

## **Towards a unified mechanism for the diachronic development of periphrastic alternations**

**Background.** Here we develop a novel hypothesis regarding the diachronic development of periphrastic alternations. Whereas novel periphrastic forms typically increase in relative frequency and ultimately fully replace their (near) synonymous synthetic alternants, we focus on two cases where alternations have been recruited to express novel distinctions and maintained: (a) periphrastic and double comparatives in alternation with synthetic forms (b) periphrastic progressives in alternation with non-progressive verbal forms. Despite important differences in the two cases, we provide a unified mechanism for the stabilization of periphrastic alternations with three key ingredients: (a) a mechanism of competition between structures that differ in syntactic complexity, (b) patterns of Gricean reasoning leading to the emergence of not-at-issue meaning, (c) an understanding of register effects as an important class of non-at-issue meaning.

**The two alternations.** Our study of the two alternations is based on corpora from PPCME2 for Middle English and ENCOW16A for the effects of register on alternant choice in Present-Day English. For ME we use the segmentation of the corpus texts into 14 text types (Bible, Biography of Saint, Fiction, Handbook Astronomy, Handbook Medicine, Handbook Other, History, Homily, Religious Treatise, Romance, Rule, Philosophy, Sermon, and Travelogue) as an initial proxy for register. (a) *Comparative formation*. The alternation is most flexible with disyllabic and low frequency adjectives (Quirk et al., 1985; Hilpert, 2008), with most adjectives strongly favoring one form over the other, despite seemingly having both options available to them (LaFave, 2015). It is this interchangeability that raises questions about the type of contexts in which a certain form is preferred over the other, and indeed, register-sensitive decisions appear to affect the form selected. In Middle English, the differing forms tend to be associated with certain text types over others. Double comparatives in particular appear to be limited to religious and narrative-based text types, suggesting a stylistic usage of this form. Furthermore, they occur more often with higher frequency adjectives, indicating the double form was not chosen solely due to a writer's uncertainty over which form to use with a particular adjective. These initial patterns highlight the significance that not-at-issue meaning like register seems to play in the comparative alternation, especially with the adjectives for which neither form is clearly preferred. We have obtain similar findings from corpus and experimental data for Modern Greek, where the use of periphrastic over synthetic simple comparatives also seems to be associated with narrative-based text types. (b) *Progressive*. We queried the corpus for progressive and non-progressive verb forms and coded them subsequently for tense, aspect and mood of the clause as well as etymological origin (Germanic, French, etc.), word-length, and transitivity of the lexical verb. To better understand the effects of text type and thus gain a first look at register, we isolate the largest type in the corpus (religious treatise), and compare it with all others. Statistical analysis is being carried out to get a profile of the four categories, in other words, to verify how, say, a higher incidence of monosyllabic Germanic verbs reflects the alternation in each text type and period in the history of English. So far, we identified a higher incidence of non-progressives in general, which can reflect lower complexity and flouting of Gricean reasoning.

**The Hypothesis.** We start from two premises. (1) there are cases where two distinct syntactic structures X and Y are both able to express a particular propositional semantic content and are thus in competition. (2) in some such cases, there is a markedness asymmetry between the two structures, such that Y is more marked than X. Against this background, our hypothesis is that, in contexts where the two structures X and Y are in competition, this licenses patterns of Gricean reasoning with respect to what might motivate the speaker to flout the Maxim of Manner and choose structure Y (Horn 1984). This can yield implicatures about not-at-issue content of various

types, including evaluativity in comparatives (see Rett 2015), scalar inferences in the progressive – which has the most specific meaning, distributing the event description, according to Deo (2015:1416), over the reference interval – as well as register effects, i.e. where one structure comes to be associated with particular situational-functional contexts and not others. We propose that these implicatures originally arise in the environments (which may be circumscribed phonologically or semantically) where X and Y are in competition, but may spread to X and Y more generally, even in contexts where only one or the other is possible.

**Applying the hypothesis.** We begin with the observation that both the periphrastic and the double comparative in PDE are associated with additional not-at-issue content compared to the less complex synthetic comparative, specifically evaluativity in the sense of Rett (2015):

- (1) a. John is taller than Peter. → *Non-evaluative*  
       √*But both of them are short.*
- b. John is more tall than Peter. → *Evaluative*  
       #*But both of them are short.*
- c. John is more taller than Peter. → *Evaluative*  
       #*But both of them are short.*

While synthetic and analytic comparatives (both double and simple) are *semantically* equivalent, they differ quite radically in their distribution in PDE with respect to well known phonological and lexical factors, such that with the vast majority of adjectives only one of the alternants is possible, with essentially no variation. Double comparatives are transparently more complex than either the periphrastic or synthetic comparative structures that they alternate with (being ultimately a combination of the two other structures, Gonzalez Diaz 2006 Kytö & Romaine 2006), and yet they share with both the same truth-conditional semantics of comparison.

Assuming Horn's (1984) Principle of least effort, periphrastic and double comparatives are marked as they are more complex than their synthetic counterparts. This provides an argument in favor of accounts that posit a syntactic asymmetry between double comparative and periphrastic comparative, on the one hand, and synthetic comparative, on the other, following Bresnan (1973), Corver (1997) and Solt (2015) among others and contra e.g. Embick (2007). Given our hypothesis, this asymmetry is what allows evaluativity to arise for the former structures (Alexiadou et al. 2021 building on Rett 2015). This also provides an explanation for why synthetic comparatives are retained diachronically, as they express non-evaluative comparison. Turning to progressive structures, they are unambiguously more complex syntactically than the simple forms with which they alternate, but here there is also an asymmetry in the at-issue semantics. In particular, the two are in something like a subset-superset relationship and are in competition in a number of contexts where there is overlap in their at-issue meanings (Deo 2015, Chark 2021). Following Deo (2015), the exponents of progressive and non-progressive form a Horn scale, the non-progressive form being the weaker alternative. This crucially goes beyond at-issue interval semantics to include not-at-issue meaning components, and here again there is evidence that the distinction has been recruited for register purposes (Smith 2007). From this perspective, diachronic change is affected by a process of conventionalization which generalizes the not-at-issue meaning to all instances of the alternation across contexts.

**Outlook.** The hypothesis proposed here can do work for us in at least three ways. It provides a framework for understanding the development and maintenance of periphrastic alternations, it yields a diachronic source for the association of not-at-issue meaning with particular structures, and it can provide clues about the relative structural complexity of alternating structures.