On the graduated evolution of *do*-support in English

Aaron Ecay
ecay@sas.upenn.edu
20 March 2010

1 Claim

• During the early phase of the spread of *do*-support in English, there existed a grammatical option intermediate between the verb-raising grammar of Middle English and the *do*-support grammar of Modern English.

• Specifically, this grammar merged *do* in little *v*.

• This fact has implications for the understanding of *do*-support as a cross-linguistic and historical phenomenon.

2 Background

• *Do*-support refers to the use of *do* as an auxiliary verb in Modern English.

• It arose in the Early Modern English period (1400–1700)

• Ellegård (1953) provided an early quantitative study of the evolution of the construction.

• Kroch (1989) extended the account, offering a generalization about the relationship between the rate of evolution of *do* in different grammatical contexts.

• Modern *do*-support environments follow a logistic curve (until ca. 1600).

• Their trajectories are parallel on the logit-transformed scale.

• *Do* in affirmative declaratives, not an allowable construction in Modern English, does not follow a parallel trajectory.1

• See Figure 1 for an chart of the evolution of *do*-support in various grammatical contexts

---

1Except in emphatic sentences. However, the tokens of Early Modern English *do*-support cannot in the main be analyzed as emphatics.
3 Evidence

3.1 Auxiliary stacking

(1) Examples with duplicated causative:
   a. He leet the feste of his nativitye
      Don cryen thurghout Sarray his citee.
      (Chaucer Canterbury Tales “The Squire’s Tale” c. 1400)
   b. gret plentee of wyn þat the cristene men han don let make
      (PPCME2, CMMANDEV, 47.1161 a. 1425)
   c. The fairest children of the blood royal
      Of Israel he leet do gelde anoon.
      (Chaucer Canterbury Tales “The Monk’s Tale” c. 1400)
   d. Lat do him calle, and I wol gladly here
      (Chaucer Canterbury Tales “Physician’s Tale” c. 1400)

(2) Example with duplicated do:
   a. And thus he dide don sleen hem alle three.
      (Chaucer, Canterbury Tales “Summoner’s Tale” c. 1400)

(3) Example with have:
   a. He [death] hes done petuously devour
      the noble Chaucer of makaris flour
      (Wm. Dunbar “Lament for the Makars” c. 1505)

(4) Example with modal:
   a. consequently it wyll do make goode drynke
      (A. Boorde Introduction of Knowledge a. 1542)

(5) Other examples:
   a. Fro the stok ryell rysing fresche and ying
      But ony spot or macull doing spring
      “From the royal stock rising fresh and young / without any spot or blemish spring-ing”
      (Dunbar The Thrissill and the Rois 1503, in Visser (1963) §1419)

3.2 Adverb placement

• Adverbs can function as a diagnostic for the position of words in the functional domain.
  (Figure 2)

• Each potential adverb position has a probability of use associated with it

• Kroch (1989) finds that the rate of use of AdvP₁ is roughly constant from the Middle English period to the present day

• We hypothesize that elements of the auxiliary system which are not undergoing change will have a constant rate of positioning relative to adverbs

• On the other hand, do does not show constant behavior over time (Figure 3)

3.3 Agentivity effects

• The association between agentivity and do-support provides the third argument for an intermediate grammar

• Ellegård (1953) noticed increased use of do-support in transitives (relative to intransitives)

• Extending this, using parsed corpora it is possible to separate unaccusatives from unergatives

• The unaccusatives singles out here are come, go, die, stand, rise, and arise

• Affirmative and negative declaratives may be found in Figures 4 and 5 respectively

4 Consequences

• The discovery that an intermediate grammar is detectable during the early stages of the spread of do-support has several ramifications:
  – The relationship of English with non-standard dialects of Dutch and German with affirmative declarative do-support
  – The approach to modeling the syntactic change underlying the spread
  – The understanding of syntactic change
Relative position of adverb and auxiliary

Affirmative declaratives

Figure 3: Adverb position, data from PPCEME and PCEEC

Figure 4: Affirmative declaratives in the PPCEME and PCEEC
Negative declaratives

Figure 5: Negative declaratives in the PPCEME and PCEEC

References


Kroch, A. and A. Taylor (2001). The Penn-Helsinki parsed corpus of Middle English. CorpusSearch; National Science Foundation (US); University of Pennsylvania Research Foundation.
