Clause-Bounded Movement: Stylistic Fronting and Phase Theory

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In this squib, we provide novel empirical support for treating the thematic domain—the “vP”—as a locality domain like CP (a “phase”), in agreement with a growing body of research (see Barbiers 2002, Fox 1999, Legate 2003, Rackowski & Richards 2005, Cozier 2006; Kahnemuyipour and Megerdoomian 2011; Buell 2012; and van Urk & Richards 2015, see Den Dikken 2006 for an opposing view). We show how vP phasehood explains a previously unsolved problem for defining the locality of Icelandic Stylistic Fronting (SF). We present novel data to show that SF of verbs and particles can only cross one phase boundary, a generalization that is empirically superior to “clause-boundedness.” Our study supports the view that v defines a phase edge whether the verb is linked to an external argument or not (Legate 2003).

1 Stylistic Fronting and Locality

Stylistic Fronting (SF) has provided an important data source for our theoretical understanding of EPP and verb-second effects (Maling 1990; Holmberg 2000; Sigurðsson 2010; see Holmberg 2005 for a thorough overview). SF is movement of a non-finite verb, verbal particle, adverb, adjective, PP or DP to the left of a finite verb. It is possible, and optional, when there is a subject gap; that is, whenever SpecTP is not filled by phonologically overt material, such as in subject-extracted relative clauses.1

1 The book that has been stolen is very valuable.’

While everyone agrees that SF is clause-bounded, the analysis, and even the formal
description of this constraint, has proved recalcitrant. In Holmberg’s (2000) analysis, the closest frontable constituent moves; clause-boundedness must be stated separately. Note, for example, that *lesa ‘read’ is the closest frontable constituent in (3) (since complementizers cannot undergo SF), and still it cannot move. Jónsson (1991) points out that it is not enough to say that CP is a barrier for SF, since raising verbs, standardly assumed to take a TP complement, do not allow it.3

(4) \[\text{DP} \text{Þeir [CP sem {*taka } \text{virðast [TP {taka } kartöflur upp }] } \text{eru álfar.}\]

\[\text{DP they [CP who {*pick.INF } seem [TP {pick } potatoes up }] } \text{are elves.} \]

‘The ones who seem to harvest potatoes are elves.’

(5) \[\text{DP} \text{Þeir [CP sem {*brjóta } \text{þykja [TP {brjóta } niður nemendur }] } \text{eru álfar.}\]

\[\text{DP they [CP who {*break.INF } think [TP {break } down students }] } \text{are elves.} \]

‘The ones who are thought to break students’ spirits are elves.’

Thráinsson (1993, 2007:374) proposes that the problem with (2) and (3) is not clause-boundedness per se, but the intervention of an overt complementizer head. He points out that, as originally observed by Sigurjónsdóttir (1989) and Sigurðsson (1989), SF is possible with some raising and control verbs when the complementizer *að is omitted; this fact will be discussed further below.

However, intervention of an overt complementizer head cannot explain the unacceptability of SF in (4). Moreover, this is not just a quirk of raising constructions: there are constructions that have not yet been mentioned in the literature which disallow SF. For example, the causative verb *láta ‘let/make’ may take an infinitive verb complement with no thematic subject, and this construction does not allow SF. (We return to the identity of XP below.)

(6) \[\text{Þetta er [DP maðurinn [CP sem {*brenna } lét [XP {brenna } allar bækurnar}]].}\n
\[\text{this is [DP the.man [CP who {*burn.INF } made [XP {burn } all the.books}]}.\]

‘This is the man who made (someone) burn all the books.’

Similarly, *fá ‘get’ may take a participle complement and mean something like ‘manage’ (Taraldsen 2010, Sigurðsson & Wood 2012); this construction also disallows SF.
(7) Þetta er [DP maðurinn [CP sem {*brennt} fékk [XP {brennt} allar bækurnar}]].
    this is [DP the.man [CP who {*burned.PTCP} got [XP {burned} all the.books}]]
    ‘This is the man who managed to burn all the books.’

The same holds for SF of verb particles. (8) shows that the particle *upp ‘up’ can undergo SF in the presence of the auxiliary skulu ‘shall’. (9)–(10) show that this is not possible in the látta ‘let/make’ and fá ‘get’ constructions.

(8) [DP þeir [CP sem {upp skulu taka kartölflur {upp}}] eru álfar.
     [DP they [CP who {up shall pick potatoes {up}}] are elves
    ‘The ones who will harvest potatoes are elves.’

(9) [DP þeir [CP sem {*upp léttu taka kartölflur {upp}}] eru álfar.
     [DP they [CP who {*up made pick potatoes {up}}] are elves
    ‘The ones who made (someone) harvest potatoes are elves.’

(10) [DP þeir [CP sem {*upp fengu tekið kartölflur {upp}}] eru álfar.
     [DP they [CP who {*up got picked potatoes {up}}] are elves
    ‘The ones who managed to harvest potatoes are elves.’

One might try to say that the identity of TP/XP in (4)–(7) is simply CP, so that these examples simply illustrate the clause-boundedness of SF. However, Icelandic non-finite CPs, such as the complements of control verbs, have verb raising, as shown by the ability of the verb to move to the left of clausal negation ekki ‘not’. Raising verbs, látta ‘let/make’ and fá ‘get’ do not allow this (Platzack 1986; Thráinsson 1986; Sigurðsson 1989).

(11) Ég reyndi að byggja ekki húsið.
    I tried to build.INF not the.house.
    ‘I tried to not build the house.’

(12) *Ég {virtist /létt} byggja ekki húsið.
    I {seemed/made} build.INF not the.house.
    INTENDED: ‘I seemed to/made (someone) not build the house.’

(13) *Ég fékk byggt ekki húsið.
    I got built.PTCP not the.house.
    INTENDED: ‘I managed to not build the house.’
In fact, these kinds of clauses apparently generally disallow sentence adverbials in the first place (Sigurðsson 1989:85–87), reinforcing the point that they are smaller than CP.

2  A New Generalization

We propose that the novel data in (6) and (7), along with (4)–(5), reveal a previously unnoticed correlation: SF is disallowed past verbs that have their own argument structure—that is, past verbs which have their own vP layer and extended projection. Láta ‘let/make’ and fá ‘get/manage to’ can be shown to have their own argument structure on the basis of the fact that they cannot embed oblique-subject verbs (see Thráinsson 1986 for discussion of this test), illustrated with the verb takast ‘manage to succeed’.

(14) Mér { mun / *lét } takast þetta.
   me.DAT { will / *made } succeed.INF this
   ‘I will manage to succeed at this.’

(15) Mér { hefur / *fékk } alltaf tekist þetta.
   me.DAT { has / *got } always succeeded.PTCP this
   ‘I have always managed to succeed at this.’

These facts support the view that láta ‘make’ and fá ‘get/manage to’ take their own thematic arguments, and do not simply inherit the argument structure of their complements. This, in turn, means that these verbs project their own extended vP layer.

Raising verbs like virðast ‘seem’ are different in that by definition, they involve raising of a lower argument; thus, they may embed oblique-subject verbs and preserve the embedded case, as shown in (16a). However, evidence that raising verbs like virðast ‘seem’ have argument structure and project their own extended vP comes from the fact that they may take experiencer dative arguments of their own, as shown in (16b).

(16) a. Mér virðist [TP me.DAT seemed [TP mé. DAT succeed this ]
   me.DAT seemed [TP me.DAT succeed this ]
   ‘I seemed to manage to succeed at this.’

b. Henni virðist [TP mé. DAT succeed this ]
   her.DAT seemed [TP me.DAT succeed this ]
‘I seemed to her to manage to succeed at this.’

Even when there is no experiencer, the important point is that raising verbs of the relevant kind are lexical, argument-taking verbs, and not auxiliaries. Under standard assumptions, they would pattern with unaccusatives in projecting an unaccusative little v, which defines a phase under the view that all vPs are phases (Legate 2003; Marantz 2007).

What distinguishes the verbs that disallow SF from the ones that allow SF, then, is that the former have argument structure of their own, which in current theoretical terms means that they project a vP layer. In phase-theoretic terms, this means that they define/project phases of their own, and their complements contain separate phases.

3 Analysis

The correlation between having argument structure and disallowing SF is explained by phase theory, which treats vPs and CPs the same from a locality perspective. The descriptive generalization is this: verbs and particles undergoing SF can only cross one phase boundary, the one that the verb in question projects. Thus, they cannot cross a higher CP boundary or a higher vP boundary. This generalization supports treating vPs as phases, that is, as boundaries for locality on par with CPs (which is not to say that vPs have the same set of features as CPs).

The theoretical question is how to implement this generalization: why is it that a verb or particle can cross only the vP phase boundary that it projects, but no other? The answer comes from phase theory, specifically the class of theories subject to what Citko (2014:33) calls the “Weak Phase Impenetrability Condition” or PIC, which was originally formulated by Chomsky (2001:13–14). Assuming that ZP is a phase that contains a distinct phase headed by phase head H, PIC is defined as in (17).

\[(17) \text{ The domain of } H \text{ is not accessible to operations at } Z; \text{ only } H \text{ and its edge are accessible to such operations.}\]

What this means is that the domain of H is accessible to non-phase heads that intervene between Z and H. This is because Transfer/Spell-Out of a phase is not triggered until the next higher phase head is merged. In the present case, this requires only that we assume
the landing site for SF (e.g., SpecTP) is lower than the next phase head.6

To take a concrete example, consider the distinction between (8) and (9), which is represented schematically in (18) and (19), respectively.

(18) [CP who [TP up shall [vP pick up potatoes]]]

(19) [CP who [TP up made [vP made [vP pick up potatoes]]]]

In (18), the domain of the phase vP is accessible to operations at TP, because TP is not itself a phase. Therefore, SF can apply and move either the verb or the particle to the preverbal position (assuming with Holmberg (2000) that verbs and particles form a head-complement relation, making them both equidistant to the landing site).7 However, in (19), there is an additional vP phase boundary between TP and the lower vP. Thus, as soon as that higher vP is constructed, the domain of the lower vP, including the verb and the particle, is no longer accessible to operations at TP. The independently-proposed PIC2 thus makes exactly the right cut: verbs and particles undergoing SF can cross one and only one phase boundary.

4 Further Consequences

All else being equal, our account predicts that categories that move successive-cyclically (e.g., undergo A′-movement) will not be clause-bounded in the same way; for example, DPs can move to phase edges, which should put them in a position to be Stylistically Fronted. This prediction is borne out (example from Thráinsson (2007:374)).

(20) ?Þetta er maðurinn [CP sem allar bækurnar, reyndi [CP að lesa ti]]

\[
\begin{align*}
\text{this} & \quad \text{is the.man} \\
\text{who} & \quad \text{all the-books, tried} \\
\text{to} & \quad \text{read} \\
\text{ti} & \quad \text{t}
\end{align*}
\]

‘This is the man who tried to read all the books.’

In this example, the DP appears to have Stylistically Fronted past the CP clause boundary, as well as past two vP boundaries (for reyna ‘try’ and lesa ‘read’).8 The same holds for PPs, which, like, DPs, can undergo long-distance topicalization as in (21). Adverbial proforms pattern with PPs; e.g., þar ‘there’ can replace the PP below. They are phrasal as shown by complex AdvP þar í bæ ‘there in town’, also compatible with this position.
It has been debated in the literature whether XPs should be considered to undergo SF, or whether apparent SF of XPs is really just topicalization (Rögnvaldsson & Thráinsson 1990; Thráinsson 2007:368; Hrafnbjargarson & Wiklund 2009; Angantýsson 2011:218–221). The ‘just topicalization’ analysis suffers from the fact that in many environments (such as relative clauses), the ‘topicalization’ is only possible when there is a subject gap—just like SF—and only in languages that allow SF (e.g. *...the man who the books, tried to read* in English) (Holmberg 2000, 2005). Nevertheless, Molnár (2010) has argued that in Icelandic, the information structural properties of SF of DPs and PPs differ from those found in SF of verbs, particles, adverbs and adjectives (see also Egerland 2013).

While we cannot go into details about the information structural properties of SF versus topicalization—note that what is called ‘topicalization’ in Germanic is associated with a variety information structural properties (Frey 2004, 2006)—in the present account, ‘long-distance’ SF shares syntactic properties with both topicalization and ‘clause-bounded’ SF. Like with topicalization, long-distance SF is fed by the availability of successive movement to phase edges; however, once that movement puts the DP in the same domain as the SF landing site, it moves by the same mechanisms—whatever those might be—that derive ‘ordinary’ SF, explaining why a subject gap is needed.

Consider how successive-cyclic movement works in a phase-based theory. Following Chomsky (2001), phase heads can generally be endowed with optional [EPP] features that trigger movement to their edges (though see Sigurðsson 2010 for a more refined view of EPP effects). If a DP is to be topicalized, it moves to the vP edge in this way. However, the DP cannot stay in place: it must find an appropriate landing site. In Scandinavian languages, movement of an object DP to the vP edge can feed Object Shift (OS) (Holmberg 1999); in English, this movement cannot feed OS, but may feed A′-movement.
to the CP domain (Chomsky 2001:26). Importantly, the [epp]-feature responsible for successive-cyclic movement is not directly associated with the information-structural effects associated with OS, topicalization, wh-movement, or the like. Those effects must arise elsewhere in the derivation (but see López (2009), where information-structural effects arise as part of a phase-edge feature-checking operation).

Returning to SF, the generally held view is that any constituent close enough to the landing site is able to move to that position (Holmberg 2000). Since DPs have a general way of moving successive-cyclically to each phase edge, we now expect that once they reach the edge of the phase inside a clause containing an available SF landing site, they should be able to move to that site. (20) and (21) show that this expectation is borne out. The DP moves to the edge of the embedded vP, from there to the edge of the CP containing it, and then to the edge of the matrix vP (for reyna ‘try’). It cannot stay in that position, of course; it must find an appropriate landing site, which in this case is the SF position. The present account, then, predicts that elements that can move successive-cyclically can, in principle, undergo SF across clause boundaries.

The present account also allows for an explanation of the fact, mentioned above, that some raising and control verbs do allow SF, as long as the complementizer að is omitted. This is illustrated in (22)–(23) (from Thráinsson 1993:194–195).

(22) Sá sem reyndi að lyfta steinimum gafst upp.
   he who tried to lift the.stone gave up

(23) ? Sá sem lyfta reyndi (*að) lyfta steinimum gafst upp.
   he who lift.1 INF tried (*to) lift the.stone gave up
   ‘The one who tried to lift the stone gave up.’

(23) seems puzzling at first glance, because it involves SF, despite the fact that it is a control construction, which means that the control verb reyna ‘try’ has a vP of its own. Assuming that much, the option available to the present theory is that in (23), it is the embedded verb that projects no phase. That is, it is a restructuring construction (Wurmbrand 1998; Legate 2012). In the theory in Wurmbrand (1998), such cases involve no null PRO, but rather
involve complex predicates built of stacked VPs with one external argument.\(^\text{10}\)

\[(vP \text{ EXT-ARG } vP \text{ try } [vP \text{ lift the stone }])\]

Assuming Icelandic að is higher than VP (standardly thought to be in C for control infinitives (Sigurðsson 2008:407)), our analysis explains the absence of að: SF is only possible when the control verb takes a VP-sized complement, which rules out að.\(^\text{11}\)

Further, independent support for the restructuring analysis can be found when the embedded verb selects for a non-nominative subject. Consider the contrast in (25).

\[(25) \text{ Context: A critic wants to write a negative review about a play, because the playwright is her rival. She goes to the play with a very negative attitude.}
\]

\[
\begin{align*}
\text{Gagnrýnandinn } & \text{\{ ? reyndi að mislîka / * mislîka reyndi \} leikritið } \\
\text{the.critic } & \text{who \{ tried to dislike / dislike tried \} the.play } \\
\text{skemmti sér } & \text{samt sem áður vel.} \\
\text{enjoyed REFL regardless well }
\end{align*}
\]

‘The critic who tried to dislike the play enjoyed herself regardless.’

The verb mislîka ‘dislike’ demands a dative subject, a requirement that can be met in control constructions by assigning dative case to PRO (Andrews 1976; Sigurðsson 1991, 2008). SF is only possible, however, with a restructuring structure like (24), in which there is no PRO, making it impossible to meet the argument-structural requirements of mislîka ‘dislike’ and reynd ‘try’ at the same time; SF is thus impossible with such verbs.\(^\text{12}\)

In general, then, we conclude that in order for a control verb to allow SF of its verbal complement, it must involve restructuring in the sense of Wurmbrand (1998), with no PRO, and no phasal vP layer. The matrix and embedded verb behave as one predicate, and SF may cross the one vP layer projected by that predicate in a manner similar to that discussed for particles above. If, however, the fronting category may move successive-cyclically across phase edges, as DPs can, then clause-boundedness does not hold in this form. The generalization that SF of verbs and particles is clause-bounded reduces to the claim that verbs and particles undergoing SF may only leave the phase that they project.
5 Conclusion

In this squib, we have provided novel support for vP as a phase. We have proposed that the locality of Stylistic Fronting is best understood as the restriction that verbs may only cross the phase that they project. We supported this by discussing raising verbs, as well as two constructions that have not previously figured in the discussion of SF, and provided evidence that the verbs disallowing SF have argument structure of their own, and thus project their own vP layer. We then discussed how our account is able to handle two kinds of exceptions to the clause-boundedness constraint. First, elements such as DPs that can move successive-cyclically are able to cross phase boundaries via their edges, and they are thus not clause-bounded. Second, apparent control verbs that allow SF as long as there is no overt complementizer are instances of restructuring, in that it is the lower predicate that does not have its own vP layer. The empirical coverage of the present account of clause-boundedness thus provides empirical support for phase theory, which treats vPs on par with CPs for the purposes of deriving locality constraints.

Notes

1 Judgments that are not cited explicitly in the text come from the first author.

2 We take no stance on other aspects of the analysis of SF; as far as we can tell, our proposal is compatible with all available analyses. We focus on SF of verbs and particles, but SF of adjectives and adverbs is also subject to the clause-boundedness constraint.

3 Jónsson (1991) marked an example like (4) as ‘??’, but that was because he was comparing it with an example that was much worse for independent reasons. The speakers we have consulted judge (4) and (5) as clearly unacceptable.

4 Even when the raising verbs in question take no experiencer argument, they take a TP argument. Moreover, verbs like virðast ‘seem’ take the -st clitic in the external argument position (here, SpecvP), according to Sigurðsson (2012) and Wood (2015). As shown earlier in (5), however, -st is not necessary for the locality conditions to take effect.

5 Sentence adverbs such as ekki ‘not’ start out higher than vP (or adjoined to it), so they
will be accessible for SF from the start. If predicate adjectives do not project a phase, the
same can be said for them; if they do, the solution in the main text for verbs would apply
in a parallel way. Note that Franco (2009) and Ott (2009, 2016) also invoked phasehood
in their analyses of SF, but it is not clear to us that they use it to derive clause-boundedness
in the sense intended here.

6 The generalization could also be implemented with the strong PIC, provided that
verbs and particles can end up on the edge of the vP they project, without being able to
move to higher phase edges.

7 The syntax of particles is probably more complex than this (cf. Svenonius 2007), but
Holmberg’s (2000) analysis suffices for present purposes.

8 Thráinsson (2007) notes that “some speakers may not find [(20) perfect” (374), and
thus marks (20) as ‘?’. Note though that the first author does not find this sentence to be
questionable, and Thráinsson’s point was that the example is fairly acceptable. Movement
of the DP is in principle unbounded, as illustrated in (i), though cases like this (where more
than one CP is crossed) are slightly more degraded than examples like (20).

(i) ? Þetta er maðurinn sem allar bækurnar ákvað [CP1 að reyna [CP2 að lesa ]].
this is the.man who all the.books decided to try to read
‘This is the man who decided to try to read all the books.’

9 Thráinsson’s actual judgment was “(?)”, which we understand as intermediate
between ? and full acceptability. Not all speakers accept SF with ‘try’. Note that
verb-specific variation in the availability of restructuring is well attested (Wurmbrand
1998:289–290). Crucially, of the speakers we consulted with, all four who allowed SF
with ‘try’ agreed on (22)–(23).

A reviewer asks whether it is possible to stylistically front the second verb of a
three-verb sequence in a restructuring configuration. Such cases turn out to be quite
degraded.

(i) Sá sem { ?? reyna } skal { reyna } að fara . . .
the.one who { ?? try } shall { try } to go . . .
‘The one who will try to go...’

This problem is not limited to our proposal; most analyses would predict SF to be possible in (i). According to Ott (2009, 2016), the complement of ‘try’ in (i) would have to be extraposed prior to (remnant) movement; if so, it is possible that extraposition is banned in these contexts. For reasons of space and time, we must set this speculation aside.

This analysis predicts that when -st verbs are built with -st in the external argument position (but not when -st occupies some VP-internal position), they will be unable to undergo SF with restructuring verbs. However, under Wurmbrand’s (2015) approach, is not clear that we expect any special restrictions on even those -st verbs.

What remains to be understood is why að is obligatory in (22); another way of putting this question would be to ask why SF is obligatory in restructuring contexts. (See Holmberg (2005) and Angantýsson (2011) for discussion of contexts where SF is obligatory.) One possibility comes from Wurmbrand’s recent work. Wurmbrand (2015) proposes that instead of the bare VP configuration in (24), restructuring involves a special, specifierless vR head that incorporates into the higher V (before that moves to its own v), extending its phase to the higher predicate and leaving the lower lexical verb behind:

(i) \[ \text{vP EXT-ARG vR+try+V} \left[ \text{vP <vR+try>} \left[ \text{vP <vR>} \left[ \text{vP lift ...} \right] \right] \right] \]

One way to derive the obligatoriness of SF in restructuring contexts would be to assume that Icelandic verbs are required to raise to v (perhaps for feature checking). Normally, simple V-to-v movement suffices, but when vR incorporates into the higher V, the lower V must move to the edge of the higher vP. This movement, however, is only possible when the verb can subsequently move to a suitable landing site, which SF then provides. Without SF, then, there can be no restructuring, and given restructuring, SF is obligatory.

The contrast in (25) is quite general with dative subject verbs, and has been verified by three speakers in addition to the first author. Note, however, that some speakers do not find dative PRO under reyna ‘try’ to be perfect (due in part to the nonagentive nature of dative subjects), and some speakers do not allow SF with reyna ‘try’ in the first place (cf. footnote 9).
References


Sigurjónsdóttir, Sigríður. 1989. The structure of Icelandic infinitival clauses and the status of the infinitival marker *að*. Manuscript, UCLA.


