On the nature of linearization: Insights from infixes and infixation

It is widely assumed in the generative literature that linearization is post-syntactic, stemming from various empirical and conceptual arguments (see, e.g., Chomsky 1995, Nunes 1999, 2004, Moro 2000, Berwick & Chomsky 2011). However, there is no consensus on the precise timing and nature of post-syntactic linearization, with proposals split along the following lines (among many others):

  i.   whether linearization among morphemes *within* a word obeys the same principles as linearization *among/across* words
  ii.   whether linearization within a word (in particular, of an affix with respect to its stem) takes place *prior to* or as *part of* exponent choice (vocabulary insertion)
  iii. whether linearization is determined purely by structural relationships, or whether linearization can be affected by other factors (e.g., morpheme identity) as well

For some varying proposals, see e.g. Lieber 1992, Noyer 1992, Halle and Marantz 1993, Embick 2010, Arregi and Nevins 2012, Bye and Svenonius 2012, Idsardi and Raimy 2013, Myler 2017, Harizanov and Gribanova 2019, Georgieva et al 2021, Felice 2022, Hewett 2022.

In this talk, I use infixes and infixation as a window into linearization and the post-syntactic component. In very brief, what I will propose is that basic linear order (for all morphemes) is established cyclically, from the bottom of a spelled-out structure upward, interspersed with exponent choice/insertion. In addition, I will argue for one additional point of *re*-linearization which is also cyclic, but which takes place *after* exponent choice/insertion.

First, I present evidence from infix allomorphy (Kalin 2022) that affixal morphemes must undergo a step of linearization *prior* to being exponed (realized). I show that (i) being an infix is a property of exponents, not of morphemes; (ii) suppletive allomorphs (competing exponents) of a morpheme cluster at the same edge of the stem, even when some of these allomorphs are infixes; and (iii) the choice among suppletive allomorphs is made from that stem edge. What this tells us is that the linear location of an affixal morpheme with respect to its stem—in particular, whether it precedes or follows its stem—is fixed before the morpheme has been exponed.

Next, I zoom in more closely on this step of linearization. There are (at least) two options for timing: it could be that linearization takes place over the entire spelled-out structure (prior to exponence), or it could be that linearization is interspersed with exponent choice/insertion. I argue for the latter: linearization takes place from the bottom of a spelled-out structure up, interspersed with exponent choice. The evidence for the bottom-up, cyclic nature of linearization is both conceptual and empirical. On the conceptual side: there is robust empirical support for bottom-up exponence (see Kalin and Weisser To Appear for a compilation); if exponence proceeds from the bottom up, there must still be hierarchical structure when exponence begins; but, if the structure has already been linearized before exponence begins, it is most natural/economical to assume there is no longer any structural information available. On the empirical side: If exponent choice is interspersed with linearization, we predict that linearization of a given morpheme should be able to be influenced by (i) the structural environment of the morpheme, (ii) the identity of the morpheme itself, and (iii) the phonological form of what has already been linearized/exponed. I will suggest that all of these types of information can indeed condition basic linearization.

Finally, I argue there must be one *additional* and very limited step of *re*-linearization which—unlike the previous one—is morphophonological in nature. This step involves minimal displacement from an already-linearized position, and is responsible for infixation of infixes, and infixation of other morphemes (certain mobile affixes) and larger constituents (as in so-called expletive infixation).