

Disharmony and the Final-Over-Final Condition in Amahuaca

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I present novel data from Amahuaca (Panoan, Peru) featuring a Final-Over-Final Condition (FOFC) violation in the verbal extended projection (ExtProj). *Contra* the predictions of the FOFC, which rules out head-initial (HI) projections dominated by head-final (HF) projections, Amahuaca HI AspP is immediately dominated by HF TP. These data cannot be accounted for under views which take the FOFC to be a universal result of Kayne’s (1994) LCA (e.g. Biberauer et al., 2014). In contrast, the Amahuaca data are unproblematic for an account in which the effects of the FOFC are derived from a ban on rightward movement (Zeijlstra, 2016).

Previous explanations of the FOFC. The FOFC is a ban on the type of disharmonic structure in (1) where HF β P dominates HI α P within the same ExtProj.

(1) * $[\beta\text{P} \dots [\alpha\text{P} \dots \alpha \gamma\text{P}] \beta \dots]$ (Biberauer et al., 2014)

Biberauer et al.’s (2014) account of the FOFC derives this ban from constraints on the distribution of movement diacritics. Following Kayne (1994), they assume that HF structures are more derivationally complex than their HI counterparts, being derived from roll up Comp-to-Spec movement. This movement is triggered by the movement diacritic \wedge , which can be introduced only by lexical items, but which can be inherited by functional items within the ExtProj. Because this feature inheritance cannot “skip” heads, once a head in the spine does not inherit \wedge , no head above that head in the same ExtProj can trigger movement of its complement.

An alternative account of the FOFC by Zeijlstra (2016) relies on a different restriction on movement. Zeijlstra argues that projections may be underlyingly HI or HF, but that the FOFC arises from a ban on rightward movement (Abels and Neeleman, 2012). (1) is only permissible if β is never a movement target for α . (Zeijlstra does admit the possibility of rightward head movement between adjacent HF heads if it does not cross any dependents of the moving head (Ackema and Neeleman, 2002)). Zeijlstra’s account predicts a dispreference for FOFC-violating structures, but allows for exceptions in which no rightward movement occurs.

Disharmony in Amahuaca. Amahuaca exhibits a FOFC-violating structure in its verbal ExtProj: HF TP immediately dominates HI AspP. The Amahuaca verbal ExtProj is schematized in (2), where all projections are HF except AspP (FOFC-violating) and CP (FOFC-compliant).

(2) $[\text{CP} \dots \text{C} [\text{MP} \dots [\text{TP} \dots [\text{AspP} \dots \text{Asp} [\text{vP} \dots [\text{VP} \dots \text{DP V}] v]] \text{T}]] \text{M(ood)}]]$

The Amahuaca verb can undergo remnant VP-fronting to Spec,CP (with information structural consequences), (3); otherwise, it head-moves through v to Asp, (4). (Some XP – in (4) the object DP – always fronts to Spec,CP.) In both structures, v P-internal material, like the subject DP, can remain to the right of Asp. (DPs can also scramble above Asp in the middle field.)

(3) $[\text{CP} [\text{VP } t_i \text{ rutu}] =\text{mun} [\text{MP} [\text{TP} [\text{AspP} =\text{hi} [\text{vP } \text{joni jono}_i \text{ t}_{\text{VP}} v]] =\text{ki} =\text{nu}]]$
kill =C =IPFV man peccary =3.PRES =DECL

‘The man is killing the peccary.’

(4) $[\text{CP} \text{kuntii}_i =\text{mun} [\text{MP} [\text{TP} [\text{AspP} \text{choka} =\text{hi} [\text{vP } \text{xano} [\text{VP } t_i \text{ t}_{\text{V}}] t_v]] =\text{ki} =\text{nu}]]$
pot =C wash =IPFV woman =3.PRES =DECL

‘The woman is washing a pot.’

(3) and (4) provide evidence that the complement of Asp (v P) does not move to Spec,AspP, since v P-internal material remains to the right of Asp. In an LCA-based account of the FOFC, Asp must inherit the feature [+V] without \wedge since its complement does not move. The sentence-final tense and mood particles are therefore problematic, because T (and, subsequently, Mood) are unable to inherit \wedge ; the [+V] Asp head selected by T lacks this diacritic. Roll up movement above Asp should therefore be impossible, yielding HI TP and MoodP, *contra* the attested order.

“Exceptionality” of particles. It has been noted that many sentence-final particles appear to violate the FOFC. Biberauer (2017) argues that these purported FOFC violations do not involve

the configuration in (1) in a single ExtProj. However, the apparently FOFC-violating particles in Amahuaca are not FOFC-compliant in any of the discussed ways. Biberauer argues that some Head-Complement...Particle (H-C...Part) configurations involve Spec-to-Spec movement rather than Comp-to-Spec. Amahuaca T consistently c-selects Asp, and there is no evidence for intervening projections such that AspP could be moving from a position other than Comp,TP.

H-C...Part configurations can also be FOFC-compliant if the particle is structurally lower than the HI projection. However, the two heads in question are T, which encodes a present/past distinction and shows ϕ -agreement, and Asp, which marks imperfective, perfect, and habitual. It is unlikely from a crosslinguistic standpoint that Asp is higher than both T and Mood.

Another way in which H-C...Part configurations can obey the FOFC is if the HI head is not part of the same ExtProj as the HF particle. This can be because the particle has a different category feature from the HI head or because it lacks a category feature. It appears untenable to assume that Asp and T have different values for $[\pm V]$ in Amahuaca. There is no evidence that Asp contains nominal structure in Amahuaca, and sentence-final T particles do not appear in non-verbal predication. T, therefore, appears to select for a $[+V]$ complement. Since Biberauer et al. (2014) assume that functional items inherit their categorial specification from their c-selected complement, T must also be $[+V]$. Amahuaca T also seems like an unlikely candidate for lacking a categorial specification altogether. Unlike other particles which Biberauer (2017) argues to lack categorial features, it is not able to select multiple types of complements, nor can it occur in multiple positions in the structure. It is also obligatory in matrix clauses (except with non-verbal predication), rather than optionally doubling a HI head like other instances of category-less particles. Finally, items in T have the expected general semantics of a grammaticalized functional head, encoding present versus past (and showing subject ϕ -agreement), rather than more specific temporal meanings argued by Biberauer to be evidence of adverbial structure. This evidence suggests that Amahuaca HF particles are not FOFC-compliant in any of the ways expected under the LCA-based account pursued by Biberauer (2017).

Rightward movement in Amahuaca. While an account of the FOFC which takes HF structures to be the result of roll up movement cannot easily be reconciled with the Amahuaca data, an account based on a rightward movement ban along the lines of Zeijlstra (2016) fares much better. There is no evidence that T (or Mood) is ever a movement target for Asp. Therefore, while the Amahuaca clause exhibits the structure in (1), no rightward movement from α (Asp) to β (T) occurs. In fact, no illicit rightward movement is necessary to account for the Amahuaca data. Rightward head movement between V and v is plausible, but is allowed since it crosses no dependent of V. Prosodically offset right dislocation of DPs or embedded clauses to sentence-final position (after Mood) is also possible, with a pragmatically marked interpretation. However, while this appears to be movement and not base-generation (for example, it shows case connectivity effects), it can be derived by a series of leftward movements.

Conclusion. The FOFC-violating Amahuaca data cannot be accounted for under theories which take the FOFC to arise from the LCA and constraints on roll up movement (Biberauer et al., 2014; Biberauer, 2017), but they are unproblematic under an account in which the FOFC arises as a consequence of the restricted nature of rightward movement (Zeijlstra, 2016). The Amahuaca data thus lend support to the view that the FOFC is not a universal restriction on headedness, springing from the derivational complexity of HF structures under the LCA; instead it is a strong tendency that arises as the result of the independently necessary asymmetrical constraints on the directionality of movement.

Selected References. Abels, K. and Neeleman, A. 2012. Linear asymmetries and the LCA. *Syntax*. • Biberauer, T. 2017. The final-over-final condition and particles. In, *The Final-Over-Final Condition*. • Biberauer, T., Holmberg, A. and Roberts, I. 2014. A syntactic universal and its consequences. *Linguistic Inquiry*. • Zeijlstra, H. 2016. Explaining FOFC without the LCA. Presentation at NELS47.