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
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. Bowern, 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 heaven or earth were created” 
   (Trinity Homilies, 133.1776)

   b. þat þurh soð scrifte synnes ben forgeuene 
   “that through true shrift sins are forgiven” 
   (Trinity Homilies, 23.304)

(4) a. Þat ne haue noht here sinnes forleton 
   “who have not forsaken their sins” 
   (Trinity Homilies 67.934)

   b. oðet he habbe iȝetted ou al þet ȝe wuldeð 
   “until he has granted you all that you desire” 
   (Ancrene Riwle)

(5) Isti-yor-um [ki yarin benim-le sinema-ya gel- esin] 
   “I want you to come to the movies with me tomorrow” 
   (Turkish - Kornfilt 1997)

(6) us-nee puuc-aa [ki kyaa tum aa- oogee] 
   “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 
   “Ram was asking me whether he came back yesterday” 
   (Marathi – Davison 2007)

(9) raam malaa witSaarat hotaa [ki to kal parat aalaa kaa(y)] 
   “Ram was asking me whether he came back yesterday” 
   (Marathi – Davison 2007)

References
Hróarsdóttir, Th. (2000). Word order change in Icelandic: from OV to VO. Amsterdam: Benjamins.