

Chapter 5: The Final-over-Final Constraint and adverbs

1 Introduction

Thus far, much of the evidence given in favour of the Final-over-Final Constraint (FOFC) comes from instances of complementation. Evidence suggests, however, that the relevant asymmetry might actually be a more pervasive phenomenon, as both Holmberg (2000) and BHR (2007, 2008) note in passing. Thus, Holmberg (2000: 140) notes that Finnish and Germanic verb clusters cannot be interrupted by either complements or adjuncts, as the following examples from Finnish illustrate:¹

- (1) Matti ei (koskaan) ole (koskaan) käynyt (koskaan) Pariisissa
 Matti not ever has ever visited ever in.Paris
 ‘Matti has never been to Paris.’ [Finnish, Holmberg (2001: 145)]

- (2) Milloin Jussi romaanin kirjoittaa olisi (siinä tapauksessa) ehtinyt
 when Jussi novel write would.have in.that case had.time

- (3) Milloin Jussi romaanin kirjoittaa ehtinyt (*siinä
 when Jussi novel write had.time in.that
 tapauksessa) olisi
 case would.have
 ‘When would Jussi, in that case, have had time to write a novel?’

[Finnish, Holmberg (2000: 130)]²

Example (1) shows that adverbs can intervene in harmonically head-initial sequences of verbal heads in Finnish, which occur obligatorily in sentences lacking an initial focus (cf. Holmberg 2000 and [chapter 11](#)). Example (2) shows that when a disharmonic order is licensed by wh-movement to the left periphery, an adverb can still intervene between two verbal heads in a head-initial sequence. However, as example (3) shows, the same is not true in a head-final sequence. This suggests that the *[[V-O]-Aux] gap discussed in [chapter 1](#) and taken as core evidence for FOFC, might actually be better characterised as a ban on *[[V-X]-Aux], changing somewhat the nature of the FOFC generalisation.

An apparent challenge to extending the generalisation in this way comes from the widely held view that the indivisibility of head-final sequences is a property only of languages with variable word orders (or non-rigid OV languages), and not of languages with obligatory head-final verb clusters (or rigid OV languages). Thus Cinque (1999: 57), citing Kayne (1994: 53) and Mahajan (1989: 225ff) claims that Hindi differs from German in allowing head-final verbal sequences to be broken up “by the negation word, emphatics and some adverbials”:

- (4) raam roTii khaataa nahiiN/to/roz thaa
 Ram bread eat.MS not/emphatic/every day was.MS

[Hindi, Mahajan (1989: 225)]³

Likewise, in agglutinating languages such as Turkish, [V-O]-Aux is not permitted but a (very similar) small class of adverbials can nonetheless intervene in the head-final verb cluster. Data of this kind thus provides potentially crucial evidence in favour of stating FOFC as a generalisation over complementation. The objective of this chapter is to inspect linear strings with the order V-Adv-Aux in certain well-studied languages so as to ascertain their underlying hierarchical structure and thus relevance to FOFC (which is, crucially, a generalisation over the connection between hierarchical structure and linear order, not linear order *per se*). It is proposed that, contrary to what has previously been claimed, there is a general ban on *[[_{VP} V-X]-Aux] so that the apparent distinction between Germanic/Finnish and Hindi/Turkish in this respect is illusory. It is further claimed, however that this ban does not derive directly from FOFC but rather from its interaction with an independent word order constraint, noted by Ernst (2003).

In section 2 it is noted that Hungarian and Germanic pattern like Finnish, whereas Basque, Turkish and Hindi appear superficially to allow head-final verb sequences to be interrupted by a small class of adverbials. Section 3 argues that these surface strings fail to have the structure [[_{VP} V-Adv]-Aux]. In Turkish and Hindi, almost all V-Adv-Aux orders plausibly involve a harmonically head-final structure whereby what has been classed as an adverbial is actually a projecting emphatic head. As such, the possibility that

FOFC, whatever its explanation, holds of adjuncts as well as complements remains highly plausible. Section 4 argues that this gap actually falls out from the combination of existing approaches to FOFC and a further asymmetry noted by Ernst, which bans post VP adverbials in OV languages. Section 5 returns to a different class of V-Adv-Aux orders in Basque, which have a different constituent structure, but still fail to violate FOFC. Finally, section 6 concludes.

2 The adjunction asymmetry

2.1 Head-initial verb sequences

Non-branching adjuncts (and subjects) can often intervene in head-initial sequences of auxiliaries/verbs. Consider, for example the following SVO and VSO languages:

(5) Jean a **toujours** joué de la guitare. [French]

Jean has.3S always played of the guitar.

‘Jean has always played the guitar.’

(6) kan **dima** yaçzef çal gitar [Libyan Arabic]

was.3S always play on.the guitar

‘He always used to play the guitar’

(7) Bhí na sealgairí **tamall fada** *ag* amharc orthu [Irish]

was the hunters time long PROG look on.them

‘The hunters were watching them for a long time.’

[Harley & Carnie (1997:14)]

In Cinque’s (1999) influential analysis of adverbials, these kinds of effects are taken as crucial evidence for the existence of an articulated sequence of functional heads, each housing a particular class of adverbs (cf. also Alexiadou 1997). Following Pollock (1989), Cinque argues at length that these functional heads can be the target of verb movement (in potentially idiosyncratic language-specific ways), so that the following difference between English and French reduces to a difference in verb movement trajectories (as Pollock first proposed):

- (8) I (always) play (*always) the guitar.
- (9) Je (*toujours) joue (toujours) de la guitare
 I always play always of the guitar
 ‘I always play the guitar.’

Cinque/Pollock further propose that language-internal variation in the order of verbs and adverbs has the same status as the contrast in (8)-(9). Thus, in Italian, an inflected main verb targets any one of a range of functional heads but can raise no higher than the head housing the adverbial specifier *solitamente* ‘usually’ (Cardinaletti 2011: 507, citing Cinque 1999: 31;

180,n.80; 214,n.7, see also Schifano in progress for a very fine-grained study of verb movement across Romance):

(10)a. ...* probably * usually (V) again (V) often (V) quickly (V) *mica* (V)

already...

b. Gianni **spesso** telefona / telefona **spesso** di sera tardi.

Gianni often calls / calls often of evening late

‘Gianni often calls late in the evening.’

c. Gianni **di nuovo** lo merita / lo merita **di nuovo**.

Gianni of new it deserves / it deserves of new

‘Gianni again deserves it.’

d. Gianni **solitamente** lo merita / *lo merita **solitamente**.

Gianni usually it deserves / it deserves usually

‘Gianni usually deserves it.’

e. Gianni **probabilmente** lo merita / *lo merita **probabilmente**.

Gianni probably it deserves / it deserves probably

‘Gianni probably deserves it.’

Although some objections have been raised to the head-movement account of the data in (10) (cf. Bobaljik 1999), the empirical facts are well established: it is often possible to interrupt head-initial sequences of verbal heads with adverbials. Of course, this is not to say that an adverb can always intervene between two verbal heads in a head-initial sequence. In Persian, an OV

language, adverbs cannot intervene in either V-Aux or Aux-V sequences, both of which occur in the language (the future auxiliary precedes V, whereas all other auxiliaries follow V):⁴

- (11) ali (hamishe) gitâr zade (*hamishe) ast [Persian]
 Ali always guitar play.PSPT always be.3s
 ‘Ali has always played the guitar.’

- (12) ali (hamishe) gitâr xâhad (*hamishe) zad
 Ali always guitar will always play
 ‘Ali will always play the guitar.’

Spanish, a Aux-V-O language, also displays such a restriction, disallowing adverbs to intervene between the perfective auxiliary *haber* + past participle (cf. Ojea López 1994: 409, Cinque 1999: 147):⁵

- (13) Juan (siempre) ha (*siempre) sido (siempre) amable. [Spanish]
 Juan always has been friendly
 ‘Juan has always been friendly.’

As Cinque notes, it is not clear how to account for this restriction in terms of verb movement. It seems more likely that there is an additional ‘adjacency requirement’ associated with *haber*. The same is also claimed by Ojea López

(1994: 409): “*haber* no tiene autonomía como forma verbal”.⁶ Note also that this is a fact about the particular auxiliary *haber*. The auxiliary *ser* ‘to be’ for example, which occurs in passives, need not be adjacent to a following passive participle (Cinque 1999: 147, citing Lois 1989: 34, 40). As such, the order Aux-Adv-V is generally, though not universally, possible. There are specific auxiliaries which must appear adjacent to a following verb, but there are also many examples of adverbs intervening in head-initial verbal sequences. A relevant question is whether the same is true in head-final sequences of auxiliaries and verbs.

2.2 *Head-final verb sequences*

To give evidence for a general ban on [[V-X]-Aux] it is obviously not sufficient to show that the sequence V-Adv-Aux is blocked in *some* languages, as the same is also true of Aux-Adv-V (e.g. for certain auxiliaries in Spanish and Persian). Suggestive evidence for a genuine asymmetry between head-initial and head-final verb sequences is nonetheless available in languages with variable word orders. In many such languages, adverbs can intervene freely in head-initial but not head-final verbal sequences, even within mixed sequences. Thus, as was the case in Finnish (discussed above), adverbs can interrupt Aux-V sequences, but not V-Aux in ‘OV’ Germanic languages and Hungarian (cf. Zwart 1996, Koopman & Szabolcsi 2000, respectively):

(14)...das er das Buch hätte (genau) durchsehen (*genau) sollen

that he the book had carefully through.look carefully shall

‘..that he should have looked through the book carefully’

[High German, Zwart (1996: pp) 1 (adv) 3 (*adv) 2]

(15) a. PETER fogja (XP) akarni (XP) kezdeni (XP) szet

Peter will want.INF begin.LNF apart

szedni a radiot

take.LNF the radio

b. PETER fogja (XP)akarni (XP) szet szedni (*XP)

Peter will want.INF apart take.INF

kezdeni a radiot

begin.LNF the radio

c. PETER fogja (XP) szet szedni (*XP) kezdeni (*XP)

Peter will apart take.INF begin.LNF

akarni a radiot

want.INF the radio

'It is Peter who will want to begin to take apart the radio'

[Hungarian, based on examples in Koopman & Szabolcsi 2000, 1 (adv) 4

(*adv) 3(*adv) 2]

This strongly suggests that an asymmetry exists here, but leaves open the possibility that the ban on V-X-Aux holds only in languages with variable word orders, as Cinque (1999) in fact has claimed (as discussed above).

Another language with variable word order is Basque (cf. Arregui 2002, Haddican 2004). In Basque, some adverbs have the ability to either precede or follow verbs and auxiliaries.⁷ Despite this, Basque also appears to be subject to the same kind of restriction as OV Germanic, Hungarian and Finnish w.r.t. head-final verb clusters (cf. Arregui 2002: 127):

- (16) (Askotan) Mirenek (askotan) liburuk irakurten (*askotan)
 often Miren.ERG often book.A.PL read.IMP
 dau (askotan)
 AUX.PR

Where the auxiliary precedes the verb, however, the Aux-V sequence can be interrupted by arguments and adverbs (cf. Haddican 2004). In this respect, then Basque appears to pattern with Finnish/Germanic. However, as Arregui (2002: 148, fn 41) also notes, certain modal evidential particles such as *ete* ('evidently') and *omen* ('apparently') unlike other adverbs/arguments can intervene between the verb and auxiliary in the V-Aux order (cf. also Haddican 2004: 97, Etxepare 2009). I return to the status of these surface V-Adv-Aux orders in section 5, as they appear to have a different hierarchical structure from the V-Adv-Aux sequences observed in other OV languages.⁸

3 Apparent counterexamples to the asymmetry

Thus far, then, there appears to be suggestive evidence that the ban on *[V-O]-Aux which lies at the heart of the FOFC generalisation, might actually be a more general ban on *[V-X]-Aux. Why, then, has FOFC sometimes been stated only in terms of complementation? The reason is that in languages with stricter head-final orders a small class of adverbs can freely surface between the verb and auxiliary. Based on this observation, Cinque (1999: 58) posits three different classes of head-final verbal structures:

- (i) verb-clustering with mixed word orders (e.g. German);
- (ii) strictly head-final agglutinative languages (e.g. Turkish);
- (iii) strictly head-final inflectional languages (e.g. Hindi).

By hypothesis, a crucial difference between types (i)-(ii) on the one hand and type (iii) on the other is that it is possible for material to intervene in a head-final sequence in type (iii) languages. In Cinque's terms, this reduces to a difference in the kind of movement operations used to derive surface head-finality in an LCA-compliant framework. In German, what is at stake is head-movement "with the non-head subparts of IP raising leftward over the verb cluster, either individually [...] or within a single constituent" (Cinque 1999: 58). (17a) is the former case, (17b) the latter.

(17)a. [_{FP} **Obj** F [_{VP} **V+v** [_{VP} *t_v* *t_{Obj}*]]]

$$b. [_{FP} [_{VP} t_V \mathbf{Obj}] F [_{VP} \mathbf{V+v} t_{VP}]]$$

The strict adjacency between V and Aux follows from the fact that they form a complex head structure. In type (ii)-(iii) languages, on the other hand, head-final verbal sequences are derived via phrasal movement. Although Cinque is equivocal on this matter, he suggests that type (ii) agglutinating languages such as Turkish might be derived via local comp-to-spec movement of the kind proposed by Kayne (1994), Julien (2002) and BHR (to appear) (where Aux is located in v):

$$(18) [_{VP} [_{VP} \mathbf{Obj} \mathbf{V} t_{Obj}] v t_{VP}]$$

Type (iii) languages, on the other hand would involve non-local movement of their complement to the specifier of some higher functional head.⁹ This kind of movement allows for the possibility that an adverb might intervene in a head-final sequence in type (iii) languages. Another property of these kinds of structures is the possibility of A-bar movement of a lexical verb via phrasal A-bar movement:

$$(19) [_{GP} [_{FP} [\mathbf{Obj}] F [_{VP} \mathbf{V} t_{Obj}]] G [_{VP} v t_{FP}]]$$

The apparent prediction of this three-way split is that agglutinative languages should pattern with type (i) languages in requiring strict adjacency between

verbs and auxiliaries. This should be the case, as Cinque notes, if one follows Kayne in assuming a single specifier per phrase: as the latter is the target for roll-up movement in a head-final structure, meaning that it cannot house an adverb. Interestingly, though, as we shall see below, Turkish (a type (ii) language) and Hindi (a type (iii) language) actually pattern very similarly in that both allow the same kinds of adverbs to surface inside the verbal cluster.¹⁰

3.1 *Hindi*

Kayne (2004: 9, fn 18) points out that the restriction on adverbs between V and a following Aux does not apply to emphatics and morphemes corresponding to words like *even*. Thus Hindi allows “the negation word, emphatics and some adverbs” to intervene between the verb and an auxiliary (Kayne (1994: 53), citing Mahajan (1989: 225)):

(20) raam roTii khaataa nahiiN/to/roz thaa¹¹

Ram bread eat.MS not/emphatic/every day was.MS

[Hindi, Mahajan (1989: 225)]

3.1.1 Emphatic markers

The emphatic markers *bhii* ‘also’ and *to* (a topic marker) can surface in the position between V and Aux when they are associated with a focused VP:

(21) aur vah paise letaa bhii hai

phrases they modify as complements. Further evidence for this analysis comes from the fact that *bhii/to* cannot occur between a post-position and noun, even where only the noun is focused (cf. Kidwai 2000, Koul 2008):

(24) *sita nur-*to*-ke paas gay [Hindi, Kidwai (2000: 42)]

Sita Nur-TO-GEN near went

‘Sita went to Noor.’

(25) *ghar *bhii* meN garmii hai. [Hindi, Koul (2008: 138)]

house also in hot is

‘it is hot in the house as well.’

More generally, it has been proposed that emphatic markers such as *even/also* can never intervene between an adposition and a DP complement (Sichel 2007: 24). This is true, for example in English and Hebrew:

(26) I gave the book to (??only) John.

This is the same restriction noted by Cable (2007: 94) in relation to the distribution of question particles. He proposes to account for this gap via his ‘Q[uestion] P[hrase] intervention condition’ (Cable 2007: 122), which states that “a QP cannot intervene between a functional head and a phrase selected by that functional head”, the idea being that the presence of a projecting

question particle blocks selection in such cases. This account can be extended to the Hindi facts discussed above only if *bhii* and *to* are also projecting heads which would likewise block selection between P and DP.¹⁴ This raises the question of the status of auxiliary verbs in Hindi. Seeing as *bhii* and *to* can intervene between lexical verbs and certain auxiliaries it follows that the latter cannot be functional heads in the extended projection of V, but must rather be lexical heads. I return to this issue below.¹⁵ According to Cable (2007: 122), the presence of an intervening QP does not block selection between a lexical head and its complement. If this is the case, then the emphatic markers *bhii* and *to* project head-final phrases in Hindi, meaning that V-Adv-Aux sequences are actually harmonically head-final structures.¹⁶

3.1.2 Constituent negation

Instances of (V(P)) constituent negation plausibly fall under the same analysis. Dwivedi (1991) observes that *nahiiN* can be used for constituent negation in Hindi in which case it usually immediately follows the negated phrase:

(27)[raam ke nahiiN] sita ko kitaabe diyaa, shyaam ne

Raam ERG NEG Sita DAT books gave Shyaam ERG

‘Ram didn’t give the books to Sita, Shyaan did.’

[Hindi, Dwivedi (1991: 90)]

Thus (28) is a felicitous conversation involving constituent negation of the verb with the surface V-Neg-Aux order:¹⁷

- (28)a. kyaa raam roTii khaa-taa thaa?
 Q Ram bread eat-HAB was.MS
 ‘Did Ram eat bread?’
- b. ji nahiiN, raam roTii khaa-taa nahiiN thaa
 no Ram bread eat-HAB not was.MS
 raam roTii banaa-taa thaa!
 Ram bread make-HAB was.
 ‘No, Ram didn’t use to EAT bread, he used to MAKE bread.’

In such cases, *nahiiN* like *bhii/to* modifies only the focused constituent, VP or V and projects. Dwivedi (1991) argues explicitly that *nahiiN* is a head in such cases. Firstly, she notes that negated constituents always receive the main pitch accent of the sentence. She claims that as intonation patterns are not sensitive to adjuncts (cf. Selkirk 1984, ch 5), negation cannot be an adjunct in instances of constituent negation. This leaves the option of *nahiiN* being a specifier or head. The basic word order facts of Hindi strongly suggest that it is a head rather than a specifier. Whereas other modifiers in Hindi (demonstratives, adjectives, quantifiers) all precede the phrase which they modify, constituent negation always surfaces to the right. This follows if the former are specifiers/adjuncts whereas the latter is a head. The strongest

support that she gives, however, for the claim that *nahiiN* is a head comes from the fact that a negated constituent can move, stranding the negation:

- (29) ram ne kitaab_i supriya ko [t_i nahiiN] dii, ...
 Ram ERG book Supriya DAT NEG give
 ‘It was not a book that Ram gave Supriya...’ [Hindi, Dwivedi (1991: 92)]

Crucially, (29) can, but need not, have a reading whereby the direct object, which has scrambled out of VP is constituent negated. If the negation were an adverb or specifier here, such movement would be impossible according to standard assumptions.¹⁸ As such, there is reason to believe that in instances of constituent negation the V-Neg-Aux sequence is also a harmonic head-final structure, compliant with FOFC.

3.1.3 Sentential negation

Crucially, though, not all instances of V-Neg-Aux order in Hindi involve constituent negation. As Kumar (2004) shows, immediately post-verbal negation, like preverbal negation can license NPIs, unlike unambiguous constituent negation which cannot.¹⁹

- (30)a. maiN kisii ko bhii nahiiN dekh sak-aa
 I anyone to EMPH NEG see modal-PERF.MS
 ‘I could not see anyone.’

b. maiN kisii ko bhii dekh nahiiN sak-aa

I anyone to EMPH see NEG modal-PERF.MS

‘I could not see anyone.’

c. */? [maiN nahiiN] kisii ko bhii dekh sak-aa

I NEG anyone to EMPH see modal-PERF.MS

[Hindi, Kumar (2004: 11)]

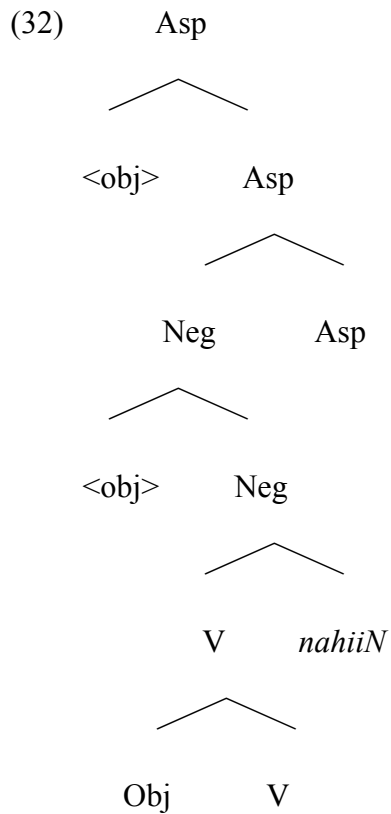
Bhatt (2007: 3) shows that the adverbial quantifier *thorii* (little), which also has a negative meaning as indicated by the gloss, can also occur in this position:

(31) timur manu-ko Dã:T-taa thoRii thaa

Timur Manu-to scold-HAB LITTLE be.PST

‘Timur didn’t used to scold Manu.’

If *nahiiN* can be a head in constituent negation, it is possible that it might also be a head in instances of sentential negation. If this is the case then the position of *nahiiN* in (20) is as expected if the head-final NegP projection occupies a position between VP and AspP, as Dwivedi (1991) proposes (where *thaa* occupies Asp):²⁰



A complication with this analysis, is that, as Mahajan (1989) notes, the position of negation in (30b) is not the most neutral position in Hindi. Rather, the unmarked position for negation is between the direct object and the lexical verb (cf. also Dwivedi 1991, Kumar's 2004 (30a) above):

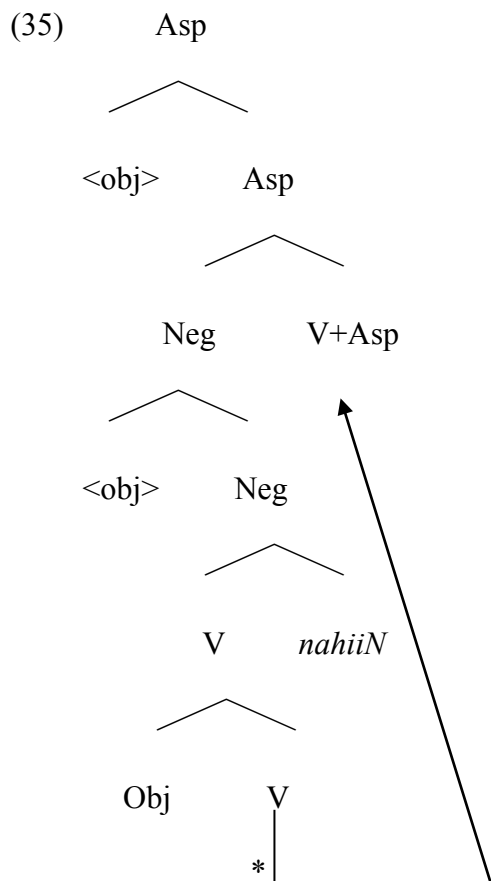
- (33) raam roTii nahiiN khaa-taa thaa
 Ram bread NEG eat-HAB was.MS
 'Ram didn't eat bread.' [Hindi, Mahajan 1989: 224]

To account for these two options (Neg-V-Aux & V-Neg-Aux), Mahajan (1990) proposes that negation is adjoined to the right of the VP and that the verb optionally moves past Neg:

- (34)a. [_{AuxP} [[_{VP} Obj V] nahiiN] Aux]
 b. [_{AuxP} [[_{VP} Obj t_V] nahiiN] V+Aux]

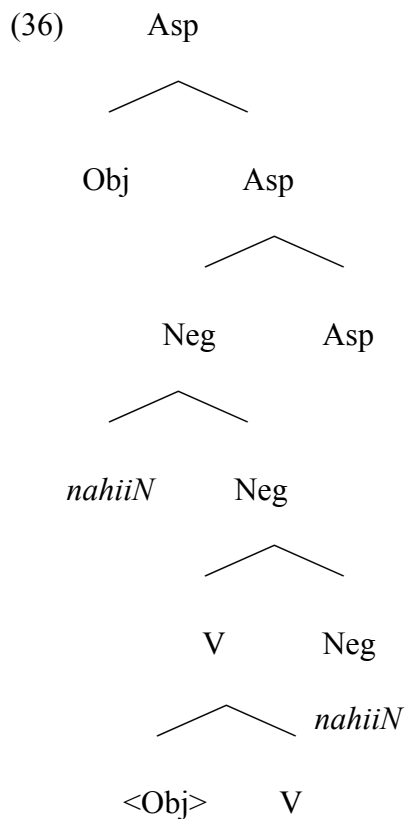
As such, the variability in Hindi is equivalent to the variability noted by Cinque for head-initial languages like Italian with respect to verb/adverb ordering, except that the negation is right adjoined here, something which is ruled out under Kayne's (1994) LCA. There are two objections one could raise to this early proposal in the light of subsequent research. Firstly, if it were the case that right adjunction and rightward head-movement of this type were possible, then it is surprising that we only see this variability with respect to negation and not adverbs. Indeed, as discussed in section 4, there appear to be no OV languages with post-verbal adverbs of the kind subject to Cinque's functional sequence. The adverbs which can occur inside the verbal complex, as illustrated above, are exactly those which do *not* have a place in the Cinquean hierarchy, being rather focus-related or variable in placement. Moreover, following Pollock (1989) and Zanuttini (1997), it is widely held that negation is located in a number of functional projections with fixed hierarchical positions, so the idea that it is an adjunct seems problematic.

This raises the question of whether these two word orders can be accounted for if *nahiiN* is in fact a head. Deriving either of these orders from the other is not straightforward if *nahiiN* is always a head. It cannot be the case, for example, that the verb raises past the negation marker as this kind of movement violates Travis' (1984) Head Movement Constraint (as well as the LCA).²¹



If the verb first moves to adjoin to Neg and then the V+Neg complex raises to Asp, roughly as proposed by Kumar (2004), then there is no ultimate

explanation for the resulting word order (as Kumar 2004: 15, fn 6 acknowledges), as we would expect such movement in a head-final language to be string-vacuous. If, on the other hand, *nahiiN* can be either a head *or* a specifier, then it is predicted to be able to surface either to the right or the left of V (assuming, regardless of the LCA, that specifiers always occur to the left of the their phrase):



Provided the object also moves to a position above NegP, then, this derives the correct unmarked word order in Hindi, without post-syntactic re-ordering

mechanisms. I propose that the two positions of *nahiiN* in (30a) and (30b) stem from its dual status as either a specifier or head of NegP.

This analysis accounts of the basic distribution possibilities of the negation marker across all tense and aspect combinations in Hindi (cf. Bhatt 2003, 2007, Kumar 2004):

(37) O **I. Neg** V_{LEX} **II. Neg** Aux **III. *Neg** Aux

Thus *nahiiN* can intervene between the verb and object or between a lexical verb and the inflected progressive marker, but never between two auxiliary verbs:

(38) ?maiN skuul jaa (nahiiN) rahaa (*nahiiN) huuN/thaa
 I school go not PROG.MS not am.1S/was.MS
 ‘I am/was not going to school.’ [Hindi, based on Kumar (2004: pp)]

This follows if *nahiiN* can only be the head or specifier of NegP which occurs in a fixed position immediately dominating VP, as proposed above. Whether we have an instance of constituent or sentential negation, then, the order V-Neg-Aux arguably does not have the hierarchical structure which violates FOFC: [_{AuxP} [_{VP} V-Neg]-Aux]. Rather is has the harmonically head-final order [_{AuxP} [_{NegP} V Neg]-Aux].

3.1.4 Intervening arguments

A final problem arising in Hindi is that objects can also surface between V and a following Aux in Hindi, in apparent violation of FOFC (cf. Mahajan 1990):

- (39) raam kha-taa sabzii thaa [Hindi, Mahajan (1990: 338)]
 Ram eat-HAB vegetables was.MS
 ‘Ram used to eat vegetables.’²²

As Bhatt & Dayal (2007) note, indirect objects can also surface in this position:

- (40) sita-ne kitaab bhej-ii raam-ko thii.
 Sita-ERG book.FS send-PFV.FS Ram-DAT be.PST.FS
 ‘Sita had sent the book to Ram.’

As can wh-phrases:

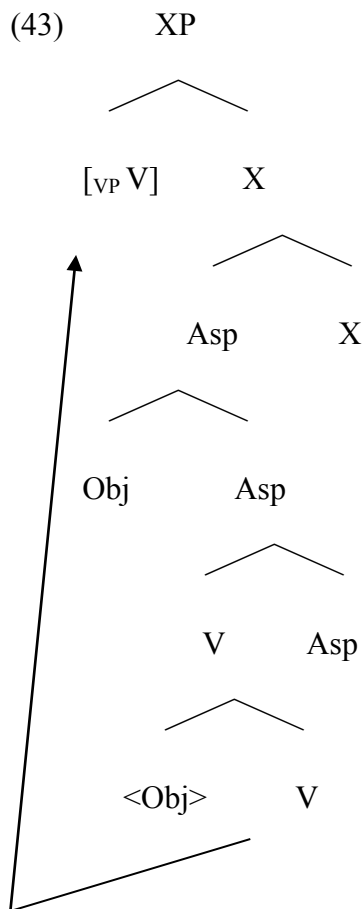
- (41) sita-ne dhyaan-se dekh-aa kis-ko thaa?
 Sita-ERG care-with see-PFV who-ACC be.PST
 ‘Who had Sita looked at carefully?’

Bhatt & Dayal (2007: 291, fn 6) also note that non-finite clauses cannot occur in this position, though they can occur in either a preverbal or post-auxiliary position.

Interestingly, though, the order V-O-Aux is not possible where preverbal negation is present:

(42) */???raam	nahiiN	kha-taa	sabzii	thaa
Ram	NEG	eat-HAB	vegetables	was.MS
‘Ram used to eat vegetables.’			[Hindi, Mahajan (1990: 338)]	

One possible explanation for these facts is that (39) is derived via remnant VP movement to some position higher than that housing the scrambled object and all auxiliary verbs:



This movement, by hypothesis, is blocked by the presence of a negative specifier, which creates a negative island in the sense of Ross (1967). If V-O-Aux orders in Hindi are derived in this way then they fail to involve a FOFC violation according to either of the approaches to FOFC explored in this volume (cf. chapter 3). For BHR, remnant VP movement in such cases would be A-bar movement (hence the sensitivity to negation), which is not subject to FOFC, for Sheehan such movement does not create a linearization problem.

3.2 *Turkish*

In Turkish, an SOV agglutinating language, the unmarked position for adverbs is preverbal:

(44) Ahmet hızlı koş-uyor-du [Turkish, Wilson & Saygın (2001: 3)]

Ahmet quickly run-PROG-PAST.3S

‘Ahmet was running quickly.’

In fact, morphologically simple adverbs *must* surface to the immediate left of the verb, even when modified by another adverb (as in Basque) (Kornfilt 1997: 404):

(45) Hasan çok yavaş konuş-ur

Hasan very slow talk-AOR

(46) *çok yavaş Hasa konuş-ur

very slow Hasan talk-AOR

As such, these adverbs clearly cannot surface between V and Aux. Other (morphologically complex) adverbs can appear in other positions, not immediately adjacent to the verb, however.

An obvious difference between Hindi and Turkish is that the usual way to express tense, mood and aspect in the latter is via agglutinating suffixes on the

verb. This alone, then, might serve to prevent any adverb from intervening between V and Aux, assuming adjunction between a root and suffix or between suffixes is independently banned. Wilson & Saygin (2001: 6) point out, though, that “sometimes an auxiliary *ol-* ‘be’ needs to be inserted, because only the past *-DI* and *-mİş* in its evidential sense can attach directly to already-suffixed verbs”. This means that in practice, Turkish does have auxiliary verbs in addition to suffixation:

- (47) Cüneyt yarın oku-yor ol-acak.
 Cüneyt tomorrow read-PROG be-FUT.3SG
 ‘Tomorrow Cüneyt will be reading.’

It is therefore these contexts which are the most likely to permit the order V-X-Aux in Turkish.

Unlike in Hindi (see section 3.1.4), it is impossible for arguments to surface between V and Aux in Turkish. As is well known, it is possible, in Turkish, for a ‘backgrounded’ object to surface in post-verbal position (cf. Kural 1997):

- (48) Cüneyt yarın oku-yor ol-acak kitabı
 Cüneyt tomorrow read-PROG be-FUT.3S book-ACC

It is not possible, however, for an argument to surface between the main verb and the epenthetic auxiliary *ol-* (Jaklin Kornfilt, p.c.):

- (49) *Cüneyt yarın oku-yor kitab-ı ol-acak.
 Cüneyt tomorrow read-PROG book-ACC be-FUT.3S

In this much Turkish differs from Hindi and presumably lacks remnant VP fronting.

Interestingly, though, in Turkish too, certain adverbial-like ‘particles’ *can* occur both between V and its suffixes or between V and the auxiliary verb *ol*, notably the question particle *mI* and the focus particles *bile* (‘even’ - in main clauses only) and *dE* (‘also’ – in main and relative clauses) (cf. Kornfilt 1997: 191-192, Göskel 2001: 162):

- (50) Hatta bu bölüm-ü anal-mış
 in.fact this section-ACC understand-PERF
bile ol-du-k
 even AUX.PAST.1PL

‘In fact, it even turns out that we have understood this section.’

- (51) Gid-e- de- bil- ir- iz
 Go-ABIL- also- ABIL- AOR- 1PL
 ‘we can also GO there.’ [Turkish, Göskel (2001: 162)]

Note that, as in Hindi, the kinds of adverbs permitted in this position are again focus-related adverbs which fall outside Cinque's functional hierarchy. As in Hindi, it appears that these particles can be associated with and follow any focused phrase:

(52) BEN *de* iç-me-yeceğ-im

I also drink-NEG-FUT-1SG

'I am not going to have any either.'²³

[Turkish, Gössel & Kerslake 2005: 116]

(53) Hasan kitab-ı Ali-yé *bile* oku-du

Hasan book-ACC Ali-DAT even read-PAST

'Hasan read the book even to Ali.'

[Turkish, Kornfilt (1997: 192)]

As in Hindi, focused phrases associated with such emphatic particles can be fronted along with the particle (Kornfilt 1997: 193). There is also suggestive evidence that these particles are projecting heads in Turkish too. *Bile* for example cannot occur between an adjective and suffixal tense inflection, which are plausibly in the same extended projection, but rather must occur following the tense inflection (Kornfilt 1997: 194):

(54) Komşu -nuz şirin-di *bile*

neighbour -2.PL cute-PAST even

As Erguvanli (1984:26) notes, these are also the only adverbials which can intervene between an unscrambled object and selecting verb in Turkish (cf. also Göskel & Kerslake 2005: 393):

(55) Murat kitab	<i>da/bile</i>	ok-ur	[Turkish, Erguvanli (1984:26)]
Murat book	also/even	read-AOR	

Again, this follows if (a) these particles are actually projecting heads and (b) they do not act as interveners between lexical heads and their complements, as Cable proposes. Finally, note that two of these particles can appear as suffixes on the verb and undergo vowel harmony further suggesting that they are heads (the exception is *bile* which is invariant). It seems to be the case that no full adverb can appear inside the verb cluster in Turkish. Once again, all instances of the surface order V-X-Aux in Turkish plausibly involve harmonically head-final structures.

3.3 Summary

In many OV and variable VO/OV languages, it appears that adjuncts as well as arguments trigger a FOFC-effect, implying that the structure *[_{AuxP} [_{VP} V-Adv]-Aux] is universally banned. The few cases of adverbials (typically *even*, *also*, *too*) which can intervene in V-Aux sequences are projecting heads which

give rise to harmonic head-final sequences.²⁴ The question, then, is whether existing accounts of FOFC can account for this more general version of the constraint. In the following section, I argue that they can, when taken in conjunction with an independent asymmetry noted by Ernst.

4 Ernst's asymmetry

Ernst (2003, 2004) observes a second asymmetry concerning the distribution of adverbs. He claims that non-branching adverbs can either precede or follow head-initial phrases but must precede head-final phrases. Thus in OV languages, adverbs must precede V (though because of scrambling need not precede O). In VO languages, on the other hand, adverbs can either follow O or precede V or in a subset of such languages occur between V and O (cf. Pollock (1989)):

- (56)a. (adv) V (adv) O (adv)
 b. (adv) O (adv) V (*adv)

When taken in combination with FOFC, this asymmetry serves to explain the lack of [_{AuxP} [_{VP} V-Adv]-Aux]. In order for a language to allow post-verbal adverbs, that language would have to have V-O order, and final auxiliaries are ruled out by FOFC in V-O languages (see chapter 1). A crucial question, then, is whether Ernst's asymmetry can be derived from anything, notably Kayne's Antisymmetry.

It is not immediately clear whether this is the case. In Kayne's (1994) terms, there is no adjunct/specifier distinction. Following Cinque (1999), it is usually taken to be the case that adverbs are specifiers of functional heads subject to a universal sequence, as discussed above. The immediate (naïve) prediction of the LCA is that adverbs should precede the phrases which they modify, then. However, as movement is available, by hypothesis, to alter the base-generated order of constituents, this naive prediction unsurprisingly does not hold. In Kaynean terms then, the asymmetry in (56) must derive from restrictions on movement. Interestingly, it seems to imply a restriction on movement of exactly the opposite kind from FOFC:

(57) * $[_{GP} [_{VP} \text{Obj } V^{\wedge}] G^{\wedge} [_{FP} \text{adv } [_{t_{VP}}] F^{\wedge}]]$

(58) $[_{GP} [_{VP} V \text{Obj}] G^{\wedge} [_{FP} \text{adv } [_{t_{VP}}] F^{\wedge}]]$

According to BHR's approach to FOFC described in chapter 3, (58) should be banned and (57) should be well-formed, contrary to fact. Rather, in (57), where all heads in the extended projection bear \wedge yielding an OV order, the result is ungrammaticality, whereas in (58), where the lexical head V lacks \wedge , resulting in VO order, this yields V-O-Adv, which is apparently attested. This is a problem for FOFC on two counts. Firstly, and less problematically, FOFC fails to rule out (57), meaning that some additional constraint on movement is needed. But more seriously, FOFC predicts (58) to be ungrammatical, apparently contrary to fact.

It is easy to provide examples from VO languages illustrating that Ernst's asymmetry holds as a surface constraint. In very many VO languages, adverbs can follow V(P):

(59)a. The children walked out of the room silently .

b. The children ate the cakes quickly.

c. ??He said that he's leaving yesterday.

(60)a. Los niños salieron de la sala silenciosamente.²⁵

the children exited of the room silently

'The children left the room silently.'

b. Los niños comieron los pasteles rápidamente

the children ate the cakes quickly

'The children ate the cakes quickly.'

c. ??Dijo [que se iba] ayer.

Said.3s that SE was.going yesterday

[Spanish, Jorge Cortina López, p.c.]

(61)a. Les enfants sont sortis de la pièce silencieusement.

the children are left of the room silently

'The children left the room silently.'

[French, Bonami et al. (2004: 155)]

b. Les enfants ont mangé les gâteaux rapidement.

the children have eaten the cakes quickly

‘The children ate the cakes quickly.’

c. ??Il m’ a dit qu’ il viendra hier.

he me has said that he will.come yesterday

[French, Caroline Cordier, p.c.]

This might be taken as evidence that the linearization of adverbs is simply not subject to FOFC, presumably because the former do not select and are not selected for (in the normal case). Unfortunately, though, given the LCA and FOFC, deriving clause-final adverb orders is no trivial task as the functional heads housing adverbs in their specifiers are presumably subject to FOFC.

If the linearization of adverbs is determined by the LCA then for a VP-adverb to follow VP, the material contained in the latter must necessarily have raised higher than said adverb. Assuming, as Cinque (1999) has argued, that adverbs are merged as the specifiers of functional heads, the simplest way to derive the correct word order is via phrasal movement of VP past Adv, as mentioned above:

(62) $[_{FP} [_{VP} V O] F^{\wedge} [_{XP} Adv X \text{VP}]]$

Cinque proposes that this ‘low’ VP-fronting is A-bar movement, which may overcome the problem if there is independent evidence that A-bar movement is involved.²⁶ If this movement is A-movement then movement of

a head-initial VP past the null head X to the specifier of FP is a FOFC-violation for both of the accounts of FOFC given in this volume (see chapter 3). According to BHR, F in (62) could only bear $\hat{}$ if it were a lexical head, beginning a new extended projection. BHR need to assume that auxiliaries, which are located higher than F, are in the extended projection of V in order to account for the lack of V-O-Aux. By implication, then, F must also be part of that same extended projection.²⁷ For Sheehan, movement of a head-initial VP within its phase is expected to require discontinuous spell-out of VP, giving rise to the order V-Adv-O rather than V-O-Adv.

There are at least three ways to circumvent this problem. The first is to reject the LCA and reformulate an alternative analysis of FOFC. For example, BHR's $\hat{}$ -percolation account could be restated without the LCA, if the $\hat{}$ -feature signalling head-finality signals only head-finality, rather than narrow syntactic movement. Adjunct placement would then fall outside FOFC, being regulated by some other mechanism (cf. Ernst 2003, Abels and Neeleman 2009). The second option is to weaken the LCA and claim that it linearizes only argument structure, adjunct placement being regulated by some different mechanism. I will not explore either of these possibilities here. Finally, it might be claimed that the structure *[V-O]-Adv is, in fact, banned and that the data which appear to falsify it (in English, French and Spanish) actually have a different hierarchical structure. I will briefly explore this last possibility here.

One possible analysis of V-O-Adv order is that the object and verb do not move past the adverb as a constituent, but rather in separate movements (cf. Johnson 1991, citing Postal 1974, Koopman 1989). Johnson gives convincing evidence that both the verb and DP object vacate VP in English, whereas PP and CP complements remain in-situ. Adapting his analysis slightly, I propose that V raises to v and both DP and PP objects vacate VP, with DPs raising to a higher position than PPs. First note the full range of adverb placement facts with DP, PP and CP complements in English:

- (63)a. John {quickly} walked {quickly} to school {quickly}.
- b. John {quickly} ate {*quickly} his toast {quickly}.
- c. John {quickly} said {quickly} that he was late {??quickly}

Assuming there are at least three relevant adverb positions here, the data can be summarised linearly as follows:

- (64)...T Adv₁ V DP Adv₂ PP Adv₃ CP

In these terms, the well-known adjacency condition which bans an adverb from intervening between a verb and direct object in English reduces to the fact that there is no adverb position between the landing site of DP and V.²⁸ Johnson's proposal is that the DP has raised from its base position in VP to a position above the second adjunction position for *quickly*. Updating his

proposal slightly we get the following (simplified) clause structures for English and French/Spanish, abstracting away from the finer positions of the adverbs, and the fact that the verb actually raises higher in French than in Spanish:

(65) English

[_{TP} Subj T [_{Adv₁} [_{VP} V+F+Asp+v [_{ASP} DP t_{Asp} [_{Adv₂} [_{PP} t_F [_{Adv₃} [_{VP} t_V CP]]]]]]]]]

(66) French/Spanish

[_{TP} Subj V+F+Asp+v+T [_{Adv₁} [_{VP} t_v [_{ASP} DP t_{Asp} [_{Adv₂} [_{PP} t_F [_{Adv₃} [_{VP} t_V CP]]]]]]]]]

Johnson gives evidence that verbs move out of VP in English from co-ordination facts, attributed to Larson (1988, p. 345, note 11):

(67) Chris ate [_{VP} t_{ate} the meat slowly] but [_{VP} t_{ate} the vegetables quickly]

Let us suppose that this analysis is along the right lines, so that V-O-Adv orders are derived not by VP movement but by separate movement of the verb and its arguments past Adv. This derivation is not in violation of FOFC, as from the perspective of both BHR and Sheehan, FOFC is a constraint on the movement/linearization of head-initial phrases. In (65)/(66), the object and verb move separately.

Crucially, the same derivation could *not* derive V-O-Aux order:
because of the head-movement constraint, the verb could never head-move
past the auxiliary:

$$(68) [_{XP} \overset{\uparrow}{V+F+X} [_{FP} \overset{\uparrow}{Obj} t_F [_{AuxP} Aux [_{VP} t_V t_{Obj}]]]$$

*

In as much as this account can be extended to all final adverbs in VO
languages, it provides a FOFC-compliant derivation for V-O-Adv orders.

It is by no means clear, though, what rules out O-V-Adv orders, as these
could be derived either by phrasal or separate V and O movements. I leave this
matter open for future research (cf. Ernst 2003 for one proposal).

5 Basque evidentiality particles: a different challenge

As Arregui (2002: 148, fn 41) points out, in Basque, modal evidential particles
such as *ete* (evidently) and *omen* (apparently) unlike other adverbs/arguments
can intervene between the verb and auxiliary in the V-Aux order (cf. also
Haddican 2004: 97):

(69) Bazkal-du-ko	bide	zue-n.
Lunch-ASP.PERF-T.FUT	MOD.EVID	Aux-T.PAST

‘Apparently he was going to have lunch.’

(70)	Lagun-tzen	(*Miren/*maiz)	omen	zintu-en.
	Help-ASP.IMP	(Miren/often)	MOD.EVID	AUX-T.PAST
	‘Apparently she (often) helped (Miren).’			[Basque]

These examples present an additional surface violation of the ban on *V-X-Aux. Once again, though, it appears that these examples do not have the structure *[[V-Adv]-Aux]. Haddican (2004) argues, partly on a semantic basis that these examples involve phrasal movement. He shows that in non-negative clauses in Basque the whole verbal complex V!P (including the verb, modals and preverbal interval arguments) raises to spec PolP. In negative contexts, the negative marker *ez* raises instead and VP remains in-situ:

(71)	Ez	al	zio-n	galde-tu-ko?
	NEG	speech.act	AUX-T.PAST	ask-ASP.PERF-T.FUT
	‘Wasn’t she going to ask him (that)?’			

Etxepare (2009) gives evidence that there is dialectal variation as to whether *omen* is a head or specifier. In what he terms Eastern II dialects, *omen* is the specifier of a functional head in a different extended projection from TP. In central dialects, however, he argues that *omen* is a head which projects a head-initial ModP above the projection of the auxiliary (T). As such, phrasal movement of V!P past this head-initial phrase gives the following structure:

(72)_{[PolP [V!P O-V] Pol [ModP *omen* [TP T t_{V!P}]]]}

Whether this is a violation of FOFC under BHR's account depends on the nature of the trigger for V!P movement in such cases. If such movement is A-bar movement then it plausibly falls outside the constraint. A potential problem with this is that the movement operations which give rise to disharmonic word orders in languages like Finnish also look like A-bar movements in certain respects, and yet they still give rise to FOFC effects. Under the PF-interface account, FOFC reduces to a linearization problem triggered by the movement of a non-atomic *head-initial* phrase. As such, the structure in (72) is unproblematic for that approach.

6 Conclusions

In this chapter I have considered to what extent there is an asymmetry between head-initial and head-final sequences of verbs. While it is true that in some languages head-final verbal sequences can be interrupted by certain adverbials, the elements which can surface in this position are very limited in scope and all cases do not have the structure *[V-Adv]-Aux]. This means that a more general version of FOFC holds, whereby no phrase can occur between V and a following Aux. It has been noted that this gap is actually predicted by existing accounts of FOFC in conjunction with Ernst's asymmetry. The reason for Ernst's asymmetry, though, remains elusive.

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¹ BHR (2007, 2008) also discuss English prenominal APs, which appear to display a FOFC-effect. These kinds of examples are discussed at length in **chapter 6**:

(i) *John is a [_{VP} [_{αP} proud of his son] man].

² Anders Holmberg (personal communication) notes that it has subsequently come to light that Finnish does allow certain adverbs to interrupt V-Aux sequences, including at least 'here' and 'there', where the verb is focused and stressed and the adverb unstressed:

(i) Milloin minä laulanut täällä olisin?
 when I sung here would-have

He also notes that unstressed pronominal complements can also occur in the same position:

(ii) Kyllä minä lukenut sen olen.
 PRTCL I read it have

These examples create a potential problem for all formulations of FOFC. In **chapter 11** it is suggested that they may involve movement both of the VP and the adverb.

³ As we shall see below, though, Hindi actually also allows V-O-Aux as a marked order suggesting that the grammaticality of (4) might not be sufficient to indicate that FOFC is a generalisation only about complementation.

⁴ Thanks to Yalda Kazemi Najafabadi for Persian judgements and Ali Algryani for Libyan Arabic judgements.

⁵ In the Corpus del Español there are no examples of ‘ha siempre regular.past.participle’ or ‘ha ya regular.past.participle’ or ‘ha *mente regular.past.participle’ from the 20th century, but many genuine examples from 13th to 19th century. So this restriction appears to be fairly recent. These facts echo Ojea López’s (1994: 409) claim that examples where adverbs intervene between *haber* and the past participle “eran más frecuentes en otras etapas de la lengua” (‘were more frequent in other stages of the language’).

⁶ ‘*Haber* does not have autonomy as a verbal form.’

⁷ Basque (like Turkish) places short manner adverbs like *gogor* ‘hard’ immediately preceding and adjacent to the verb (Arregui 2002, citing A. Elordieta 2001):

(iii) Athletic Real Madriden	kontra	gogor	jolasten	dau
Athletic Real Madrid.G	against	hard	play.IMP	AUX.PR
‘Athletic plays hard against Real Madrid.’				

[Basque, Arregui (2002: 128)]

As such, these adverbs cannot occur between V and a following Aux for independent reasons.

⁸ Consider also Pintzuk’s (2005: 121) observation that no constituent (argument or adjunct) can intervene between V and Aux in V-Aux orders in Old English. Perhaps relevant, though, is Pintzuk’s (2005: 121) observation

that the three attested examples of the V-X-Aux orders involve a PP or adverb rather than a DP complement.

⁹ This is sometimes known as snowballing movement following Aboh (2004).

¹⁰ In more recent work Cinque has rejected these distinctions, and now assumes that all head-finality is derived via snow-balling (see Cinque 2005, 2010).

¹¹ Note that Mahajan (1989) does not use capital letters with proper names whereas Bhatt does. I have not used capital letters in Hindi examples except to represent retroflex consonants.

¹² Note that a similar set of adverbials fail to count for V2 in certain Germanic languages (Swedish *bara* ‘only’, *nästan* ‘nearly’, *till och med* ‘even’, *helt enkelt* ‘simply’, Holmberg 2010: 15, Nilsen 2003).

¹³ There are certain restrictions on the distribution of *bhii* though. The particle *bhii* cannot intervene between the lexical verb and future marker or between the progressive marker and the verb *hona* ‘be’ (Koul 2008: 144):

(iv) **vah khaa rahaa bhii hai*
 he eat prog also is

¹⁴ A potential exception to this comes from instances where only the verb appears to be modified and fronted:

(i) *khaataa to raam roTii thaa*
 eat.MS TO Ram bread was.3MS

[Hindi, Mahajan (1989:226)]

This could potentially be remnant VP fronting, given that Hindi allows scrambling.

¹⁵ This raises some challenges for the account of FOFC pursued by BHR as it must crucially be the case that auxiliary verbs are not lexical heads originating their own extended projection.

¹⁶ The only example of an adverb which Mahajan gives is *roz* which he glosses ‘every day’. Other adverbs in Hindi occur in preverbal positions. The status of *roz* requires further investigation.

¹⁷ Thanks to Pallavi Worah for Hindi judgements and discussion.

¹⁸ Dwivedi gives further evidence from an Eastern dialect of Hindi spoken in Uttar Pradesh in which negation appears to incorporate into the verbal cluster. As it is not clear how general these facts are, though, this does not imply that negation always undergoes head movement to T in Hindi.

¹⁹ Following Mahajan (1990), it is generally accepted that Hindi NPIs are not licensed at s-structure but rather at LF, meaning that no surface c-command is required between sentential negation and an NPI (cf. also Bhatt 2005). Thus an NPI-containing direct object need not be in the surface scope of negation here.

²⁰ I assume that the habitual inflection on V in (31) is equal in status to the –ing on a progressive form in English.

²¹ But see Roberts (2010: chapter 5) on the head movement constraint.

²² This example seems to be wrongly glossed as ‘Ram did not (use to) eat vegetables’ in Mahajan (1990: 338).

²³ I have added glosses to these examples.

²⁴ The Basque examples are of a different nature and are considered below.

²⁵ A potential confounding factor is that *–mente* is arguably a separate word in Modern Spanish, as illustrated by the fact that it can modify co-ordinated adjectives:

- (i) *subió la escalera [triste y lenta]mente*
 climbed the stairway sad and slowly
 ‘He/she climbed the stairs sadly and slowly.’

As such, *–mente* adverbs qualify as ‘heavy’ (though left-branching) and might be extraposed for this reason. In fact, adverbs without *–mente* cannot appear in this post-PP/DP position:

- (i) **Hablo con los chicos bajo.*
 Spoke with the boys low
 (ii) *Hablo bajo con los chicos.*
 Spoke low with the boys
 ‘He spoke quietly with the boys.’

A similar case could be made for French *–ment* adverbs. Note that time adverbials such as *ayer/hier* ‘yesterday’ can also appear in a post-PP/DP position, but these have elsewhere been argued to be concealed PPs.

²⁶ As is well known, predicates behave differently from arguments when moved and so many of the usual diagnostics for A-bar movement are unavailable (see Huang 1993).

²⁷ If auxiliaries are not part of the same extended projection as the verb then the lack of VO-Aux structures cannot be a FOFC-effect.

²⁸ As is also well-known, the adjacency condition fails to hold in Romance and this is often attributed to the fact that English, unlike Romance, lacks verb movement. The same effect obtains, however if verb movement in Romance targets a higher position than in English, raising past the Adv₁ position.