

Defining diachronic pathways: The Final-Over-Final Constraint
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Biberauer, Holmberg & Roberts (2007) propose that structures in which a head-final phrase dominates a categorially non-distinct head-initial one are universally ruled out by the Final-over-Final Constraint (FOFC) in (1). This constraint is motivated by the existence of systematic gaps in word-order patterns found synchronically in various unrelated languages. Old English, for example, allowed all permutations of Aux, V and Object in (2) except that in (2f). Strikingly, the same gap emerges in all past and present Germanic varieties (cf. Kiparsky 1996), and also in unrelated languages like Finnish (Holmberg 2000) and Basque (Haddican 2004). This unattested structure instantiates (1) where Head1 = Aux and Head2 = V, i.e. where both phrases are verbal. Further evidence for FOFC comes from the Finnish nominal domain, where all permutations of P(reposition), N and Object are found except FOFC-violating *N O P (Holmberg 2000), and from the observation that VO languages cannot have final complementizers (Hawkins 1990).

FOFC defines a diachronic “pathway” for word-order change which is determined by synchronically impossible stages. In the change from head-final to head-initial ordering, for example, to ensure that no stage of the change involves FOFC-violating orders, it must proceed ‘top-down’. Thus, in a rigidly head-final grammar – [CP[IP[VP OV]I]C] – the first change must affect C. Hence: IP–C→C–IP. The following change must then affect I. Hence: VP–I→I–VP. Only thereafter can OV become VO. This pathway is well attested in both Germanic and Romance. In archaic Germanic (Gothic, Old English and Old Norse) we observe C–IP order with mixed orders being possible in IP and VP, shown in (3). Later, first IP and then VP become head-initial in English, as in (4) and Scandinavian (Pintzuk 1999, Kroch & Taylor 2000, Hróarsdóttir 2000). The development of VO order in French from OV order in Latin seems to have followed the same pattern (Bauer 1995). Correspondingly, FOFC predicts that change from head-initial to head-final order must always proceed ‘bottom-up’: change from VO to OV must precede I–VP→VP–I, which must, in turn, precede C–IP→IP–C. We thus observe diachronic “pathways” forced, not by a theory of change, but by universally operative synchronic constraints at each diachronic stage.

In the domain of contact, (1) predicts that it will not be possible for languages to borrow lexical elements or word-order patterns that would result in a structure which violates FOFC. Thus we observe otherwise rigidly head-final languages which borrow initial complementisers (e.g. *ki* borrowed into Turkish from Persian, cf. Bowerman, to appear), but we do not find the reverse, i.e. rigidly head-initial languages which borrow clause-final complementizers. Further, where rigidly head-final languages borrow initial complementizers, we observe a restriction on the placement of CPs introduced by the borrowed complementizer: unlike head-final DPs and CPs in these languages, they necessarily surface *postverbally*, thereby avoiding a potential FOFC violation (5). We also find cases where, in a largely head-final language, the presence of a single head-initial category blocks the borrowing of immediately dominating head-final categories. This appears to be the explanation for the lack of final complementizers in certain Indo-Aryan languages. Languages like Hindi-Urdu (6) which have initial Polarity heads, a category standardly assumed to be below C (Laka 1994), have all failed to develop/borrow a final complementizer (Davison 2007), thereby avoiding a FOFC violation (7). By contrast, the languages in the area with non-initial Polarity heads, e.g. Marathi (8-9) have all developed/borrowed a final complementizer. In addition to exerting a constraint on diachronic processes, FOFC therefore also appears to play a role in defining which syntactic elements and patterns can and cannot be borrowed.

- (1) *[_{Head1} [_{Head2P} Head2 Complement] Head1]
- (2) a. AUX V O; b. AUX O V; c. O V AUX; d. O AUX V; e. V AUX O; f. ***V O AUX**
- (3) a. er þanne þe heuene oðer eorðe shapen were
before that heaven or earth created were
“before heaven or earth were created” (Trinity Homilies, 133.1776)
- b. þat þurh soð scrite synnes ben forgeuene
that through true shrift sins are forgiven
“that sins are forgiven following sincere confession” (Trinity Homilies, 23.304)
- (4) a. Ðat ne haue noht here sinnes forleten
Who neg have not their sins forsaken
‘who have not forsaken their sins’ (Trinity Homilies 67.934)
- b. oðet he habbe izetted ou al þet ze wulleð
until he has granted you all that you desire
“until he has granted you all that you desire” (Ancrene Riwele)
- (5) Isti-yor-um [ki yarın benim- le sinema-ya gel- esin]
Want-PROG-1S that yesterday I-GEN-with cinema-DAT come-S.OPT
“I want you to come to the movies with me tomorrow” (Turkish - Kornfilt 1997)
- (6) us-nee puuc-aa [**ki kyaa** tum aa- oogee]
3s-Erg ask- Pf that Pol you come- FUT
“He asked whether you will come” (Hindi/Urdu – Davison 2007)
- (7) *[_C [_{PolP} **Pol** Complement] C]
- (8) [to kal parat aalaa **kaa(y) mhaaNun/asa**] raam malaa witSaarat hotaa
he yesterday back come-pst-3ms Pol quotative/C Ram I-dat ask-prog. was-3ms
“Ram was asking me whether he came back yesterday” (Marathi – Davison 2007)
- (9) raam maalaa witSaarat hotaa [ki to kal parat aalaa **kaa(y)**]
Ram I-dat ask-prog. was-3ms that he yesterday back came-3ms Pol
'Ram was asking me whether he came back yesterday' (Marathi – Davison 2007)

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