## From constructional expansion to constructional explosion: the case of transparent free relatives

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#### Outline

- The noun phrase
- peripheral modifiers
- Constructional expansion
- Constructional explosion (transparent free relatives)
- Conclusions

#### The noun phrase

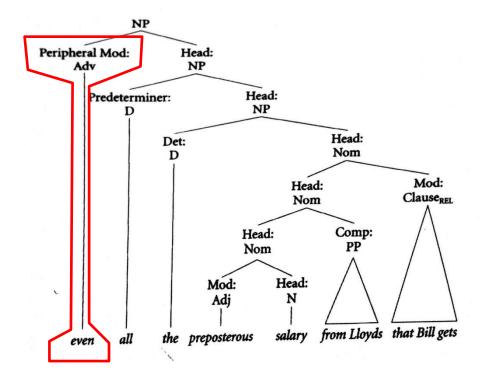
$$[_{NP} the_{D} [... [man_{N}]]]$$

- Common idea: determiner is the left edge
  - Processing: determiners mark the start of a noun phrase (Hawkins 2004:86-93)
  - The idea is so enthusiastically embraced by some, that the NP is rechristened into 'DP' (Abney 1987 and subsequent research)
- Now is it?
  - No (trivially): pre-determiners all and both (and other, more complicated instances: such, quite, so/how/... ADJ a etc.)
    - They are seen as part of the D-projection
    - They sometimes *are* determiners: *all men* vs. *all the men*
  - No (less trivially): peripheral modifiers
    - (1) Only a fool would risk doing so. (BNC)
    - (2) resulting in possibly a damaging loading on the switching device and overheating with loss of efficiency. (BNC)

## Peripheral modifiers

$$[_{NP} even_{Pm} [ [all_{Pre-D} the_{D}][...[men_{N}]]]]$$

Close to the NP template in Payne & Huddleston (2002:332):



#### Peripheral modifiers

- What kind of elements can occupy the peripheral modifier slot?
   (Payne & Huddleston 2002:436-439)
- 1. Focusing modifiers (e.g. only the corner of the painting)
- 2. Scaling modifiers (e.g. almost the same conclusion)
- 3. Frequency modifiers (e.g. *invariably the most unconvincing explanations*)
- 4. Domain modifiers (e.g. architecturally the most impressive building)
- 5. Modal modifiers (e.g. possibly the worst performance of his career)
- 6. Evaluative modifiers (e.g. unfortunately very limited qualifications)
- 7. Quantifying modifiers in predicatives (e.g. *She is every inch a philosopher*)
- 8. Reflexives (e.g. The manager herself had approved the proposal)
- ⇒ (interpersonal) adverbials.
- ⇒ How did ad*verb*ials end up in the *noun* phrase?

#### Peripheral modifiers

- Peripheral modifiers are an Early Modern English innovation
- Started off with focusing adverbs:
  - Semantic reanalysis (Traugott 2006):
  - (1) Pe barons portiond be lond euen bam bituene (c. 1330, OED s.v. even, adv.) 'The barons divided the land equally between them.'
  - (2) These sweet thoughts, doe euen refresh my labours (1610, OED s.v. even, adv.)
  - (3) and concluded the horrid sport by kicking and mangling the heads, cutting of the lips, cheeks, ears, and noses; they even took out the jaw-bones, which they smokedried, together with the right hands, to carry home, as trophies of their victory (1796, OED s.v. smoke-dry [context added])
  - (4) The tone of insolent superiority assumed by even the gutter urchins. (1863, OED s.v. even, adv.)
  - Reordering to adjacency (Harris & Campbell 1995:220-224, 237)
  - (5) The eldest sone shall onlye enheryte his father. (1531, OED s.v. only, adv., conj., and prep.)
  - (6) Only the oldest son shall inherit from his father.

## Frequency increase

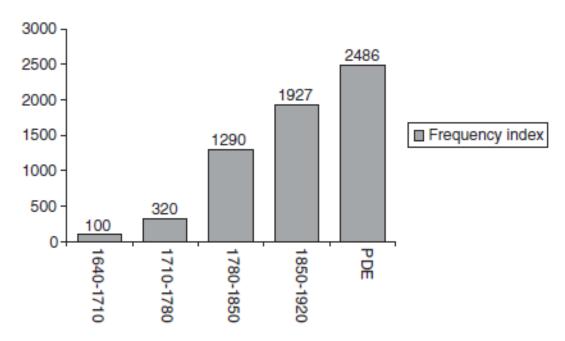


Figure 1. PP-internal peripheral modifiers in Modern English (indexed: 1640–1710 = 100)

CEMET/CLMETEV/CB (Freq.: 1.0 per Megaword > 25.6 per Megaword)

#### **CONSTRUCTIONAL EXPANSION**

# Expansion of group membership ('attractor position', Bisang 1998)

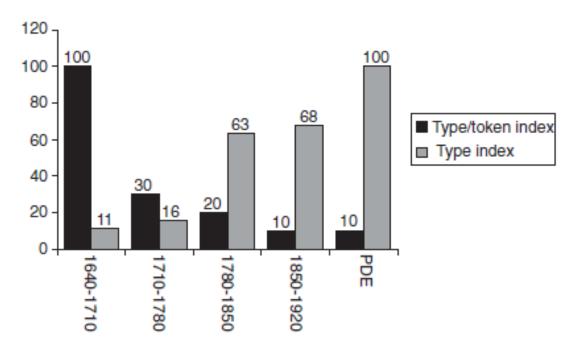
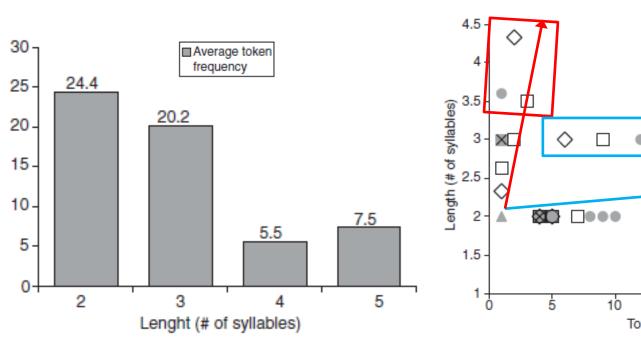
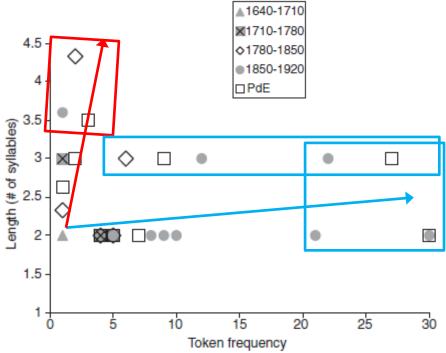


Figure 2. Lexical variation in the peripheral modifiers (indexed: 1640-1710 = 100 for types; PDE = 100 for type/token ratio)

## Increase in 'size'



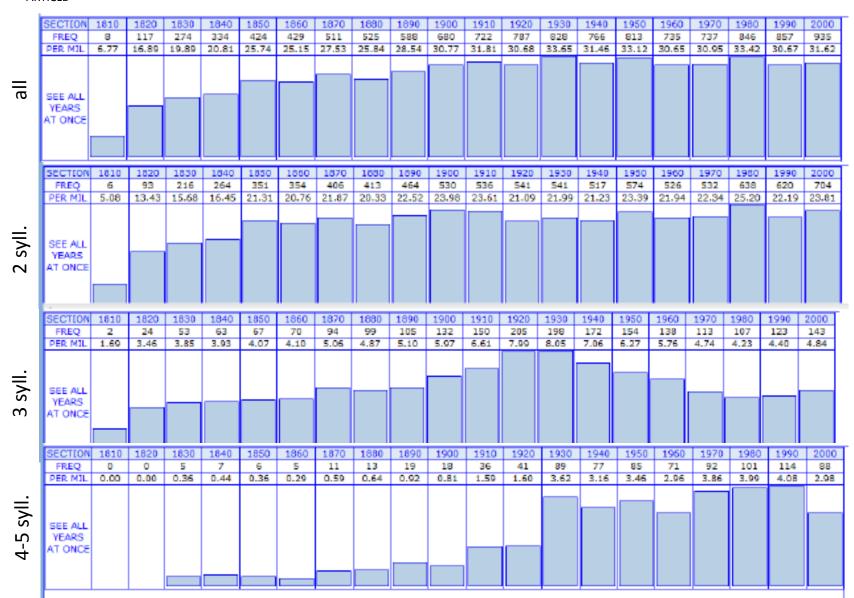


#### Cross-validation in COHA

#### **PREPOSITION**

absolutely, approximately, barely, essentially, exactly, fully, hardly, merely, nearly, only, practically, precisely, roughly, scarcely, substantially, surely, virtually

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#### **CONSTRUCTIONAL EXPLOSION**

#### Transparent free relatives

- Transparent free relatives (Wilder 1999; McCawley 1988, ch.22, with reference to work by Kajita)
  - (1) What seemed to be the gunshots were picked up on Channel One during that interval. (Google)
- Wait a minute: is this not just an ordinary free relative?
  - No: the verb in the matrix clause ("were") is in the plural.
  - Ok, but why is this so special?
  - Because normally, free relatives are singular NPs:
    - (2) What you take with you on the trip **is/\*are** limited to 20 items of clothing.
  - Why?
  - Because the free relative pronoun ("what") is the head.
  - And why does (1) behave differently?
  - Because the free relative clause is transparent: you can look through the free relative pronoun, right into the right-peripheral internal constituent ("the gunshots")

#### Transparent free relatives

- Transparent free relatives are transparent with regard to a whole bunch of features:
  - Verbal agreement:
    - (1) What seemed to be the gunshots were/??was picked up on Channel One during that interval. (Google)
  - Definiteness:
    - (2) First, there are what may be termed contractual techniques (BNC)
    - ?There is what he purchased at the art auction in his cellar
  - Animacy:
    - (4) The little boy was kissed by what was understood to be his mother. (Google)
    - (5) People with those skill sets are often insulted by who/\*what McMaster hires for their management training program. (Google)

**–** ...

#### Transparent free relatives

- How are transparent free relatives to be analysed syntactically?
- Various analyses proposed (see Schelfhout et al. 2004 and Van de Velde 2009 for overviews)
- Reanalysis/analogy with other Peripheral Modifiers:

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[NP \quad even_{Pm} \quad [the_D [gunshots_N]]] \\ only_{Pm} \\ undoubtedly_{Pm} \\ presumably_{Pm} \\ what seemed to be_{Pm}
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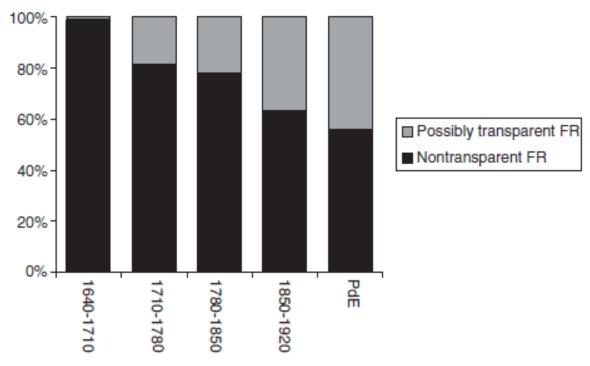
 Explains the syntax (see Van de Velde 2009, 2011; De Smet & Van de Velde 2013) as well as the semantics (interpersonal, often evidential value)

- The diachrony is not easy to investigate:
  - it is often not clear whether free relative clauses are transparent: for verbal agreement they need to have a plural content kernel AND they need to be in subject position, which is rarely the case for such heavy constituents.
    - She was wearing [NP-DO] what seemed to be a red silk ball gown, embroidered with silver flowers on the bodice and very long and full in the skirt]. (BNC)
  - They vary considerably in form. The only thing all free relatives have in common is the free relative pronoun, which is – to a problematic extent – syntactically homonymous.

#### Solutions:

- Set off unambiguous 'initial contexts ' against 'bridging contexts' (Heine 2002)
  - (1) It is unwise to guess about performance criteria or to choose from a menu, as these usually represent no more than a picture of what is fashionable at the moment. (CB)
  - (2) The first shot showed three bodies, side by side in what appeared to be a desert. (CB)
- Count the number of transparency diagnostics:
  - (3) After all he bore no responsibility for [what had happened the day before]<sub>=this</sub>. (CB)
  - (4) In [what seemed no time at all] $_{\neq this}$  Anthony found himself steering the Morris towed behind the truck. (CB)

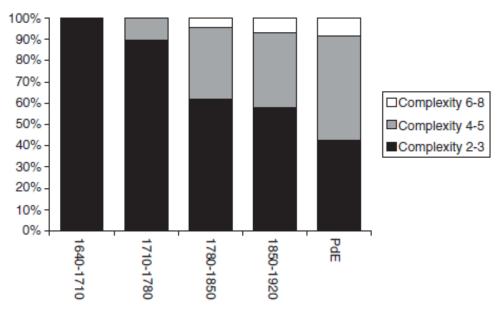
PP-internal TFR (see Van de Velde 2011 for details about the corpus query)



Corpus	Period	Non-transparent FR	Possibly transparent FR	Total
CEMET	1640-1710	98	1	99
CLMETEV	1710-1780	129	29	158
CLMETEV	1780-1850	244	68	312
CLMETEV	1850-1920	194	112	306
CB	Present-day E.	204	162	366
Total	•	869	372	1241

Increase in internal complexity in the 'possibly transparent free relatives':

- (1) The English retaliated in what seemed an insulting way (CB)
- (2) Lady Rice, erstwhile mistress of what was now described in guide books as a stately home (CB)



Corpus	Period	Complexity 2–3	Complexity 4–5	Complexity 6–8	Total
CEMET	1640-1710	1	0	0	1
CLMETEV	1710-1780	26	3	0	29
CLMETEV	1780-1850	42	23	3	68
CLMETEV	1850-1920	65	39	8	112
CB	Present-day E.	69	79	14	162
Total	•	203	144	25	372

#### **Conclusions**

#### Growth:

- On the level of the syntactic template: specialised slot for interpersonal modification (peripheral modifiers)
- On the level of the slot members:
  - Increase in frequency (token-level)
  - Increase in slotfillers variance (type-level)
- From constructional expansion to constructional 'explosion':
  - Reanalysis/analogy of (specific type of) free relatives
  - Gained new momentum: again rise in frequency, slotfiller variance
- We need a constructional view on grammaticalisation
  - Onomasiological approach (Croft 2010)
  - Construction-based (Himmelmann 2004, Traugott & Trousdale 2013)

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