There is no OBJECT SHIFT, just a GENERAL SHIFT, and independent constraining principles[*]

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Abstract. There is a propensity in many languages for elements that represent backgrounded and/or given information to show up in the middle field, a tendency that I term SHIFT. In this paper I argue that Object Shift and the raising of certain adverbials to the middle field in Swedish is due to this general propensity. SHIFT applies across the board, but language-specific principles, such as Constituent Order Rules, may block its application. An example of a reordering restriction is that an operation must not result in a constituent order for which the phonological module cannot supply a prosodic pattern, for example an OV pattern in a VO language. Another restriction is that a reordering operation must not result in a violation of the Case filter. Holmberg's generalization (cf. Holmberg 1999) does not describe a restriction on Object Shift *per se*, but is a consequence of a more general rule which states that VO-languages (such as the Scandinavian languages) do not allow an OV constituent order in the IP-VP domain.

1. Object Shift and adverbials in the middle field – an introduction

Object Shift, henceforth OS, has been the subject of a vivid discussion in the literature, ever since Holmberg's dissertation (see Holmberg 1986; also Vikner 1994, Hellan and Platzack 1999).[1] The base position for objects in Swedish is to the right of the negation and non-finite verb(s):

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[1] What type of constituents that can/must undergo Object Shift varies between the Scandinavian languages. In Icelandic full DPs may shift, whereas only pronouns shift in the other Scandinavian languages. The degree of optionality for Object Shift seems to vary too. In Swedish the operation is clearly optional (Josefsson 2003). When Object Shift is discussed in this paper it is from the point of view of Swedish, although comparisons to the other Scandinavian languages will be made.

(1) a. Jag har inte köpt bilen.
I have not bought car.the
'I have not bought the car.'
b. Jag har inte köpt den.
I have not bought it
'I have not bought it.'

Weak, i.e. unstressed and unmodified, personal pronouns may appear to the left of sentence adverbials, such as the negation *inte* 'not;' this reordering operation is called "Object Shift." Consider (2):

(2) a. Jag köpte den inte.
I bought it not
'I did not buy it.'
b.* Jag köpte bilen inte.
I bought car.the not
'I did not buy the car.'

OS does not apply unless all verbs have evacuated the VP. It is thus available only in simple tense main clauses, where the sole finite verb is in C^o – a restriction referred to as "Holmberg's generalization" (Holmberg 1999).

OS is also banned out of PPs (as demonstrated in 3a) and particle phrases (3b):

(3) a. *Jag åt den inte på. cf. Jag åt inte på den.
I ate it not on I ate not on it
'I did not nibble on it.'
b. *Hon sparkade den inte ut. cf. Hon sparkade inte ut den.
she kicked it not out she kicked not out it
'She did not kick it out.'

Not only weak object pronouns, but also adverbials may appear in the middle field. The base position for content adverbials expressing time, manner, location, etc. is the right periphery. This is also the position for bound adverbials, such as the theme adverbial *med farmor* 'with grandma' below.[2] Consider (4), where all adverbials, including the bound PP adverbial *med farmor* 'with grandma,' occur to the right of the DP object *Monopol* 'Monopoly.'

[2] The term bound adverbial is used for PPs and adverbial phrases carrying a theta role of some kind. It corresponds to the *Swedish Academy Grammar* (Teleman et al. 1999) term *bundet adverbial* 'bound adverbial,' as well as *prepositionsobjekt*, 'prepositional object,' used in traditional grammar.

(4) Barnen har spelat Monopol i vardagsrummet med farmor hela eftermiddagen.
children.the have played Monopoly in living room.the with grandma whole afternoon.the
'The children have played Monopoly in the living room with grandma the entire afternoon.'

In the base position the adverbials in question may scramble rather freely:

(5) a. Barnen har spelat Monopol i vardagsrummet hela eftermiddagen med farmor.
b. Barnen har spelat Monopol med farmor i vardagsrummet hela eftermiddagen.
c. Barnen har spelat Monopol med farmor hela eftermiddagen i vardagsrummet.
d. Barnen har spelat Monopol hela eftermiddagen i vardagsrummet med farmor.
e. Barnen har spelat Monopol hela eftermiddagen med farmor i vardagsrummet.

Some adverbials, mainly adverbials expressing time and circumstance, may appear in the middle field.[3] Consider the examples in (6):

(6) a. Barnen har hela eftermiddagen spelat Monopol i vardagsrummet med farmor.
children.the have whole afternoon.the played Monopoly in living room.the with grandma
'The children have played Monopoly in the living room with grandma the entire afternoon.'
b. Barnen har med stor entusiasm spelat Monopol med farmor
children.the have with great enthusiasm played Monopoly with grandma
i vardagsrummet hela eftermiddagen.
in living room.the whole afternoon.the
'The children have played Monopoly with grandma in the living room the entire afternoon with great enthusiasm.'

However, the raising of adverbials to the middle field is generally not an option for theme or locative adverbials:

(7) * Barnen har i vardagsrummet/med farmor spelat Monopol med farmor.
children.the have in living room with grandma played Monopoly with grandma

The purpose of this paper is to provide a unified account for the trigger of the raising of elements to the middle field, and, in doing so, to also explain the restrictions, in particular "Holmberg's generalization."

2. Constituent Order Rules, COR

In language typology, languages are classified according to their basic constituent order properties. In such a system Swedish is a VO language, hence (8) below is ungrammatical:

[3] I take the non-finite verb to demarcate the right-hand border of the middle field.

(8) * Jag har boken köpt.
I have book.the bought

If asked to judge the grammaticality of (8), a typical speaker of Swedish would probably say that the sentence is not well-formed, and that it "sounds German." Such a statement would presumably be due to the OV order. However, it is not always the case that the constituent order object > verb is bad; consider (9):

(9) Boken har jag köpt.
book.the have I bought
'I have bought the book.'

A linguist's answer as to why (9) is fine is, of course, that the CP layer is not relevant when it comes to constituent order restrictions, but only the order within the IP-VP domain.

A similar line of reasoning may be applied to PPs. Consider (10):

(10) * Jag tittade den på. cf. Jag tittade på den.
I looked it on I looked on it.
'I looked at it.'

The sentence in (10) is ungrammatical because Swedish has prepositions, not postpositions. As expected (11) is fully grammatical, since the complement of the preposition now is in the CP domain, hence there is no constituent order violation in the IP-VP domain.

(11) Den tittade jag på.
it looked I on
'I looked at it.'

Another case concerns verb particles, which normally precede objects in Swedish, cf. (12a). With the reversed order, cf. (12b), the sentence is not well-formed – it has a Danish ring to it. And as expected, the fronting of the object of the particle (12c) makes the sentence grammatical, again because constituent order rules apply only in the IP-VP domain; with the object of the particle in Spec CP, no constituent order violation is at hand.

(12) a. Jag sparkade ut den
I kicked out it
'I kicked it out.'
b.* Jag sparkade den ut.
I kicked it out

c. Den sparkade jag ut.
it kicked I out
'I kicked it out.'

The constituent order rules described above could be formalized in terms of basic Constituent Order Rules (COR):

(13) **Constituent Order Rules (COR)** in Swedish for domain D, taking D to refer to the IP-VP domain:
a. if V, object → V > object
b. if adposition, complement → preposition > complement
c. if object, particle → particle > object

The idea that I would like to propose is that the Constituent Order Rules in question are intimately connected to prosodic patterns, which are important parts of the internal grammar of native speakers. Our intuitive knowledge of the prosodic patters of our mother tongue becomes evident through the fact that we recognize our native language, even when no words are available. At a distance or in circumstances where we for various reasons are unable to perceive the words or even the distinct vowel or consonant sounds uttered by a speaker, we immediately know if the language spoken is our native one. We are able to identify it from the prosody – the melody of the language. If my proposal is correct we may conclude that the phonological component of the language faculty does not just read off the output of the narrow syntax and assign it a phonological form, but that the phonological component has its own requirements that have to be fulfilled in order for a sentence is to be well-formed. If the output of the narrow syntax results in a constituent order pattern for which the phonological component cannot supply a licit prosodic pattern, the derivation crashes.

The more precise nature of the prosodic constraints in question cannot be explored in this paper, but let us consider some basic properties. First of all, (14) is a sentence with a non-finite verb and a full DP object. The stressed part is indicated by capital letters.[4]

(14) Jag har [köpt EN NY BIL]$_{VP}$.
I have bought a new car
'I had bought a new car.'

We might consider (14) a neutral pattern from point of view of information structure, since it is a plausible answer to the question *Vad har du gjort?* 'What have you done?' The important prop-

[4] In a full DP such as *en ny bil* 'a new car,' the head noun is the element that receives the main portion of stress. However, for the sake of illustration the whole DP is capitalized in (14). I refrain from discussing examples with contrastive stress.

erty of (14) is that the object receives a relatively higher degree of stress than the verb. If this is correct, the neutral stress pattern in the Swedish VP is [LOW – HIGH]$_{VP}$.
If the object is a weak pronoun, however, we get a reversed pattern. Note that the capitalization of KÖPT in (15) does not indicate contrastive stress, only that the verb *köpt* 'bought' receives relatively more stress than *den* 'it:'

(15) Jag har [KÖPT den]$_{VP}$.
I have bought it.
'I have bought it.'

(15) is a suitable answer to the question *Hur har du gjort med bilen?* 'What have you done with the car?' The pronoun *den* 'it' thus represents old information. Preliminary investigations show that the patterns illustrated in (14) and (15) can be read off by the F0 curve (capital letters correspond to a higher tone level). However, more extensive investigations based on more informants have to be carried out in order to describe more exactly how the F0 curve relates to different of parts of speech. The main point so far is that the neutral pattern of the Swedish VP (as defined above) is [LOW – HIGH]$_{VP}$, whereas the reverse holds if the object is a weak pronoun.

In German, an OV-language, an opposite state of affair seems to hold:

(16) a. Ich habe [EINEN NEUEN WAGEN gekauft]$_{VP}$. [HIGH – LOW]$_{VP}$
I have a new car bought
'I have bought a new car.'

b. Ich habe [ihn GEKAUFT]$_{VP}$. [LOW – HIGH]$_{VP}$
I have it bought
'I have bought it.'

My claim is that the examples in (14-16) illustrate some very basic properties of two basic prosodic patterns of Swedish and German. I have only discussed properties of the VP, leaving the effect of possible adverbials out. The point is that prosodic patterns of this kind constitute part of our mental grammar, which means that the linearization ("spell-out") of the narrow syntax has to yield results that correspond to a possible prosodic pattern, if the utterance is to be perceived of as grammatical. Consequently, as will be shown below, grammaticality cannot be restricted to notions of word order and constituent order alone, but to word/constituent order mapped onto a prosodic pattern.

An important property of the CORs introduced in (13) is that they refer to a topological matching of pairs of constituents that are string adjacent when they occur in the IP-VP domain. When one of the members of the pair, for instance the object, moves from the IP-VP domain to the CP-domain, an illicit configuration no longer holds, and the sentence is grammatical. As we shall see, when it comes to OS, it is thus neither intervening traces nor the ordering of constituent

at phase levels (the latter suggested by e.g. Fox and Pesetsky, 2005) that constrains the operation, but the final result, i.e. the surface order.[5]

The main idea is that it is not principles internal to the narrow syntax that restrict linear structure, but rather the (in-) felicity of the syntax-phonology interface. The most obvious argument for the importance of prosodic patterns comes from metric poetry, where CORs are frequently violated. OV order is, for example, fine and fully interpretable in this register. Consider some lines from Erik Johan Stagnelius' poem *Näcken* in (17).

(17)

Kvällens	gullmoln	fästet	kransa					SOV
night.the's	gold.clouds	heaven	surround					
'The golden clouds of the night surround heaven'								
Älvorna	på	ängen	dansa					S Loc V
fairies.the	on	meadow.the	dance					
'The fairies dance on the meadow'								
Och den	bladbekrönta	Näcken	gigan	rör	i	silverbäcken		SOV Loc
And the	leaves-crowned	Näcken,	violin.the	moves	in	silver.brook.the		
'And Näcken, crowned with leaves, moves the violin in the silver creek'								

The sentences in (17) are not ungrammatical as such, i.e. they do not constitute violations of the mental grammar of speakers of Swedish, even though the order is SOV (line 1 and 3) and a Locative preceding the verb (line 2). The sentences "sound right" when judged against prosodic patterns that we associate with poetry, although they would not be well-formed if used in normal, everyday conversation. In the proposed system this is because speakers of Swedish are able to activate other (peripheral) prosodic patterns that make the sentence "pronounceable." This clearly indicates that it is prosodic factors that license constituent order pattern. OV word order can be well-formed if a prosodic pattern is available; in modern Swedish such patterns are not available for the ordinary spoken register, only for poetry. And since we tacitly assume that all investigations of constituent orders take standard (spoken) languages as their objectives, we think of OV as ungrammatical in Swedish.

3. Weak pronouns in the middle field – Object Shift

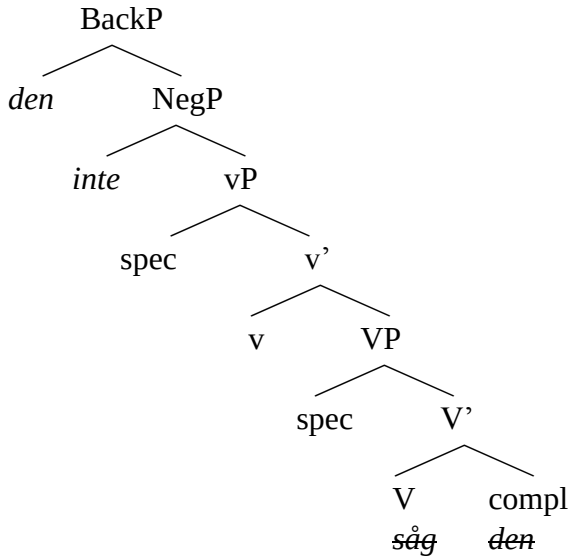
Let us now consider Object Shift. OS occurs only in simple tense main clauses where the sole finite verb is in C^o, which restriction is usually referred to as "Holmberg's generalization" (cf. Holmberg 1999). OS is also banned across prepositions and verb particles.[6] In the literature OS

[5] It is important to point out that I do not assume that the movement of the verb to C^o reestablishes an "original" VO word order, as suggested in e.g. Fox and Pesetsky (2005). Instead, movement of the verb out of the IP-VP domain removes the source of ungrammaticality; with just an object and no verb in the IP-VP domain there can be no violation of the relative order of verb and object in this domain.

[6] Holmberg (1999) assumes that Object Shift is phonological in nature and, more specifically, that an object cannot bypass any phonological elements, except adverbials, which thus would have to be invisible in some sense. In Jo-

has often been related to information structure, suggesting the objects that undergo OS are backgrounded and/or convey old information (c.f. Rosengren 1993, Platzack 1996, Josefsson 1994, 1999). In this paper I take this assumption as my point of departure. The exact landing site for the raised element is not crucial to me here; in (18) below I simply term it Spec,BackP. The tree below shows the lower part of the structure of the sentence *Jag såg den inte* 'I did not see it:'

(18)



What I want to argue is that there is no such thing as Object Shift in the sense of an operation that targets weak object pronouns and moves them to the middle field. However, there is a general propensity for backgrounded or given elements to move to the middle field, a propensity that we may call SHIFT; OS is an instance of this propensity. SHIFT is also responsible for similar operations due to information structural properties in other languages e.g. scrambling of objects and adverbials to the middle field in German. SHIFT thus correlates to Gundel's (1988:229) "given before new" principle, as well as Newmeyer's (1998:122) "thematic first explanation" (see also see also Herring 1990:164, Molnár 2003, and Hinterhölzl and Petrova 2010 for more discussion).

sefsson (2001), I objected to Holmberg's analysis, in particular because an object pronoun can bypass the subject – in Long object shift. Hence, the properties of Long object shift would necessitate a reformulation of Holmberg's (1999) idea of visibility in such a way that the subject would be an invisible syntactic element too. This would, in turn, mean that only the verb would be visible, hence blocking OS, which is merely a reformulation of the observation that OS is dependent on verb movement.

No Object Shift

If Object Shift is but an instance of a general SHIFT, some questions immediately arise:

- Why do only WEAK object pronouns undergo OS in the Scandinavian languages?
- Why cannot full DPs undergo OS?
- Why does a verb block OS (Holmberg's generalization, Holmberg 1999)?
- Why do prepositions and verb particles block OS?

Let us consider the questions in turn: The reason why only weak object pronouns undergo object shift has to do with their information structural status; there is in fact no class of weak object pronouns in the lexicon in Swedish. A weak object pronoun is simply an unstressed pronoun, and the lack of stress is a reflex of its informational status: It is backgrounded and/or represents contextually given information. The reason why full DPs cannot undergo OS in the Mainland Scandinavian languages is that full DPs lack case, whereas pronouns do not. Hence, OS of full DPs in the mainland Scandinavian languages would induce a violation of the Case filter, speaking in more obsolete terms.[7] In view of the proposed analysis verbs, prepositions and verb particles do not "block" OS; a more accurate analysis is that any movement that results in a violation of CORs, for instance OV and postposition structures, is out. In other words, properties of information structure propagate movement, but if the result is a violation of COR the operation is illicit.

The implication of the discussion so far is that the why-question inherent to Holmberg's generalization – Why is Object Shift dependent on verb movement? – is not so interesting, as it is embedded in a much larger question that has to do with headedness parameters: Why is Swedish a VO-language? Why does Swedish disallow OV? What is the deep nature of OV and VO? In view of this, Holmberg's generalization has nothing to do with Object Shift as such; a violation of Holmberg's generalization results in OV, and OV is never allowed in modern Swedish, regardless of the size of the object. In other words: It does not matter whether it is a pronoun or a full DP or if a sentence adverbial is present or not; an object can never "bypass" a verb. The only exception is when the object ends up in Spec CP. Consider (19), which shows that OV is generally ungrammatical in Swedish:

[7] The background assumption is that all DPs must have case, and that case can either be morphological or structural. Pronouns are assumed to have morphological case. Morphological case on full DPs in Swedish was lost around 1450, which means that full DPs have to have abstract case, i.e. land in a particular position vis-a-vis a case assigner, such as a verb or a preposition. An explanation along these lines is, in fact, given already in Holmberg (1986).

A question is of course why OS of full DPs is not well-formed in Faroese, a language that has case morphology on DPs. I have no full answer to this question, but one has to remember that morphological case is merely a prerequisite for OS. Object Shift of full DPs is not obligatory in e.g. Icelandic, which has case morphology also on full DPs.

(19) a.* Jag har den köpt.
I have it bought
b.* Jag har bilen köpt.
I have car-the bought
c.* Jag har den inte köpt.
I have it not bought
d.* Jag har inte den köpt.
I have not it bought
e.* Jag har bilen inte köpt.
I have car.the not bought
f.* Jag har inte bilen köpt.
I have not car.the bought

Holmberg's generalization implies that the answer to the question as to why the verb has to evacuate the VP in order for OS to be possible lies in the Object Shift construction. In my view a more valid (and general) research question would be the true nature of the headedness parameter, in particular what OV and VO word orders really are. The fact that Object Shift is possible only in cases where the verb has evacuated the VP is a mere consequence of the fact that Swedish does not allow OV (in the IP-VP-domain, see above), which is an old and well known generalization. Why would we expect OV, postpositions, or the "wrong" particle-object constituent order to be acceptable in cases where the object is a weak pronoun, but not in other cases?

Abstracting away from poetry, modern Swedish is strictly VO, but this was not the case at earlier stages of the language. In Old Swedish OV order was a viable option. The prediction, then, would be that Holmberg's generalization did not hold during this period, which seems to be borne out. In (20) some examples from Siællina Tröst (15th century) are given that contain quite frequent construction types in Old Swedish literature. The parts that are relevant for the discussion are underlined:

(20) a. OS/Scrambling of weak object pronoun:

Hon	wilde	honom	thz	ekke	sighia
		indir obj	dir obj	Neg	V
she	wanted	him	it	not	tell

'She did not want to tell him that.'

b. OV:

Mænniskia	wilt	thu	thz	fiærdha	gudz	budhordh	wel	halda
man	will	you	the	fourth	God's	command	well	hold
					Object			V

tha	skal	thu	thin	fadher	oc	modher	æpter	thera	dødh	ekke	forgæta
then	shall	you	your	father	and	mother	after	their	death	not	forget
				Object						Neg	V

'Man, if you want to obey God's fourth command, you shall not forget your father and your mother after their deaths.'

c. OS/Scrambling of full DP object:

Qwinna	thu	hafwer	thina	dotter	ekke	wel	lærth
woman	you	have	your	daughter	not	well	taught
			Object		Neg		V

'Woman, you have not taught your daughter well.'

Diachronic data supports the idea that Object Shift is dependent on the headedness parameter, in particular the VO vs. OV order. My proposal predicts that the constituent orders in (20) above were licit because the prosody was different in Old Swedish. For obvious reasons this prediction is difficult to corroborate. However, see Hinterhölzl and Petrova (2010) for an in-depth discussion of the idea that changes in prosodic patterns had effects on the constituent orders of German.

Swedish has a couple of verb particle constructions of the Danish type, i.e. verb particles that (optionally) take their complements to left, e.g. *ta med* 'bring.' As expected OS is possible in such cases:

(21) a.

Föräldrarna	tog	inte	barnen	med.
parents.the	took	not	children	with

'The parents did not bring their children.'

b.

Föräldrarna	tog	dem	inte	med.
parents.the	took	them	not	with

'The children did not bring them.'

In a similar way, Swedish allows for has a few postpositions in certain constructions, among them *runt* 'around.' As expected, Object Shift is fine in such cases, too:[8]

(22) a.

De	for	inte	jorden	runt,	utan	bara	halva	vägen.
they	travelled	not	world.the	around	but	only	half	way .the

'They did not travel all around the world, but only halfway.'

[8] It should be pointed out that the preposition *runt* 'around' receives contrastive stress in (22).

b. De for den inte runt, utan bara halva vägen.
they travelled it not around but only half way.the
'They did not travel all around it, but only halfway.'

(21) and (22) show that the complement of an adposition and a verb particle may move to the middle field – provided the internal order between the head and complement is not violated in the relevant domain.

4. Adverbials in the middle field

If there is no particular Object Shift, just a SHIFT, we predict that not only objects, but also adverbials may raise to the middle field. As shown in example (6), repeated below, this is possible:

(6) a. Barnen har hela eftermiddagen spelat Monopol i vardagsrummet med farmor.
children.the have whole afternoon.the played Monopoly in living room.the with grandma
'The children have played Monopoly in the living room with grandma the entire afternoon.'

b. Barnen har med stor entusiasm spelat Monopol med farmor
children.the have with great enthusiasm played Monopoly with grandma
i vardagsrummet hela eftermiddagen.
in living room.the whole afternoon.the
'The children have played Monopoly with grandma in the living room the entire afternoon with great enthusiasm.'

Example (7) above, repeated below, shows that the middle field is generally not available for locative adverbials or theme adverbials ("prepositionsobjekt"):

(7) * Barnen har i vardagsrummet/med farmor spelat Monopol med farmor.
children.the have in living room with grandma played Monopoly with grandma

It is necessary to point out that adverbials in the middle field do not represent a predominant pattern in Swedish; it is typically found in written style, where a lot of information is packed in each sentence. One context where sentences of this type are found is the news on TV and radio, in other words in pre-composed written or read texts. It would be incorrect to say that *hela eftermiddagen* 'the entire afternoon' and *med stor entusiasm* 'with great enthusiasm' are as destressed as the weak object pronouns discussed in the previous section. It would also be incorrect to say that they always represent old information. However, I would like to claim that content adverbials in the middle field are relatively backgrounded and that there needs to be a more prominent and/or stressed element to the right of them. I assume that this may be related to the fact that content adverbials in the middle field are more often found in written texts of various sorts: If a great deal of information is packed in a sentence the speaker/writer has to evaluate which information

is to be presented as foregrounded or backgrounded. As it is evident that information structure plays a role as to what type of adverbials may raise to the middle field, but as it is also clear that this does not tell us the whole story, the question arises why only some adverbials can raise to the middle field (e.g. time adverbials), but not others (e.g. locative adverbials). None of the explanations for the ungrammatical cases of OS above can be used to explain this. The solution I would like to offer is that the restrictions are tied to Relativized Minimality. Consider (23):

(23) a. Han hade velat köpa en ny bil i Småland.
he had wanted buy a new car in Småland
'He had wanted to buy a new car in Småland.'

b. I Småland hade han velat köpa en ny bil.
in Småland had he wanted buy a new car
'He had wanted to buy a new car in Småland.'

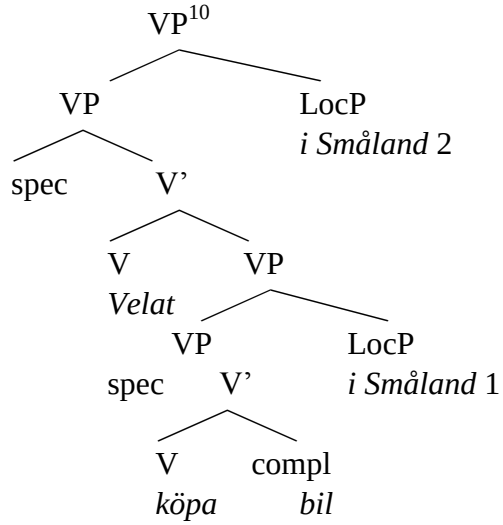
c. ? Han ville i Småland köpa en ny bil.
he wanted in Småland buy a new car
'He had wanted to buy a new car in Småland.'

d. Köpa ny bil i Småland ville han inte.
buy new car in Småland wanted he not
'He did not want to buy a new car in Småland.'

The nature of the two verbs *vilja* 'want' and *köpa* 'buy' in (23) allows for the interpretation of the adverbial *i Småland* as determining either the mental act of wanting or the physical act of buying. In (23c) *i Småland* unambiguously refers to the act of wanting, (23d) to the act of buying, whereas (23a) and (23b) are ambiguous in this respect. The fact that the raising of an adverbial to the middle field, as in (23c) excludes the possibility of the adverbial taking scope over the lower verb phrase, headed by *köpa* 'buy,' whereas the opposite holds for VP raising, as in (23d), indicates that there are at least two adverbial positions: "Inner" adverbials taking scope over the lower VP, and "outer" adverbials over the higher VP:[9]

[9] Consider also Frey and Pittner (1998), who propose a similar solution for German. According to their analysis *process adverbials* in German are generated closer to verb-object complex than other types of adverbials. Process adverbials can be pied-piped in VP-raising, which is not possible for other types of adverbials.

(24)



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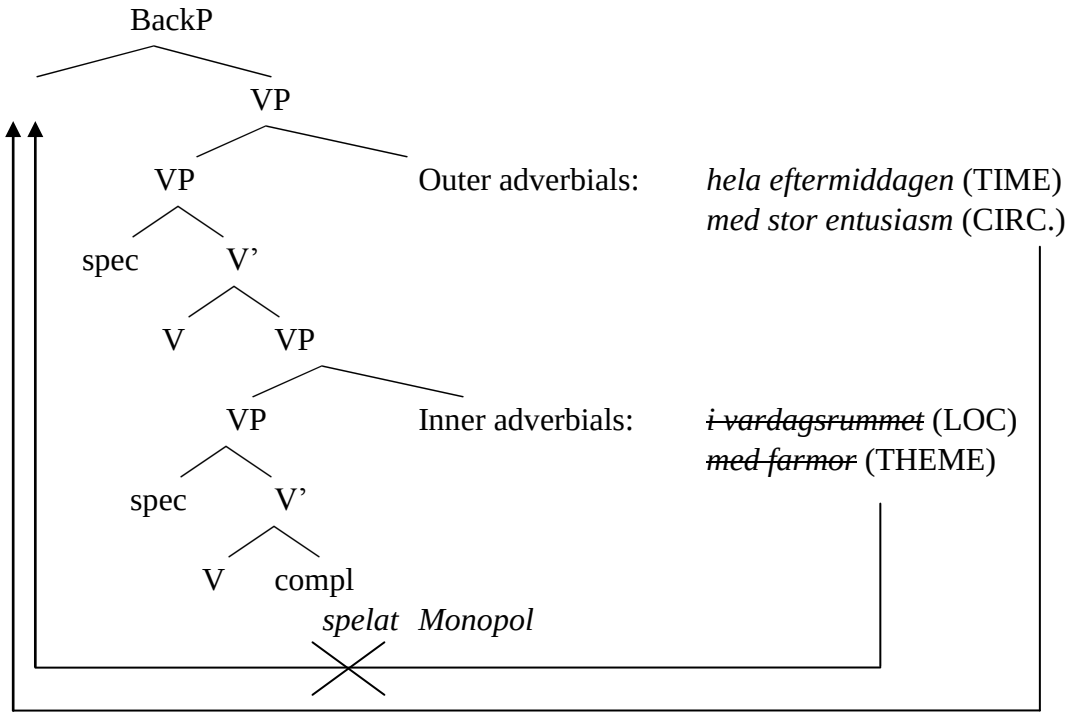
I propose that the two positions above typically host different kinds of adverbials: "Inner" adverbials are bound adverbials/PP complements and locative adverbials taking scope over the lower VP. "Outer" adverbials, on the other hand, are typically circumstantial and time adverbials, but also locative adverbials that take scope of over the higher VP. The raising of inner adverbials across outer adverbials is out for reasons of Relativized Rinimality, as shown in (25). Note that relativized Minimality is calculated on the hierarchical structure, not the linear one. From a surface point of view outer adverbials cross inner adverbials when they raise to the middle field. However these adverbials raise from a position that is higher in the structure than inner adverbials, hence they do not bypass the inner adverbials:

[10] Note that irrelevant parts of the structure in (24) have been omitted.

No Object Shift

(25)



The proposed analysis evokes an important question: Why would the higher VP-adjunction site block movement of lower adverbials, even if there is no overt adverbial present? The question needs more consideration, but two tentative answers present themselves. The first is that each possible adjunction sites denotes an "Origo" (the here and now of an Event or a Subevent). The second possible answer is that each VP has its own tense projection to which the adverbial relates (cf. Platzack 1996, Larsson 2009). According to both scenarios, the raising of an element that is under the scope of the lower Origo/TP across a higher Origo/TP would result in violations of Relativized Minimality.

Another question is why movement to the middle field requires a certain amount of weight on the constituents that follow the adverbial:

(26) ?? Man hittade i lördags bilen.
one found in Saturday car.the
'The car was found last Saturday.'

The sentence in (26) improves by the adding of a relative clause:

(27) Man hittade i lördags bilen som rånarna hade tagit.
one found in Saturday car.the that roobers.the had taken
'The car that the robbers had stolen was found last Saturday.'

Since there is no obvious difference in the basic syntactic structure between (26) and (27) – the linear order being $DP_{subject}$ > finite verb > time adverbial > DP_{object} in both cases – I assume that (26) is less acceptable because of prosodic imbalance. However, the issue of balance and weight as a contributing factor for sentential well-formedness is a large issue, and a closer investigation cannot be pursued in this paper.[11]

5. Conclusion

I have argued that Object Shift is an instance of a more general tendency, SHIFT, that causes backgrounded or given elements to move to the middle field. SHIFT operates in Swedish as well as in languages such as German, which means that also scrambling is an instance of the same tendency. SHIFT applies blindly, but can be blocked by independent constraints. Operations that yield an OV constituent order in a VO language, postpositions in a preposition language or object – particle constituent order in a language where the reversed order is the canonical one, as well as violations of minimality constraints or the Case Filter rule out the application of SHIFT. In Swedish, the constraints in question block the raising of all types of object, with the exception of weak pronominal objects, in other words Object Shift. Neither verbs, nor verb particles, nor prepositions block movement of the object. What determines the grammaticality of the sentence is the final output.

The ideas in this paper rely on the idea of "prosodic patterns," the presence of which native speakers have tacit knowledge of. I have provided some tentative answers as to what the crucial features might be. However, exactly what these patterns are and, more specifically, in what way syntactic categories such as "finite verb," "object," "verb phrase," etc. correspond to these prosodic patterns will be left to future research.

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[11] See Teleman and al. (1999, part 3: 444ff.) for a discussion of the possibility of having different types of adverbials in the middle field, including locative adverbials.

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