Disharmonic Orders in Nominalizations: morphological evidence against the FOFC.

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Biberauer et al (2007, 2008) take as their point of departure a striking asymmetry in the attestation of disharmonic languages (i.e. those in which phrases are not uniformly head-initial or head-final) and propose a hierarchical universal on the basis of these word order generalizations. This is the so-called **Final-over-Final Constraint (FOFC)**, given in (1):

(1) For all heads \{\alpha, \beta, ..\} on a single projection line, if \alpha is a head-initial phrase and \beta is a phrase immediately dominating \alpha, then \beta must be head-initial. If \alpha is a head-final phrase, and \beta is a phrase immediately dominating \alpha, then \beta can be head-initial or head-final.

The constraint rules out structures like that in (2):

(2) *[βP [αP γP ] β ]  where αP is the complement of β and γP is the complement of α.

As (2) clearly shows, the problematic structure is one in which a head-initial XP is immediately dominated by a head-final one. They show that disharmonic orders of the opposite type – where \alpha is head-final and \beta is head-initial are commonly attested. The absence of (2)-type structures therefore constitutes the striking asymmetry alluded to above.

Biberauer et al (2007) further claim that the FOFC also operates in the morphological domain. So-called **bracketing paradoxes** arise in the context of compound nominals like *generative grammarian, historical linguist* and *rocket scientist*. As noted by Ackema and Neeleman (2004: 164ff), such bracketing paradoxes do not arise when the base-form is N+complement:

(3) a. *[history of science]ist]  b. *[philosophy of science]ist]

If the suffix in (3) is \beta and the head-initial NP is \alpha in (3), these examples all constitute FOFC-violations which are therefore expected to be ruled out.

In this paper we present evidence from two domains that are highly problematic for the FOFC. In the first case, it concerns agentive nominalisations in Saramaccan that shows exactly the configuration, as in (2), that is explicitly ruled out by the FOFC. In the second case, we discuss the acquisitional development of synthetic compounds in English where we show that children go through a stage in which they violate the FOFC. We argue that this is totally unexpected under the assumption that the FOFC is a hierarchical universal.

Agentive nominalisations in Saramaccan are synthetic compounds, formed by the affixation of the suffix *-ma*:

(4) a. ondosúku-tón-go-ma  b. tjá-búka-ma  c. nái-koó-su-ma
   ‘linguist’  ‘messenger’  ‘tailor’

On the basis of phonological and syntactic evidence, such as tone polarization, argument-inheritance, the ability for semantic specification and extraction phenomena, we show that *-ma* is a suffix, and not a noun standing in a compound relationship with the preceding element(s), or a bound nominal stem. We propose the following mapping rule for *-ma* (cf. Ackema & Neeleman 2004):
We further show that compounds in Saramaccan are always right-headed, thereby ruling out a compound analysis of the verb and its object in the nominalisation. We argue that the only feasible analysis of this construction involves phrasal affixation of –ma to a (nominalized) VP. We present such an analysis in terms of the Ackema & Neeleman's framework:

\[(6) \text{[N [VP V NP] –ma]}\]

As such, these agentive nominalisations are direct counter-examples to the FOFC, with in (4a) the verb ondosíku ‘to do research’ as α and the suffix –ma as β (and the object tóngo ‘language’ as γP). The examples in (4) all have the configuration as in (2).

The second problem for the FOFC as a hierarchical universal involves the acquisition of synthetic compounds in English. Studies on the L1 acquisition of synthetic compounds (Clark, Hecht, & Mulford 1986; Clark & Berman 1987; Clark & Barron 1988; Clark 1993) show that initially children have problems in determining the correct position of the affix (-er) as well as the order of the verb and its object. The latter is particularly unstable in the first few years (in production as well as comprehension). Three stages can be distinguished, of which the second one concerns us most. At the start of this stage children use the VO order typical of English syntax in such compounds before they start using the affix (a kick-ball ‘s.o. who kicks a ball’). A subsequent stage in which the affix is spelled out, but the verb and its object still show up in the head-first order typical of English syntax although the affix is in the majority of cases rightly attached to the (verbal) head of the construction (a giver-present ‘s.o. who gives a present’), the next most frequent pattern constitutes the FOFC-violation (a dry-hairer ‘s.o. who dries hair’). This is totally unexpected under the assumption of the FOFC as a hierarchical universal, because such universals are firmly grounded in our grammatical system and act as guiding principles for the acquisitional process in delimiting the search space, i.e. delimiting the range of possible morphological (and syntactic) configurations.

The conclusion we draw is that the FOFC is not an absolute hierarchical universal on possible configurations in the morphological domain.

References