A semantic solution to the progressive passive puzzle

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Structure of this talk

- First I’ll introduce the progressive passive puzzle, and previous attempts at solutions
- Then I’ll talk about the semantics of English be, particularly ‘agentive be’
- Finally I’ll present a diachronic scenario that links the two
The progressive passive

Formed with:

- a finite form of \textit{BE}
- then a present participle (\textit{being})
- then the past participle of the lexical verb

First attested in the second half of the 18th century (van Bergen, 2013, 182). An early example:

(1) \textit{ODE To a PIG, while his Nose \textit{was being bored}.}

The puzzle

- The progressive – with *be* as auxiliary – is available from at least Middle English.
- The passive – with *be* as auxiliary – is available from at least Middle English.
- So why is the combination of the two not attested until 1761? (cf. Denison, 1993, 440, Warner, 1995, 533)

(diachronic puzzle – not like the present perfect puzzle of Klein, 1992)

Weinreich et al. (1968, 102): “What factors can account for the actuation of changes? Why do changes in a structural feature take place in a particular language at a particular time, but not in other languages with the same feature, or in the same language at other times?”
Previous explanations: functional

- Visser (1963–73, §2158): “the urge, permanently inherent in English as an analytic language, to signal separately every separate shade of meaning, function or connotation”. Local cause: analogy with being + adjective. BUT this construction is not earlier (Denison, 1993, 442).

- Denison (1993, 440): these forms “fill a system gap in the patterning of English verbs”. Local cause: regularization of do-support meant that all verbs with the NICE properties complemented by another verb were auxiliaries except progressive be. BUT do-support is virtually categorical by 1750 before the progressive passive emerges.

- Denison (1998, 149–150): earlier form, the passival (The house was building), with inanimate subject, became ambiguous when the active progressive began to take inanimate subjects. BUT the chronology isn’t right for that (Hundt, 2004a; Kranich, 2010). 91 of 130 early examples of progressive passive have non-human subjects (Hundt, 2004b).
Previous explanations: formal

- Traugott (1972, 178): “an excellent example of simplification by generalization”. BUT why in the 18th century?

- Warner (1995, 1997): reanalysis after which auxiliaries are frozen forms lacking the morphological interrelationships of full verbs. Local cause: loss of *thou* (removing last vestige of inflection on modals) and fixing of *do*-support.

- Cowper & Hall (2012): restructuring of tense and aspect system (two syntactic heads rather than one). Local cause: reanalysis of *-en* as exponent of passive rather than resultativity. Resultative *be*-perfect in decline throughout eighteenth century. (Must assume accidental homophony between past participle *-en* and passive *-en.*)
Towards a new explanation

Most of these approaches propose a local cause – some more plausible than others.

Warner and Cowper & Hall also link the change to other syntactic changes occurring at the same time.

But none of the approaches considers the semantics of either the progressive or of be in detail.

Warner (1997, 162): “Semantic and functional contrasts ... are not central determinants in the same sense as the availability of morphosyntactic categories.”
The semantics of **BE**

- Traditional (Aristotelian/Russellian) approach: **BE** is semantically completely vacuous, a verbal expletive needed to bear tense.
- Partee (1987): \( \lambda P. P \) (the identity function)
- However, **BE** carries agentive implications in the progressive (Partee, 1977).

(2) a. Mary is noisy.
   b. Mary is being noisy.
   c. *Mary is being awake.
   d. *Mary is being a murderer.
   e. *The river is being noisy.
   f. *The children are being quiet because they are asleep.

How to account for this?
Two **BEs** (or not two **BEs**)

- Partee (1977): there is an additional [+active] **BE** that is homophonous (cf. also Dowty, 1979).
- Problems (Rothstein, 1999, 360–362):
  - little supporting evidence (stipulative)
  - also doesn’t capture certain parallels and differences between the progressive and small clauses
  - Unlike other verbs, **BE** does not inherently belong to any of the Vendler (1967) aspectual classes
  - **BE** + AP may be assigned to stative, activity, or achievement depending on contextual factors
Ingredients of Rothstein’s account

- BE packages non-atomic states into atomic eventualities.
  \[\lambda S \lambda e. \exists s \in S : e = l(s)\]

- \(S\) is a set of states and \(l\) is a locating function.

- Adjectives (before predicate abstraction): \(\lambda s. A(s) \land \text{Arg}_1(s) = x\)

- Verb classes (leaving accomplishment aside):
  - Statives: \(\lambda P \lambda e. P(e)\)
  - Activities: \(\lambda P \lambda e. (DO(P))(e)\)
  - Achievements: \(\lambda P \lambda e. (BECOME(P))(e)\)

- \(\text{BE} + \text{AP}\) is then \(\lambda e. \exists s[A(s) \land \text{Arg}_1(s) = x \land e = l(s)]\)
Stative vs. activity BE

- Example adjective: *obnoxious* (Rothstein, 1999, 404)

- Stative: \( \lambda P \lambda e. P(e) (\lambda e. \exists s[OBNOXIOUS(s) \land \text{Arg}_1(s) = x \land e = l(s)]) \)
  
  \[ = \lambda e. \exists s[OBNOXIOUS(s) \land \text{Arg}_1(s) = x \land e = l(s)] \]

- Activity: \( \lambda P \lambda e. (DO(P))(e) (\lambda e. \exists s[OBNOXIOUS(s) \land \text{Arg}_1(s) = x \land e = l(s)]) \)
  
  \[ = \lambda e. (DO(\exists s[OBNOXIOUS(s) \land \text{Arg}_1(s) = x \land e = l(s)])) \]
The progressive

- Stative verbs are incompatible with the progressive (Dowty, 1979, Rothstein, 1999, 402 among many others).
- (Rothstein, 1999, 409–416 discusses the semantic details of this, based on the theory of the progressive in Landman, 1992.)

(3) *John is knowing French.

- But be can have an activity reading.
The underspecification of BE is clearly not universal. Other languages don’t permit an activity reading.

(4) Hij is een dwaas aan het zijn.
he is a fool in the be.INF
‘He is being a fool.’

So has the activity reading of BE in English always been available? Or is it a more recent development?
A diachronic scenario

I hypothesize that English *be* originated as a lexically stative verb – as Rothstein argues is the case for other verbs such as *resemble* – and underwent semantic bleaching during the late 18th century to become underspecified for aspectual class.

This predicts that the rise of the progressive passive should be concomitant with the rise of other uses of *be* with an activity reading.

...Is this true? How can we test it?
The literature

➤ The literature generally agrees that the progressive passive precedes uses of *being* with nominal or adjectival complements (see e.g. Denison, 1993).

➤ Visser (1963–73, 1954) argues that the opposite is true – but his much earlier examples are misanalysed.

➤ However, all this literature is based on the ‘find the earliest example’ school of historical linguistics, without use of modern corpus methods. Is the claim correct?
Corpus investigation

- CLMET 3.0 (Diller et al., 2011): a 34-million-word POS-tagged corpus covering the period 1710–1920.
- Search query: *(is|are|am|was|were) being_VBG* followed by manual inspection to root out false positives. (There will be false negatives too.)
- Problem: difficult (both in theory and in practice) to identify the envelope of variation. Not just the passival.
### Results

<table>
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<th>Year Range</th>
<th>Prog. pass.</th>
<th>Per million</th>
<th>With NP or AP</th>
<th>Per million</th>
</tr>
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<tr>
<td>1710–1780</td>
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<td>0.10</td>
<td>0</td>
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<tr>
<td>1780–1850</td>
<td>68</td>
<td>6.03</td>
<td>1</td>
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<td>1850–1920</td>
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<td>50.55</td>
<td>5</td>
<td>0.40</td>
</tr>
<tr>
<td>Overall</td>
<td>707</td>
<td>20.56</td>
<td>6</td>
<td>0.17</td>
</tr>
</tbody>
</table>

(5) You will be glad to hear ... how diligent I have been, and am being.

(CLMET 3.0; Letter from John Keats, July, 1819)

(6) ... that one of their own fraternity is being launched into eternity

(CLMET 3.0; Memoirs of Henry Hunt, 1820–2)
At first it looks as if the hypothesis is false – not only do the earliest examples of \textit{be} + \textit{being} + NP/AP start much later, but the progressive passive is vastly more common than \textit{be} + \textit{being} + NP/AP in the later period.

But things are not this simple, as \textit{be} + \textit{being} + NP/AP is much less common in present-day English too.

Random sample of 500 of 17,399 hits for the same query in the British National Corpus yields only 22 examples that are not progressive passives!

It would be good to test for a Constant Rate in the sense of Kroch (1989), but we need a handle on the other competing variants.
Conclusions

▶ I’ve proposed that the absence of the progressive passive before Late Modern English was not due to an arbitrary gap in a paradigm, but rather due to the absence of the relevant reading of *be*.

▶ The emergence of the progressive passive would thus be the automatic corollary of a lexical semantic change that permitted *be* to receive non-stative readings.

▶ Due to the much lower overall frequency of *be* + *being* + NP/AP, and the difficulty of finding other variants, it’s hard to say whether this is true or not.
Thanks for listening!


References III


