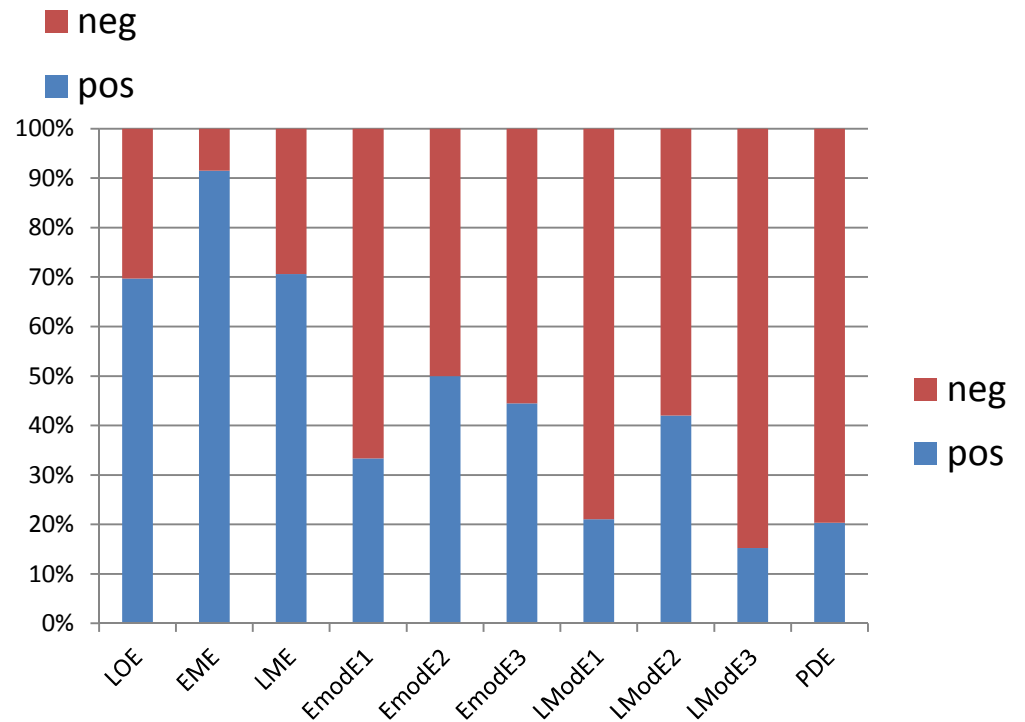
# 4. The semantic developments of VNPs

- overall increase of negative polarity over time:

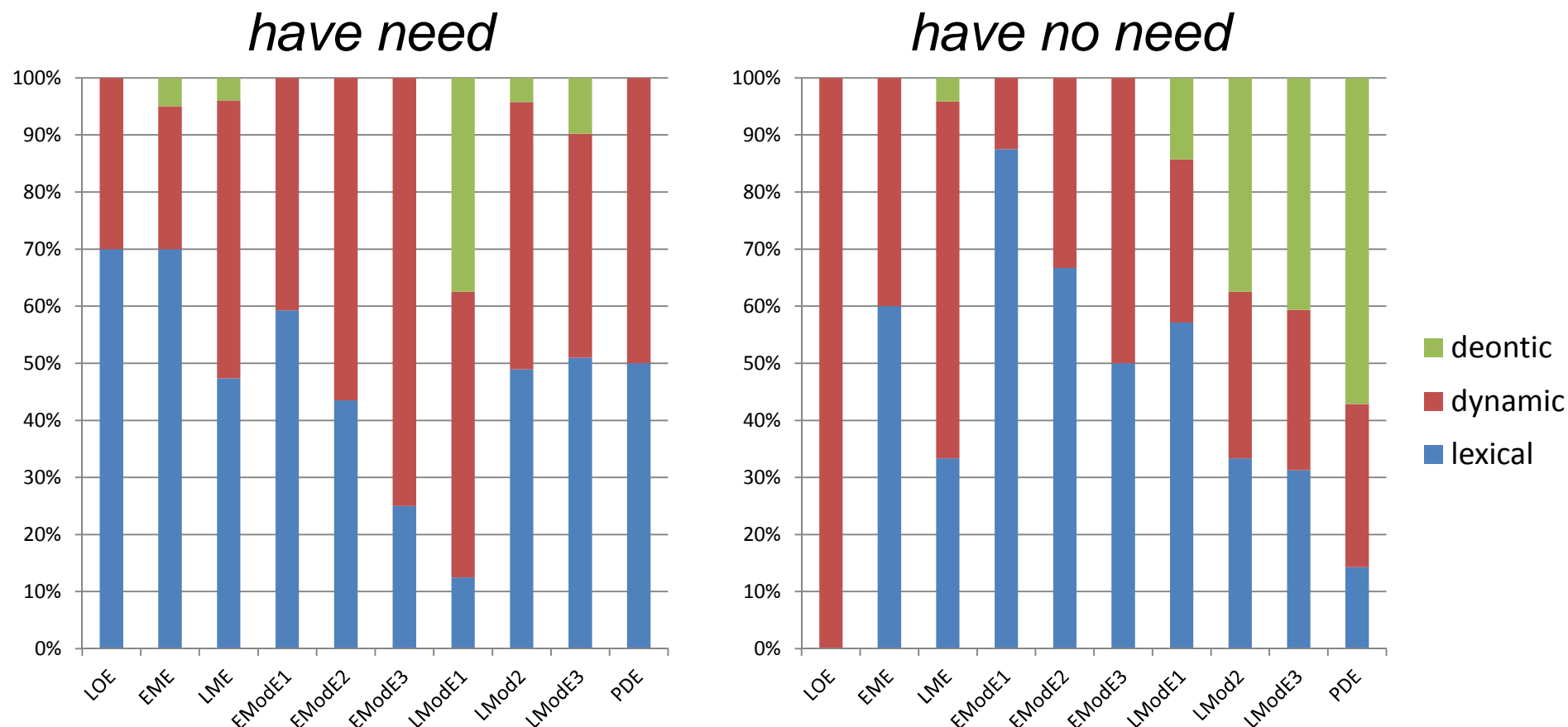


BE-exist need →

← HAVE need

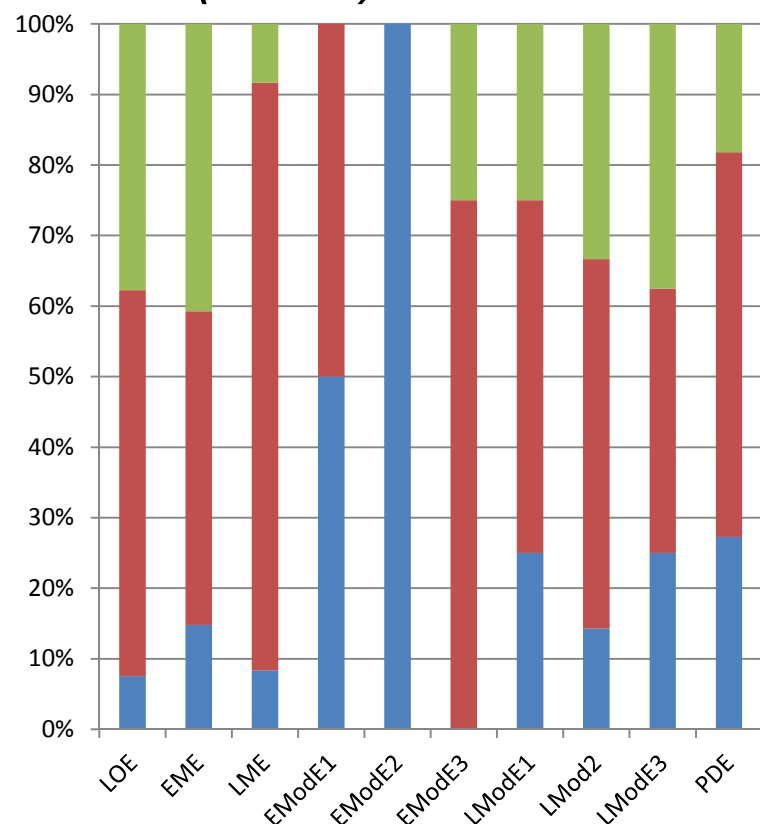


- clear tendency for 'have no need' to stronger delexicalization and grammaticalization (modal uses increasingly predominate) → interaction between negation and semantic abstraction
- over ModE en PDE 'have no need' increases its deontic uses whereas 'have need' loses them

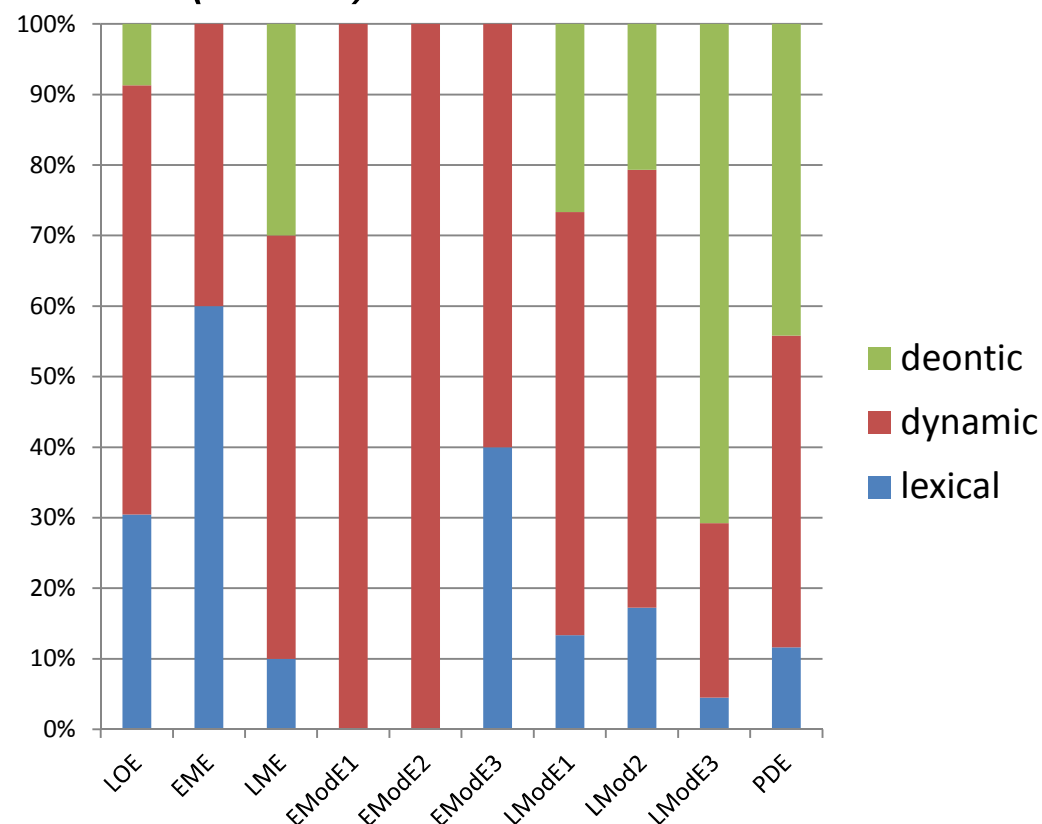


- '(there) BE no need' delexicalizes and grammaticalizes somewhat more strongly; modal uses increasingly predominate
- in PDE '(there) BE no need' ends up with equal portions of dynamic and deontic uses whereas with '(there) BE need' dynamic ones predominate

*(there) BE need*

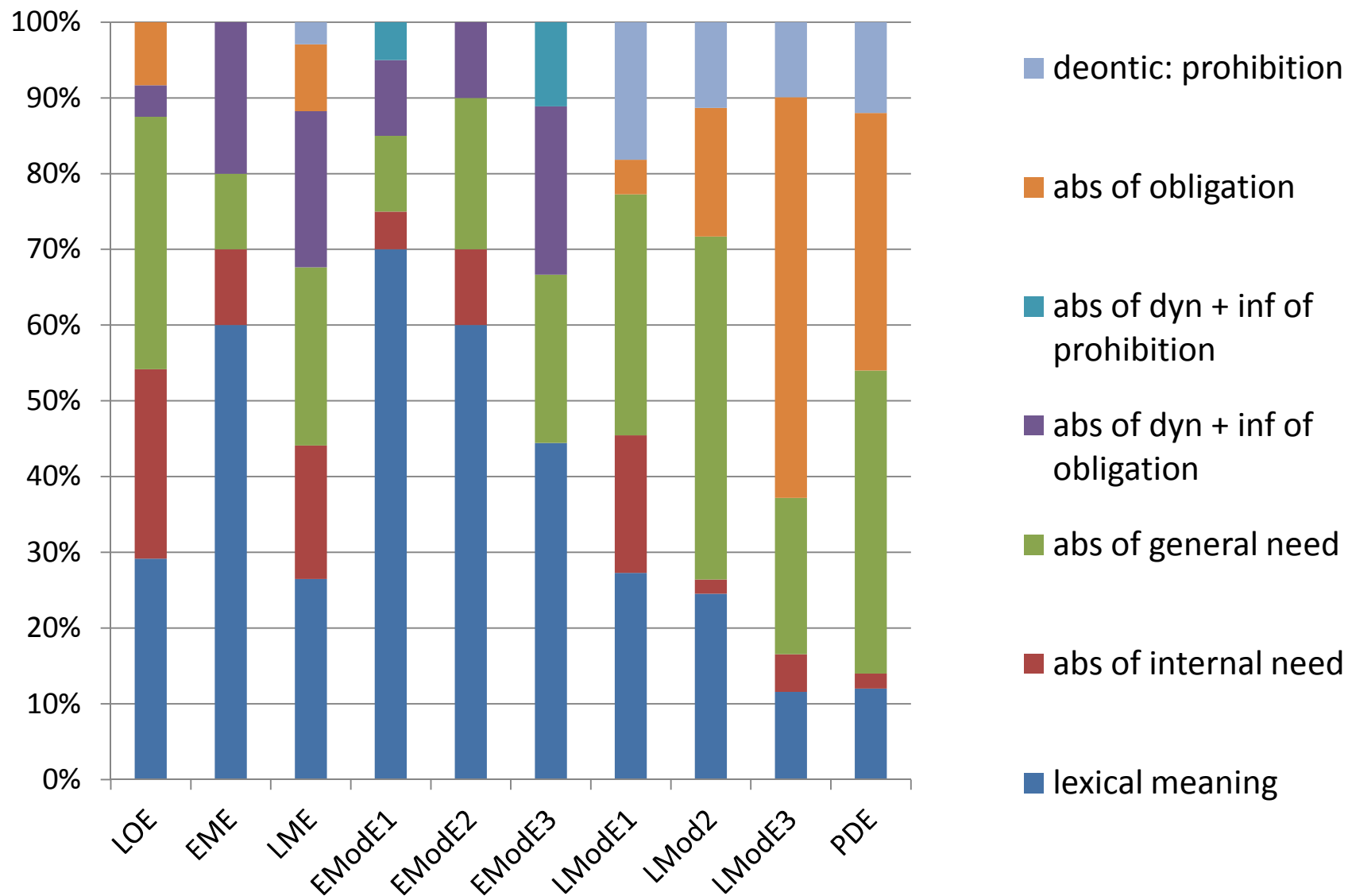


*(there) BE no need*





## Overall development with NEG polarity (*'have no need'* & *'(there) BE no need'*)



## 4. The semantic developments of VNPs

- chronological development within the **negative modal domain**:
  - (i) dynamic modality + external negation: absence of internal need/general necessity
  - (ii) deontic modality + external negation: absence of obligation
  - (iii) deontic modality + internal negation: prohibition
- prohibition emerges as an invited inference of (i) and (ii) in EModE, and crystallizes in LModE
  - negative polarity both motor and reflex of **increasing grammaticalization**
  - specific instantiation in negative polarity domain of crosslinguistic cline **dynamic > deontic** (Van der Auwera & Plungian 1998; Narrog 2005)

## 4. The semantic developments of VNPs

- our proposal: increased '**systemicness**' (Davidse & De Wolf 2012):
  - paradigmatic organization of grammar conceived of in terms of interdependencies between features of different systems, e.g. polarity and modality (Halliday 1961, 1991, 1992)
  - increased grammaticalization involves not just extension to values within one but within several interrelated systems
- grammaticalizing expression comes to express more inter-related grammatical features belonging to different systems

## 5. Conclusions

- *have / (there) be (no) need* : **progressive grammaticalization**:
  - greater schematicity of constructional template (Trousdale 2012)
  - increased integration of construction into grammatical paradigm (Diewald & Smirnova 2012)
  - increased interaction between grammatical systems (Davidse & De Wolf 2012)
- *have / (there) be (no) need* : have acquired all possible combinations of modality and polarity that auxiliaries such as *need (to)* can express

## 5. Conclusions

- **Semantic development:** evidence for lexical > participant-inherent need > participant-imposed necessity > deontic pathway
  - Lexical and participant-inherent necessity, i.e. semantic types closest to source meaning of *need*, predominantly **positive polarity**
  - Situation-inherent /participant-imposed necessity and deontic modality, i.e. semantic types further removed from source meaning, predominantly **negative polarity**
- Correlation between delexicalization and negation

## 5. Conclusions

- Evidence from other case-studies on *have NO + NOUN /there BE NO + NOUN + predicate/proposition*
- that negative determiner is trigger of grammaticalization of VNPs:
  - *have no **question**/there BE no question* (Davidse & De Wolf 2012)
  - *have no **doubt**/there BE no doubt* (Davidse, De Wolf & Van linden forthc)
  - *have no **wonder**/it BE no wonder* (Van linden, Davidse, Brems, Gentens in prep)
- involving similar increases of
  - abstraction
  - integration into paradigm of modal (mirative) modifiers
  - interaction between modality (mirativity) and polarity

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