

Object Shift, Remnant VP-Topicalisation, and Optimality Theory

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(5) **Holmberg's Generalisation (HG)**

(Holmberg 1997: 208)

Object Shift is blocked by any phonologically visible category preceding/c-commanding the object position within VP.

[Here "within VP" has to mean that only elements "properly inside" VP (i.e. not adverbials or other elements adjoined to VP) may block object shift. E.E. & S.V.]

The definition in (5) is vague with respect to whether precedence and/or c-command of a phonologically visible category blocks movement. In the 1999 version of the paper, Holmberg formulates HG in terms of asymmetric c-command. For reasons to become clear in section 2.1 below, we pursue the first option, taking HG to be the consequence of a violable condition on order preservation (cf. Déprez 1994, Müller 2001b, Sells 2001, Williams 2003, and Fox & Pesetsky 2005).

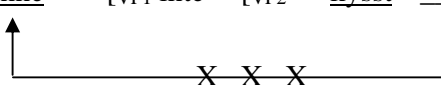
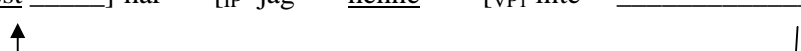
Holmberg (1997, 1999) supposes that HG is a derivational condition, not a representational one. OS of an infinitival clause subject is possible as long as there is no intervening non-adverbial material, (6)a. A violation of HG as in (6)c cannot be repaired by subsequent operations as in (6)d that place the blocking element to the left of the shifted object; in other words, HG may not be violated at any point in the course of derivation.

- (6) Sw a. Jag såg henne inte ____ [IP ____ arbeta].
 I saw her not work
 b. Jag har inte sett [IP henne arbeta].
 I have not seen her work
 c. *Jag har henne inte sett [IP ____ arbeta].
 d. *Sett ____ arbeta har jag henne inte _____

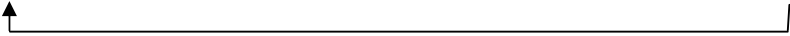

(Holmberg 1997: 206)

Holmberg concludes that the grammatical sentences in (3) cannot involve OS prior to remnant VP-topicalisation since that would violate HG, cf. (7). Rather, they must be derived by V^o-topicalisation, with subsequent OS, cf. (8).

(7) Remnant VP-topicalisation? Holmberg (1997, 1999): NO!

- Sw a. [CP har [IP jag [VP₁ inte [VP₂ kysst henne]]]]
- b. [CP har [IP jag henne [VP₁ inte [VP₂ kysst ____]]]]
- 
violation of HG!!!
- c. [CP [VP₂ Kysst ____] har [IP jag henne [VP₁ inte ____]]]
- 

(8) V°-topicalisation? Holmberg (1997, 1999): YES!

- Sw a. [CP har [IP jag [VP1 inte [VP2 kysst henne]]]]
- b. [CP [_{V°} Kysst] har [IP jag [VP1 inte [VP2 ____ henne]]]]

- c. [CP [_{V°} Kysst] har [IP jag henne [VP1 inte [VP2 ____ ____]]]]


Note that the V°-topicalisation analysis involves movement of an X° to an XP-position.

Moreover, if V°-topicalisation were possible, we would expect the sentences in (9)b/(10)b to be acceptable, contrary to fact.

- (9) Da a. Jeg har ikke smidt den ud.
I have not thrown it out
 b. *Smidt har jeg den ikke ____ ____ ud.
- (10) Da a. Jeg har ikke stillet det på bordet.
I have not put it on table-the
 b. *Stillet har jeg det ikke ____ ____ på bordet.

Against Holmberg (1997, 1999), we would like to suggest that remnant VP-topicalisation is possible, though it is subject to certain restrictions.

1.2 Fox & Pesetsky's (2005) remnant VP-Topicalisation approach

As Fox & Pesetsky (2005) mentions, remnant VP-topicalisation is possible in Swedish under certain conditions: In double object constructions, topicalisation of a non-finite main verb may take along the IO, stranding the DO in shifted position, (11)a. By contrast, stranding of an IO pronoun alone is not possible, (11)b.

- (11) Sw a. ?_[VP] Gett henne ____ har jag den inte.
 given her have I it not
 b. *_[VP] Gett ____ den har jag henne inte. (Fox & Pesetsky 2005: 25)

Fox & Pesetsky (2005) suggests that the mapping between syntax and phonology, i.e. Spell-out, takes place at various points in the course of derivation (including at VP and at CP), whereby the material in the Spell-out domain D is linearized; see also Chomsky (2000, 2001). The crucial property of Spell-out is that it may only add information about the linearization of a newly constructed Spell-out domain D' to the information cumulatively produced by previous applications of Spell-out. Established information cannot be deleted in the course of derivation, accounting for order preservation effects.

To Fox & Pesetsky (2005), the fact that OS observes HG is a consequence of their "linearisation theory". At the Spell-out domain VP, the ordering statement "V<O" is established, (12)b. At CP, Spell-out adds information about the linearisation of the new material, (12)c; this information agrees with the previously established information: The finite main verb moves to C° in the main clause and the pronominal object undergoes OS, maintaining their relative order V<O.

- (12) Da a. Jeg kyssede hende ikke ____ ____.
 I kissed her not

- b. VP: [_{VP} V O]
 Ordering: V<O

- c. CP: [_{CP} S V [_{IP} t_S O Adv [_{VP} t_V t_O]]]
 Ordering: S<V V<O
 V<O
 O<Adv
 Adv<VP → ∅

In an embedded clause in MSc, V°-to-I° movement does not take place, cf. (13). OS then is not possible either.

- (13) Da a. Han tror at jeg ikke kyssede Marie.
 he believes that I not kissed Marie
 b. *Han tror at jeg kyssede ikke ____ Marie.

(14) Da a. *... at jeg hende ikke kyssede ____.
 that I her not kissed

- Note that Fox & Pesetsky (2005) predicts that movement operations that do not obey HG have to proceed successive cyclically: The underlined constituents in (15) have to move through the edge of VP prior to linearisation of the VP domain to prevent ordering contradictions at the Spell-out of CP. These movement operations comprise various instances of A-movement and A-bar-movement operations, such as Scandinavian Negative Shift (see Christensen 2005), *wh*-movement, topicalisation, and subject raising.

- Engels & Vikner: OS, Remnant VP-Topicalisation & OT, p. 6

- (16) Da a. Bøgerne har jeg læst _____.
books-the have I read
- b. Spell-out VP: $[_{VP} \underline{O} [_{VP} \underline{V} t_O]]$
Ordering: **O<V**
- c. Spell-out CP: $[_{CP} \underline{O} Aux [_{IP} S t_{Aux} [_{VP} \underline{V} t_O]]]$
Ordering: **O<Aux** **O<V**
Aux<S
S<V

Hence, the crucial difference between the various movement operations in (15) and OS is that the former may - and indeed must - go through the edge of VP, but as Fox & Pesetsky (2003) states, in their analysis OS cannot involve movement to the edge of VP, i.e. OS is the exception to their rule.

2 An OT approach to Object Shift and remnant VP-Topicalisation

2.1 Asymmetry I: Stranding of a DO vs. Stranding of an IO

2.1.1 OS and order preservation

Following Fox & Pesetsky (2005), we assume that HG results from a condition on order preservation. The constraint in (17) is based on Müller's (2001:279, ex. (1)) constraint on parallel movement.

- (17) ORDER PRESERVATION (ORDPRES):
 If α precedes β at level L_n , then α precedes β at level L_{n+1} (where α is non-adverbial).

OS is motivated by the constraint SHIFTPRON which outranks the constraint STAY that prohibits movement.¹

¹ In Icelandic, not only weak pronouns but also full DPs may undergo OS.

- (i) Ic a. Af hverju las Pétur aldrei þessa bók?
why read Pétur never this book
 b. Af hverju las Pétur þessa bók aldrei _____? (Vikner 2005: 417)

Full DP Shift is motivated by a more general version of SHIFTPRON, called SHIFT.

- (ii) SHIFT:
 A [-focus] element precedes and c-commands the lowest VP (of the same clause) that contains all other VPs and all VP-adjoined adverbials.

(18) SHIFTPRONOUN (SHIFTPRON):

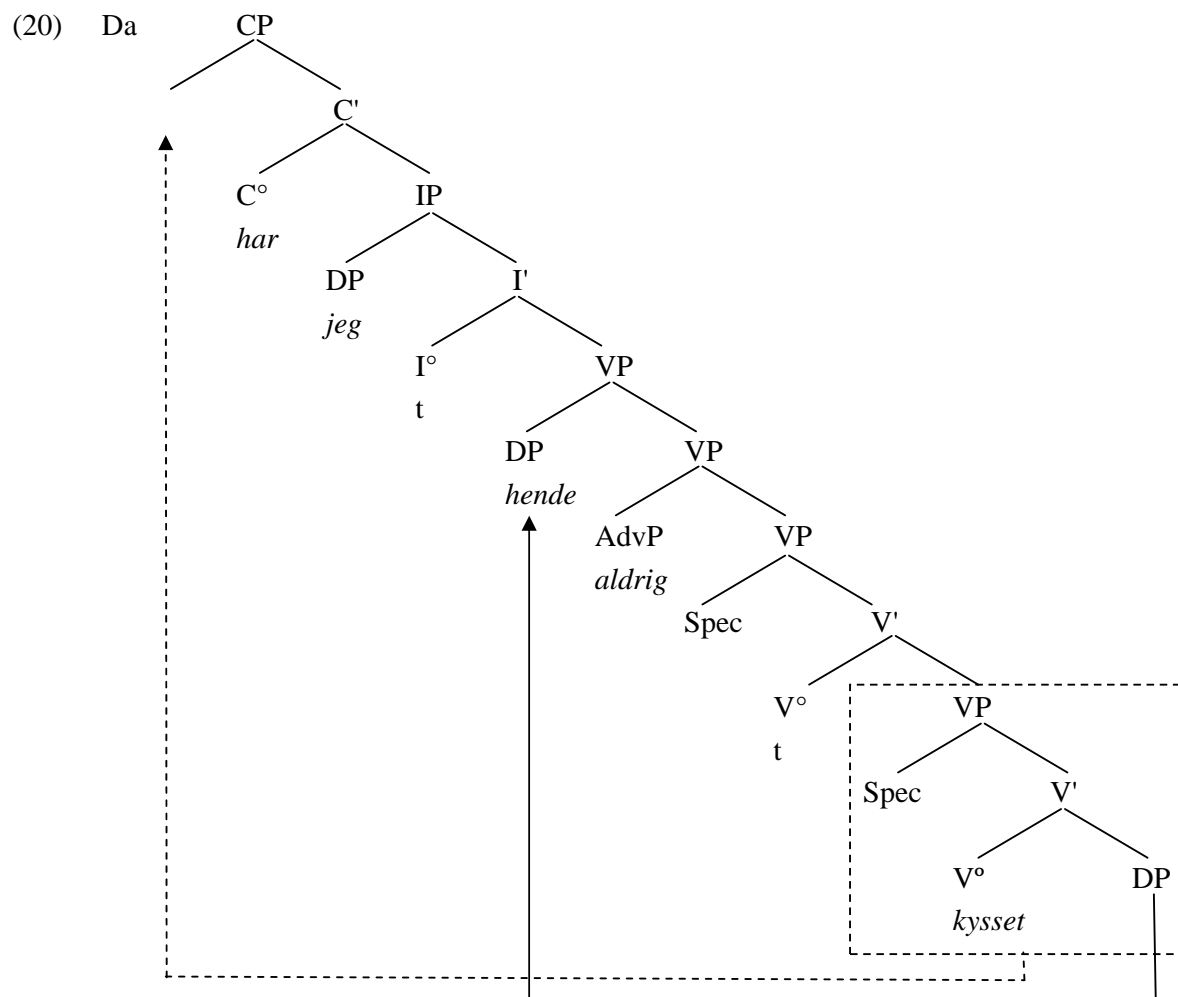
A [-focus] proform that is "min = max" precedes and c-commands the lowest VP (of the same clause) that contains all other VPs and all VP-adjoined adverbials.²

(19) STAY:

Trace is not allowed.

(Grimshaw 1997: 374)

SHIFTPRON is satisfied if the pronoun is adjoined to the top VP, as illustrated in (20) below. The ranking ORDPRES >> SHIFTPRON predicts that OS is only possible if it maintains the base order of elements. The main verb does not necessarily have to undergo V°-to-I°(-to-C°) movement for OS to be possible. What is crucial is that the main verb moves to a position to the left of the target position of OS, such that the relative order between verb and object is preserved. This can also be achieved by placing a non-finite verb in topic position as in (3).



² Cf. Appendix 1: Syntactic Complexity of Pronouns and "Min = Max"

Da:				ORD PRES	SHIFT PRON	STAY	ex.
☞	1a	Sub Aux Adv <u>V Pron-Obj</u>		*		(2)a	
	1b	Sub Aux <u>Pron-Obj</u> Adv <u>V</u> t _{Obj}	*!		*	(2)b	
	2a	Sub <u>V</u> Adv t _v <u>Pron-Obj</u>		*!		(1)a	
☞	2b	Sub <u>V Pron-Obj</u> Adv t _v t _{Obj}			*	(1)b	
	3a	<u>V</u> Aux Sub Adv t _v <u>Pron-Obj</u>		*!		(4)b	
☞	3b	<u>V</u> Aux Sub <u>Pron-Obj</u> Adv t _v t _{Obj}			*	(3)b	

We propose that when a non-finite main verb occurs in topic position, then the pronominal object undergoes OS prior to remnant VP-topicalisation. In Holmberg's (1997, 1999) approach such remnant VP-topicalisation is ruled out by the assumption that HG is derivational, i.e. that it cannot be violated at any point in the derivation, compare (7) above. The OT constraint *ORDPRES*, by contrast, is representational: Constraint violations are computed based on the final structure of the candidates. Hence, although the individual steps of OS might violate *ORDPRES*, this is of no consequence as long as the verb is subsequently placed in front of the shifted object such that their precedence relation is re-established.

(21) Sw a. ?_{[VP} Gett henne ____] har jag den inte.
 given her have I it not
 b. *_{[VP} Gett ____den] har jag henne inte. (Fox & Pesetsky 2005: 25)

(22) Da a. [_{VP} Givet hende den] har jeg ikke.
 given her it have I not
 b. ?[_{VP} Givet _____] har jeg hende den ikke.

(23) TOPIC: Elements with a [+topic] feature occur in Spec,CP.

Tableau 2: VP-topicalisation that takes along both IO and DO

Da/Sw	Topic: V & Pron-IO & Pron-DO	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
☞ a	[_{VP} V <u>Pron-IO</u> <u>Pron-DO</u>] Aux Sub Adv t _{VP}			**		(22)a
b	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux Sub <u>Pron-DO</u> Adv t _{VP}	*!		*	*	(21)a
c	[_{VP} V t _{IO} <u>Pron-DO</u>] Aux Sub <u>Pron-IO</u> Adv t _{VP}	*!	*	*	*	(21)b
d	[_{VP} V t _{IO} t _{DO}] Aux Sub <u>Pron-IO</u> <u>Pron-DO</u> Adv t _{VP}	*!*			**	(22)b

Tableau 3: Remnant VP-topicalisation that strands both IO and DO

Da/Sw	Topic: V	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
a	[_{VP} V <u>Pron-IO</u> <u>Pron-DO</u>] Aux Sub Adv t _{VP}			*!*		(22)a
b	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux Sub <u>Pron-DO</u> Adv t _{VP}			*!	*	(21)a
c	[_{VP} V t _{IO} <u>Pron-DO</u>] Aux Sub <u>Pron-IO</u> Adv t _{VP}		*!	*	*	(21)b
☞ d	[_{VP} V t _{IO} t _{DO}] Aux Sub <u>Pron-IO</u> <u>Pron-DO</u> Adv t _{VP}				**	(22)b

As Tableau 2 and Tableau 3 show, SHIFTPRON favours stranding of a pronoun which is, however, only possible if the pronoun is not marked [+topic]. The asymmetry between stranding of a DO and stranding of an IO is expected by the ranking ORDPRES >> SHIFTPRON. OS of a DO maintains the ordering relations in remnant VP-topicalisations, satisfying ORDPRES (see Tableau 4). Note that it is crucial for the remnant VP-topicalisation constructions that ORDPRES refers to precedence rather than c-command relations: While the precedence relations are maintained in (21)a, the c-command relations are not - neither the verb nor the IO c-commands the shifted DO. In contrast, remnant VP-topicalisation does not re-establish the base order relations if the IO is stranded. Consequently, the violation of ORDPRES rules out stranding of the IO in OS position, compare Tableau 5 below. Instead, the IO has to be taken along by VP-topicalisation, giving rise to neutralization: Despite the different input specifications with regard to topichood, the same candidate (namely, candidate a) arises as output in Tableau 2 and Tableau 5. (But stranding of the IO is possible if it does not result in a violation of ORDPRES, namely if both objects are stranded as in (22)b.)

Tableau 4: Remnant VP-topicalisation that strands DO

Da/Sw	Topic: V & Pron-IO	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
a	[_{VP} V <u>Pron-IO</u> <u>Pron-DO</u>] Aux Sub Adv t _{VP}			**!		(22)a
☞ b	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux Sub <u>Pron-DO</u> Adv t _{VP}			*	*	(21)a
c	[_{VP} V t _{IO} <u>Pron-DO</u>] Aux Sub Pron-IO Adv t _{VP}	*!	*	*	*	(21)b
d	[_{VP} V t _{IO} t _{DO}] Aux Sub Pron-IO <u>Pron-DO</u> Adv t _{VP}	*!			**	(22)b

Tableau 5: No remnant VP-topicalisation that strands IO

Da/Sw	Topic: V & Pron-DO	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
☞ a	[_{VP} V <u>Pron-IO</u> Pron-DO] Aux Sub Adv t _{VP}			**		(22)a
b	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux Sub Pron-DO Adv t _{VP}	*!		*	*	(21)a
c	[_{VP} V t _{IO} Pron-DO] Aux Sub <u>Pron-IO</u> Adv t _{VP}		*!	*	*	(21)b
d	[_{VP} V t _{IO} t _{DO}] Aux Sub <u>Pron-IO</u> Pron-DO Adv t _{VP}	*!			**	(22)b

More generally, the ranking ORDPRES >> SHIFTPRON predicts that stranding of an object is only acceptable if the object is right-peripheral within VP. As shown in (24)-(26), topicalization of the entire VP but not remnant topicalization is possible in constructions in which the object is followed by other elements within VP, e.g. in constructions with a infinitival clause, (24), a particle verb, (25), or a verb with an additional PP-complement, (26). (Recall that the unacceptable sentence in (24)c repeated from (6)d led Holmberg (1997, 1999) to assume that remnant VP-topicalisation is not possible.)

- (24) Sw a. [_{VP} Sett henne arbeta] har jag inte.
 seen her work have I not
 b. *[_{VP} Sett _____ arbeta] har jag henne inte. (Holmberg 1997: 206)
- (25) Da a. [_{VP} Smidt den ud] har jeg ikke.
 thrown it out have I not
 b. *[_{VP} Smidt ____ ud] har jeg den ikke.
- (26) Da a. [_{VP} Stillet det på bordet] har jeg ikke.
 put it on table-the have I not
 b. *[_{VP} Stillet ____ på bordet] har jeg det ikke.

Tableau 6

Sw:	Topic: V & V	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
☞ a	[_{VP} V <u>Pron</u> V] Aux Sub Adv			*		(24)b
b	[_{VP} V t _{Pron} V] Aux Sub <u>Pron</u> Adv		*!		*	(24)c

2.1.2 OS and depth of embedding

From the discussion in the previous sections, we might expect that all that matters is that the remnant object is at the edge of the the VP right before this VP is topicalised. However, not all objects on the right edge may be left behind during VP-topicalisation: The object of an infinitival clause cannot be stranded by remnant topicalisation of the main clause VP although it is the rightmost element within that VP.

- (27) Da a. [_{VP} Set [_{IP} ham [_{VP} fotografere hende]]] har jeg ikke.
 seen him photograph her have I not
 b. * [_{VP} Set [_{IP} ham [_{VP} fotografere ____]]] har jeg hende ikke.

Thus, besides the linear restriction, there would seem to also be a structural restriction, ruling out stranding of an object which is too deeply embedded.

Also the object of a Swedish particle verb cannot be left behind during remnant VP-topicalisation even though the particle precedes the object in Swedish and therefore stranding of the object would not violate **ORDPRES**.

- (28) Sw a. [VP Kastat bort den] har jag inte.
 thrown out it have I not
 b. *[VP Kastat bort ____] har jag den inte. (Gunlög Josefsson, p.c.)

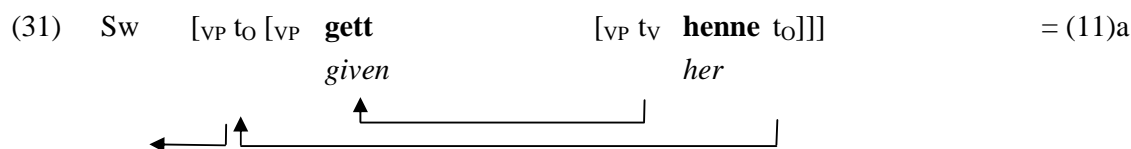
However, OS is possible in particle verb constructions where the particle is topicalised and the verb undergoes V2, (29):

- (29) Sw a. UT kastade dom mej inte ____ (bara ned för trappan).
out threw they me not (only down the stairs)
 b. (Ja, ja, jag ska mata din katt, men) IN släpper jag den inte ____.
(All right, I will feed your cat but) in let I it not
- (Holmberg 1999: 17)

We would like to suggest that the shifted object can only move out of the VP in (28)b in two steps, first by adjoining to the PrtP and then by adjoining to the VP.

- (30) Sw [VP t_O [VP **kastat** [P_{RtP} t_O [P_{RtP} **bort** t_O]]]] = (28)b
thrown out
-

If we furthermore assume that adjunction to the PrtP is only necessary because PrtP and VP here do not have the "same" head, then we have a difference between the above situation and double object constructions like the following (where remnant topicalisation is possible):



where there is no intermediary trace adjoined to the lower VP.³ We now would like to suggest that the reason why the absence of the intermediary trace is important is that it is possible to topicalise the sequence *gett henne* in (31) without bringing along any intermediary trace (i.e. what is topicalised is the inner segment of the higher VP). In contrast, even if what is topicalised in (30) is only the inner segment of the VP, an intermediary trace would still have to come along to Spec,CP, viz. the trace adjoined to PrtP. One possible reason why intermediary traces are not allowed to come along to Spec,CP could be that they have to be licensed by being c-commanded by the next higher link in the chain (which does not hold under VP-topicalisation), whereas a trace in its base position (which has to come along to Spec,CP in both (30) and (31)) may be licensed in a different way, e.g. simply by being in a thematic position. The difference between (28) and (29) is now that in (29), only the PrtP is topicalised (the verb is also moved, but by a different movement, V2) and so there does not have to be an intermediary trace inside Spec,CP.

2.2 Asymmetry II: Subject vs. Object

The ranking `ORDPRES >> SHIFTPRON` thus predicts that remnant VP-topicalisation may strand an object in shifted position as long as the precedence relations are maintained (and its base position is not too deeply embedded). Consequently, only an object that is right-peripheral in VP may be left behind, giving rise to the asymmetry between stranding of an IO and stranding of a DO.

In addition, there is an asymmetry between stranding of an object and stranding of a subject by remnant VP-topicalisation, indicating that a non-peripheral trace in the topicalised VP is not a problem as such. The base order of elements does not have to be maintained by remnant VP-topicalisation if the remnant occurs in subject position (as in passives), see (32)a/(33)a vs. (32)b/(33)b.

³ The contrast between (30) and (31) in the presence/absence of an intermediary trace might be derived by requiring OS to proceed via adjunction to the minimal XP whose X° contains its selecting/theta-assigning head.

Such a condition is able to account for the fact that remnant topicalization taking along a manner adverb is not only ungrammatical if the adverb occurs in right-peripheral position within VP (ORDPRES), (i), but also if the adverb is left-adjoined to VP, (ii). In both cases, the remnant VP includes an intermediary trace of the object.

- | | | | | | | | | |
|------|----|----|---|---|-----------------|--|---------------------|------------------------------------|
| (i) | Da | a. | Han | har | nok | [_{VP} læst <u>den</u>] | omhyggeligt] | (men har han forstået den?) |
| | | | <i>he</i> | <i>has</i> | <i>probably</i> | <i>read it</i> | <i>carefully</i> | <i>(but has he understood it?)</i> |
| | | b. | [_{VP} | [_{VP} Læst <u>den</u>] | omhyggeligt] | har | han nok, | men har han forstået den? |
| | | c. | *[_{VP} [_{VP} t _O | [_{VP} Læst t _O]] | omhyggeligt] | har | han <u>den</u> nok, | men har han forstået den? |
| | | | | | | | | |
| (ii) | Da | a. | Han | har | nok | [_{VP} omhyggeligt [_{VP} læst <u>den</u>]] | | (men har han forstået den?) |
| | | | <i>he</i> | <i>has</i> | <i>probably</i> | <i>carefully read it</i> | | <i>(but has he understood it?)</i> |
| | | b. | ?[_{VP} Omhyggeligt | [_{VP} læst <u>den</u>]] | har | han nok, | | men har han forstået den? |
| | | c. | *[_{VP} Omhyggeligt [_{VP} t _O | [_{VP} læst t _O]]] | har | han den nok, | | men har han forstået den? |

- | | | | | | | | | | |
|------|-------|------------------|---------------|-------|------------|-------------|------------|------------|------------|
| (32) | Da a. | *[_{VP} | Smidt | _____ | ud] | har | jeg | <u>den</u> | ikke. |
| | | | <i>thrown</i> | | <i>out</i> | <i>have</i> | <i>I</i> | <i>it</i> | <i>not</i> |
| | b. | [_{VP} | Smidt | _____ | ud] | blev | <u>den</u> | | ikke. |
| | | | <i>thrown</i> | | <i>out</i> | <i>was</i> | <i>it</i> | | <i>not</i> |
-
- | | | | | | | | | | |
|------|-------|------------------|------------|-------|---------------------|-------------|------------|------------|------------|
| (33) | Da a. | *[_{VP} | Stillet | _____ | på bordet] | har | jeg | <u>det</u> | ikke. |
| | | | <i>put</i> | | <i>on table-the</i> | <i>have</i> | <i>I</i> | <i>it</i> | <i>not</i> |
| | b. | ?[_{VP} | Stillet | _____ | på bordet] | blev | <u>det</u> | | ikke. |
| | | | <i>put</i> | | <i>on table-the</i> | <i>was</i> | <i>it</i> | | <i>not</i> |

This contrast is accounted for if the constraint that triggers subject movement to Spec,IP, SUBJECT, outranks ORDPRES.⁴ (Note that the acceptability of subject raising out of a verb particle construction indicates that depth of embedding does not play a role for subject movement either.)

Tableau 7

Da:	Topic: V & Prt	SUBJECT	ORD PRES	SHIFT PRON	STAY	ex.
☞ 1a	[_{VP} V <u>Pron-Obj</u> Prt] Aux Sub Adv			*		(25)a
1b	[_{VP} V _{tObj} Prt] Aux Sub <u>Pron-Obj</u> Adv		*!		*	(32)a
2a	[_{VP} V <u>Pron-Sub</u> Prt] Aux e Adv	*!		*		-
☞ 2b	[_{VP} V _{tSub} Prt] Aux <u>Pron-Sub</u> Adv		*		*	(32)b

Accordingly, constraints triggering other movement operations such as Negative Shift, *wh*-movement or topicalization that are not subject to HG, (15), outrank ORDPRES (e.g. NEGSPEC, WHSPEC, TOPIC >> ORDPRES >> SHIFTPRON). Hence, OS with its almost unique property of being order preserving does not receive a special treatment in our analysis; rather, the contrast between the various movement devices follows from the familiar OT-mechanism of constraint ranking (relative to ORDPRES).

⁴ The ranking SUBJECT >> ORDPRES is supported by the fact that movement to subject position does not presuppose verb movement; i.e. subject movement may cross an intervening (unaccusative, passive) verb. At the same time, ORDPRES predicts that in double object construction the IO rather than the DO is promoted to subject in passives, as borne out in e.g. Danish.

- | | | | | | | | | |
|------|----|----|------------------|-------------|-------------|------------|--------------|----------------------------|
| (i) | Da | a. | Derfor | har | <u>Elsa</u> | ikke | _____ | ringet. |
| | | | <i>therefore</i> | <i>has</i> | <i>Elsa</i> | <i>not</i> | | <i>called</i> |
| | | b. | Derfor | er | <u>Elsa</u> | ikke | | kommet _____. |
| | | | <i>therefore</i> | <i>is</i> | <i>Elsa</i> | <i>not</i> | | <i>come</i> |
| | | c. | Derfor | blev | <u>Elsa</u> | ikke | | fotograferet _____. |
| | | | <i>therefore</i> | <i>was</i> | <i>Elsa</i> | <i>not</i> | | <i>photographed</i> |
| | | | | | | | | |
| (ii) | Da | a. | Derfor | har | jeg | ikke | givet | <u>Elsa</u> <u>bogen</u> . |
| | | | <i>therefore</i> | <i>have</i> | <i>I</i> | <i>not</i> | <i>given</i> | <i>Elsa book-the</i> |
| | | b. | Derfor | blev | <u>Elsa</u> | ikke | givet | _____ <u>bogen</u> . |
| | | | <i>therefore</i> | <i>was</i> | <i>Elsa</i> | <i>not</i> | <i>given</i> | <i>_____ book-the</i> |
| | | c. | *Derfor | blev | bogen | ikke | givet | Elsa _____. |

2.3 Asymmetry III: Remnant VP-Topicalisation out of a Main vs. an Embedded Clause

Moreover, there is an asymmetry between remnant VP-topicalisation out of a main clause and remnant VP-topicalisation out of an embedded clause.

While finite verb movement takes place in main clauses, (34), it does not in embedded clauses. Consequently, OS is prohibited in embedded clauses, (35); cf. also (13) and (14) above.

- (34) Da a. *Hvorfor e Peter aldrig læste den?
 why *Peter* *never read it*
 b. Hvorfor læste Peter den aldrig ____ ____?
(Vikner 2005: 394)

- (35) Da a. Jeg spurgte hvorfor Peter e aldrig læste den.
 I asked why Peter never read it
 b. *Jeg spurgte hvorfor Peter læste den aldrig ____ ____.
- (Vikner 2005: 396)

A full VP may be topicalised from both main clauses and embedded clauses.

- (36) Da a. [_{VP} Set ham] har jeg ikke, ...
 seen him have I not
 ... hvis jeg skal være helt ærlig, men jeg har talt i telefon med ham.
 if I should be totally honest but I have spoken in phone with him
- b. [_{VP} Set ham] tror jeg ikke at hun har, ...
 seen him believe I not that she has
 ... men hun kan måske nok have talt i telefon med ham.
 but she may perhaps well have spoken in phone with him

Topicalisation of a remnant VP, by contrast, is only possible out of a main clause, (37)a, not out of an embedded clause in Danish: The stranded object may neither follow the finite auxiliary (in its base position), (37)b, nor may it precede it, (37)c:

- (37) Da a. ?[_{VP} Set ____] har jeg ham ikke, ...
 seen have I him not
 ... hvis jeg skal være helt ærlig, men jeg har talt i telefon med ham.
 if I should be totally honest but I have spoken on phone-the with him
- b. * [_{VP} Set ____] tror jeg ikke at hun [_{V°} har] ham, ...
 seen believe I not that she has him
- c. * [_{VP} Set ____] tror jeg ikke at hun ham [_{V°} har] , ...
 seen believe I not that she him have
 ... men hun kan måske nok have talt i telefon med ham.
 but she may perhaps well have spoken in phone with him

This asymmetry shows that stranding must involve OS, because OS requires the (stranded) object to occur in a position to the left of the base position of a finite verb (SHIFTPRON), but it can only do so if this verb has itself left its base position (ORDPRES).

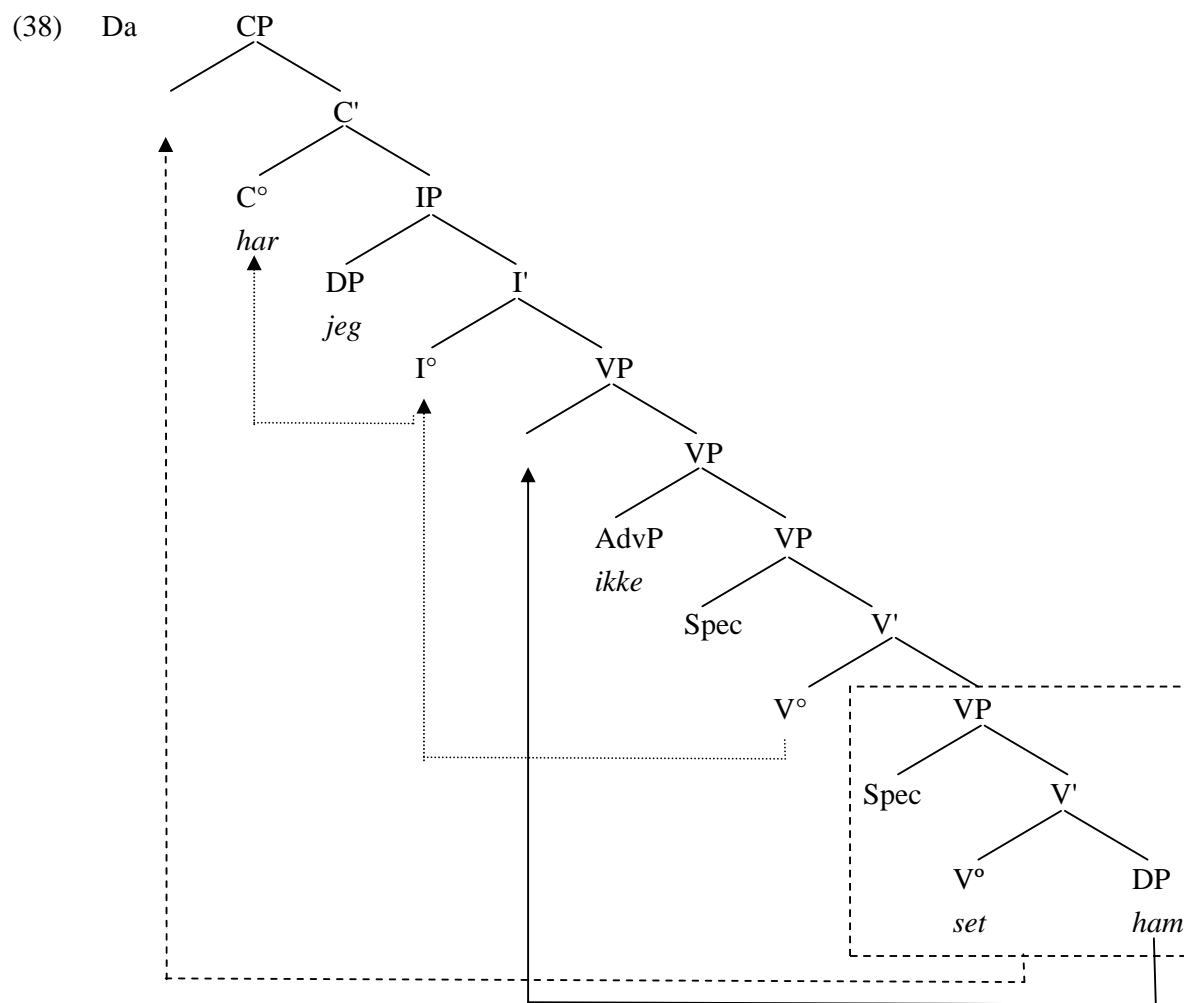


Tableau 8

Da: Topic: V		ORD PRES	SHIFT PRON	STAY	ex.
a	[_{VP} V <u>Pron-Obj</u>] Aux Sub Adv t _{VP}		*!		(36)a
b	[_{VP} V t _{Obj}] Aux Sub Adv <u>Pron-Obj</u> t _{VP}		*!	*	-
☞ c	[_{VP} V t _{Obj}] Aux Sub <u>Pron-Obj</u> Adv t _{VP}			*	(37)a

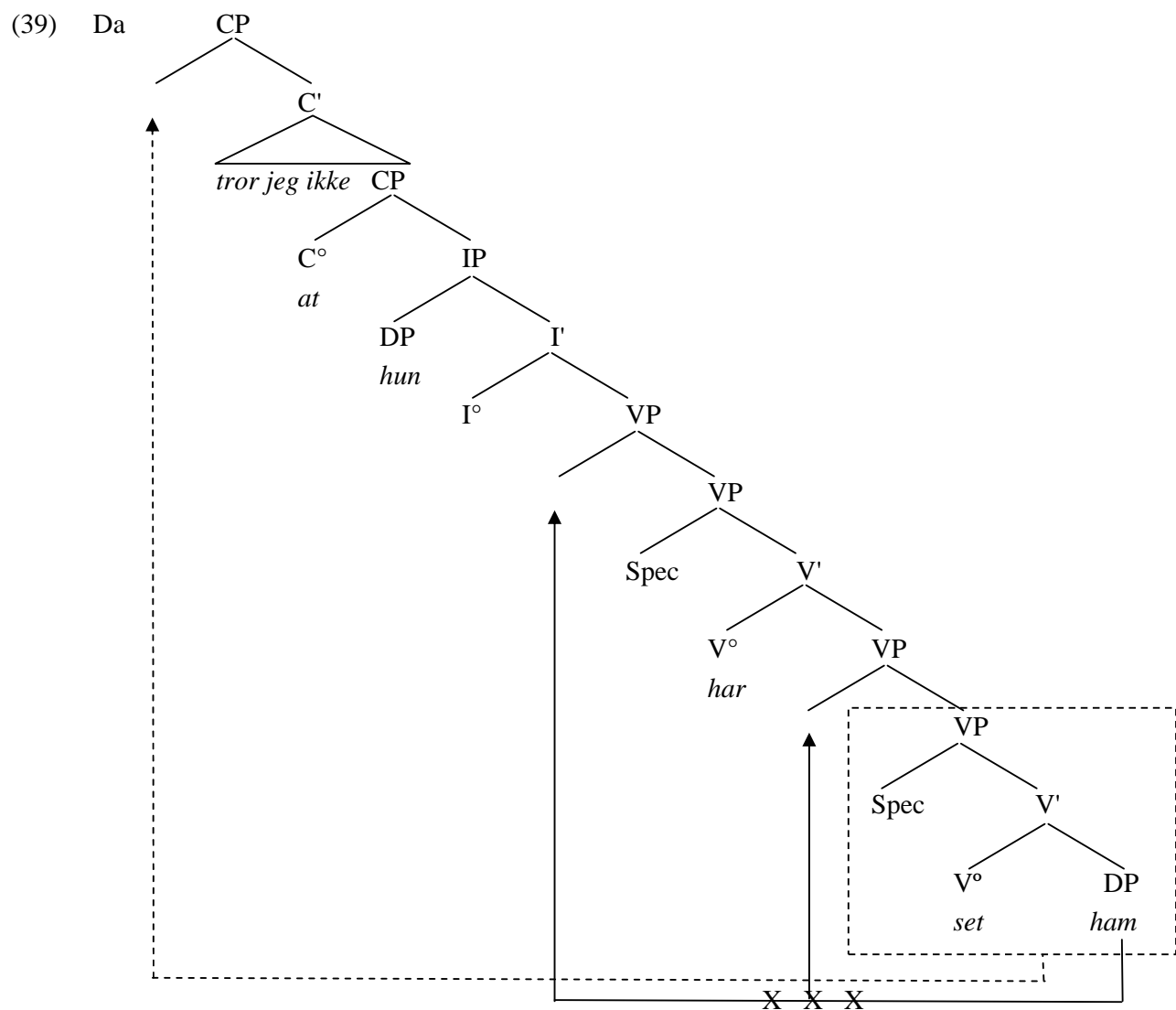


Tableau 9

Da: Topic: V		ORD PRES	SHIFT PRON	STAY	ex.
☞ a	[_{VP} V <u>Pron-Obj</u>] V Sub Adv Comp Sub Aux t _{VP}		*		(36)b
b	[_{VP} V t _{Obj}] V Sub Adv Comp Sub Aux <u>Pron-Obj</u> t _{VP}		*	*!	(37)b
c	[_{VP} V t _{Obj}] V Sub Adv Comp Sub <u>Pron-Obj</u> Aux t _{VP}	*!		*	(37)c

(40) Ic a. *Ég spurði af hverju Pétur e aldrei læsi hana.
 I asked why Pétur never read it
 b. Ég spurði af hverju Pétur læsi hana aldrei ____ ____.

(Vikner 2005: 396)

- Note that remnant VP-topicalisation from embedded clauses is possible in passives, i.e. if the element left behind occurs in subject position. This follows from SUBJECT being ranked higher than ORDPRES, as in Tableau 7 above.

- Engels & Vikner: OS, Remnant VP-Topicalisation & OT, p. 19

3 Conclusion

Holmberg (1997, 1999) considers occurrences of a non-finite verb in topic position such as (3) to result from V°-topicalisation. He assumes that HG is a matter of derivation rather than of representation, i.e. a violation of HG cannot be rescued by some subsequent operation, and hence the non-finite verb has to move before OS can take place, ruling out remnant VP-topicalisations altogether.

However, Fox & Pesetsky (2005) has presented data from double object constructions that clearly show that remnant VP-topicalisation is possible, as long as it does not involve a reversal of the base order of elements, which suggests that HG is representational. We have collected more data that corroborate Fox & Pesetsky's observation and we agree with them in the assumption that HG is to be accounted for in terms of order preservation. Their approach builds on the assumption that Spell-out applies at various points in the derivation (in particular, at VP and at CP) and that the information about the linearisation of the material of a newly constructed Spell-out domain must not contradict the cumulated information of previous applications of Spell-out. In this way, Fox & Pesetsky (2005) predicts that OS differs radically from other types of (A- and A-bar-) movement that can result in a reversal of the order of elements, such as e.g. *wh*-movement or subject raising, in that the latter have to proceed successive cyclically through the left edge of VP while this is impossible for OS.

In contrast, in our OT approach, order preservation is required by a violable constraint. This means that it is the ranking of the ORDERPRESERVATION constraint relative to the constraints that motivate the various types of movement which accounts for the contrast as to whether or not a certain movement operation has to be order preserving. Hence, OS does not receive a special treatment in our approach; the properties distinguishing it from other movement types result from constraint interaction.

The linear conception of HG as expressed by the constraint ORDPRES and its dominance over the constraint that triggers OS, SHIFTPRON, predicts that only pronominal objects that originate in a right-peripheral position within VP might be left behind in OS position during remnant VP-topicalisation, accounting for the asymmetry in stranding of an IO and stranding of a DO observed by Fox & Pesetsky (2005). However, depth of embedding also plays a role for whether or not an object may have undergone OS out of a topicalised VP: The remnant VP in Spec,CP may not include an intermediary trace of a shifted object. Moreover, we presented new data that showed that subject raising does not underly either of these restrictions, and this may be accounted for by a different ranking of SUBJECT and SHIFTPRON relative to the corresponding prohibitions (including ORDPRES).

Finally, the asymmetry between main and embedded clauses as to the applicability of remnant VP-topicalisation in MSc illustrates that object stranding has to involve OS. Object stranding is only possible in sentences in which finite verb movement has taken place, something that would be expected if any object left behind during remnant VP-topicalisation would have to undergo OS (and that as always, OS has to respect order preservation).

Appendix 1: Syntactic Complexity of Pronouns and "Min = Max"

In MSc, OS may only apply to weak pronouns, (43) repeated from (1); neither full DPs, (44), nor syntactically complex pronouns, i.e. modified or conjoined ones, (45) and (46), may undergo OS (cf. footnote 1 on full DP shift in Icelandic).

- (43) Da a. *Jeg kyssede ikke _____ hende.
 I kissed not her
 b. Jeg kyssede hende ikke _____.
- (44) Da a. Hvorfor læste Peter aldrig bogen?
 why read Peter never book-the
 b. *Hvorfor læste Peter bogen aldrig _____?
- (45) Da a. Hvorfor læste Peter aldrig den her?
 why read Peter never this here
 b. *Hvorfor læste Peter den her aldrig _____? (Vikner 2005: 417)
- (46) Da a. Han så ikke dig og hende sammen.
 he saw not you and her together
 b. *Han så dig og hende ikke _____ sammen. (Diesing & Jelinek 1993: 27)

Moreover, focused pronouns cannot undergo OS: Focused pronouns have to stay *in situ* where they follow a medial adverb.

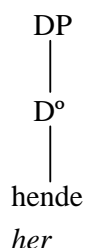
- (47) Da a. Hvorfor læste Peter aldrig DEN?
 why read Peter never it
 b. *Hvorfor læste Peter DEN aldrig _____? (Vikner 2005: 417)

In our analysis, OS is triggered by the constraint SHIFTPRON in (18), repeated here as (48).

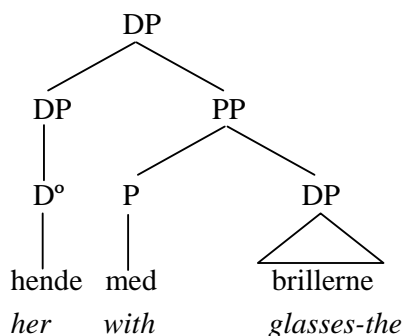
- (48) SHIFTPRONOUN (SHIFTPRON):
 A [-focus] proform that is "min = max" precedes and c-commands the lowest VP (of the same clause) that contains all other VPs and all VP-adjoined adverbials.

The fact that focused pronouns do not move is captured by the restriction of SHIFTPRON to [-focus] constituents. Furthermore, a syntactically simple pronoun, (49)a, differs from a modified, (49)b, or conjoined one, (49)c, in that the phrasal status of the former but not the one of the latter two is "min = max" (cf. also Josefsson 1999).

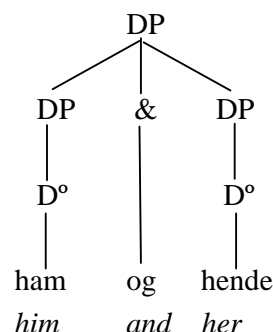
(49) a. simple pronoun



b. modified pronoun



c. conjoined pronoun



By "min = max", we thus mean that the amount of lexical material (i.e. phonologically visible material) dominated by the highest XP (here: DP) must be the same as the amount of lexical material dominated by the lowest X° (here: D°). This is fulfilled in (49)a, but not in (49)b,c. Hence, SHIFTPRON does not affect modified or conjoined pronouns; they are thus expected to remain *in situ* due to STAY in MSc.⁵

Tableau 10

Da:	SHIFT PRON	STAY	ex.
1a Sub V [VP Adv [VP ... [DP=D° <u>Pron-Obj</u>]]]	*!		(43)a
☞ 1b Sub V [VP [DP=D° <u>Pron-Obj</u>] [VP Adv [VP ... t _{Obj}]]]		*	(43)b
☞ 2a Sub V [VP Adv [VP ... [DP≠D° <u>Pron-Obj Mod</u>]]]			(45)a
2b Sub V [VP [DP≠D° <u>Pron-Obj Mod</u>] [VP Adv [VP ... t _{Obj}]]]		*!	(45)b
☞ 3a Sub V [VP Adv [VP ... [DP≠D° <u>Pron-Obj & Pron-Obj</u>]]]			(46)a
3b Sub V [VP [DP≠D° <u>Pron-Obj & Pron-Obj</u>] [VP Adv [VP ... t _{Obj}]]]		*!	(46)b

As mentioned in footnote 1, OS is not restricted to weak pronouns in Icelandic; it may also apply to full DPs, (50). Likewise, syntactically complex pronouns may undergo OS; cf. (51) and (52).

- (50) Ic a. Af hverju las Pétur aldrei þessa bók?
 why read Pétur never this book
 b. Af hverju las Pétur þessa bók aldrei _____?

- (51) Ic a. Af hverju las Pétur aldrei þessa hérna?
 why read Pétur never this here
 b. Af hverju las Pétur þessa hérna aldrei _____? (Vikner 2005: 417)

⁵ Note that there are elements which are "min = max" in the conjoined structure in (49)c, namely each single conjunct, and are thus expected to be able to move due to the ranking SHIFTPRON >> STAY. However, movement out of a conjoined structure represents an instance of an island violation.

- (52) Ic a. Ég þekki ekki hann og hana.
 I know not him and her
 b. Ég þekki hann og hana ekki _____. (Diesing & Jelinek 1993: 27)

In Vikner & Engels (2006:35), we take OS of a complex phrase to be triggered by a more general version of the constraint SHIFTPRON, namely SHIFT.

- (53) SHIFT:
 A [-foc] element precedes and c-commands the lowest VP (of the same clause) that contains all other VPs and all VP-adjoined adverbials.

The contrast between Icelandic and MSc in the applicability of OS to complex DPs may be captured by differences in the relative ranking between SHIFT and STAY.

- (54) a. MSc: SHIFTPRON >> STAY >> SHIFT
 b. Ic: SHIFTPRON, SHIFT >> STAY

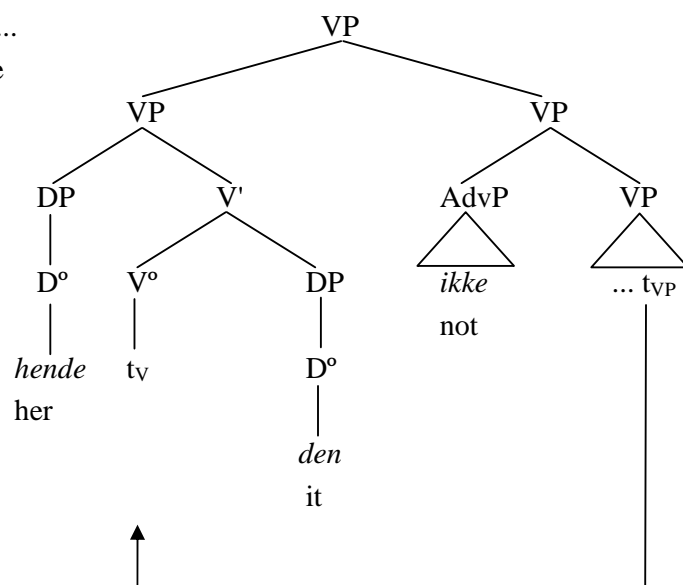
The account presented so far thus captures the facts that OS in MSc only applies to [-focus] DPs that satisfy the "min = max" condition, and that OS in Icelandic applies to all [-focus] DPs. The account is thus incompatible with some accounts of multiple OS, see (55)c, in that it does not allow the analysis of OS as movement of one constituent including several pronouns (as assumed by e.g. Vikner 1989:151 and Christensen 2005:157). We thus have to assume that each pronoun has to be moved separately. This is forced by two facts, to do with c-command and with the definition of "min = max".

If multiple OS was movement of one constituent including several pronouns, then the shifted objects would not c-command the relevant VP themselves, (56)a. The formulation of SHIFTPRON and of SHIFT is such that every shifted object must fulfill the condition that a shifted objects precedes and c-commands the relevant VP, as is indeed the case in the alternative analysis, where the objects move individually, (56)b; cf. also candidate d in Tableau 11.

Furthermore, if multiple OS was movement of one constituent including several pronouns, then this complex constituent would not satisfy the "min = max" condition (it would be a phrase that was not "min = max" itself but rather included several elements that are "min = max"), and thus it would not be affected by SHIFTPRON; movement of a complex constituent is ruled out by the ranking STAY >> SHIFT in MSc.

- (55) Da a. *Jeg gav ikke hende den.
 I gave not her it
 b. *Jeg gav hende ikke ____ den.
 c. Jeg gav hende den ikke ____ ____.

(56) Da a. *Jeg gav...*
I gave



b. *Jeg gav...*
I gave

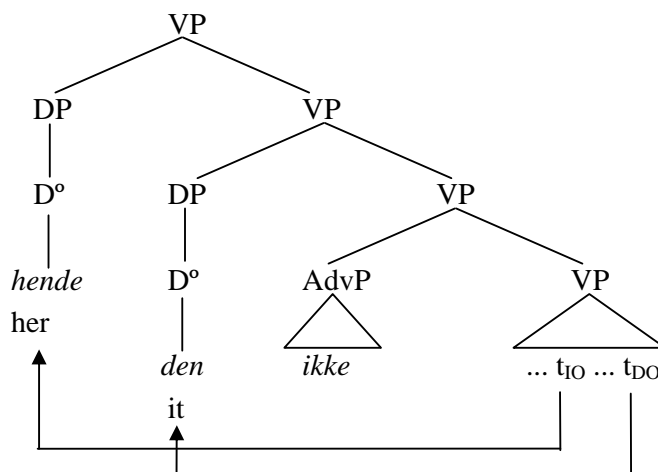


Tableau 11

Da:	SHIFT PRON	STAY	ex.
a Sub V [VP Adv [VP ... [DP=D° <u>Pron-IO</u>] [DP=D° <u>Pron-DO</u>]]]	*!*		(55)a
b Sub V [VP [DP=D° <u>Pron-IO</u>] [VP Adv [VP ... t _{IO} [DP=D° <u>Pron-DO</u>]]]]	*!	*	(55)b
c Sub V [VP [VP ... [DP=D° <u>Pron-IO</u>] [DP=D° <u>Pron-DO</u>]] [VP Adv t _{VP}]]	*!*	*	(55)c= (56)a
d Sub V [VP [DP=D° <u>Pron-IO</u>] [VP [DP=D° <u>Pron-DO</u>] [VP Adv [VP ... t _{IO} t _{DO}]]]]]		**	(55)c= (56)b

Appendix 2: Structure Preservation

There are native speakers of Danish whose intuitions do not agree with the acceptability judgments given above. Rather than to subject remnant VP-topicalisation to a linear restriction, permitting stranding of an object in OS position as long as it does not change the base order of elements (cf. (21) and (22) above), these speakers do not allow for object stranding during remnant VP-topicalisation at all. Topicalisation of a full VP, in contrast, is judged acceptable.

- (57) Da a. [VP Givet hende den] har jeg ikke.
 given her it have I not
 b. *[VP Givet ____ ____] har jeg hende den ikke.
 c. *[VP Givet hende ____] har jeg ____ den ikke.
 d. *[VP Givet ____ den] har jeg hende ikke.

The pattern in (57) can be accounted for if in addition to order preservation, a constraint on structure preservation is considered to restrict OS (cf. Déprez 1994, Müller 2001, Sells 2001, and Williams 2003).

- (58) STRUCTURE PRESERVATION (STRUCPRES):
 If α c-commands β at level L_n , then α c-commands β at level L_{n+1} (where α is non-adverbial).

In other words, where ORDPRES says "preserve the sequence", STRUCPRES says "preserve the c-command relationships".

Like ORDPRES, the constraint STRUCPRES and its dominance over SHIFTPRON predicts that OS cannot cross an intervening non-adverbial element: For example, OS across a verb *in situ* as in (59)b changes the c-command relation between the verb and the shifted object.

- (59) Da a. Jeg spurgte hvorfor Peter aldrig læste den.
 I asked why Peter never read it
 b. *Jeg spurgte hvorfor Peter den aldrig læste ____.

In contrast to ORDPRES, however, STRUCPRES (>> SHIFTPRON) rules out stranding of an object during VP-topicalisation. While the linear relations between the verb and the objects are maintained in (57)b,c above, their structural relations are not: The verb (and IO) in Spec,CP is too deeply embedded to c-command the stranded (IO and) DO. Consequently, STRUCPRES >> SHIFTPRON rules out stranding of an object during remnant VP-topicalisation while permitting topicalisation of a full VP.

Tableau 12: No remnant VP-topicalisation

Da	Topic: V	TOPIC	STRUC PRES	SHIFT PRON	ex.
☞ a	[_{VP} V <u>Pron-IO</u> <u>Pron-DO</u>] Aux Sub Adv t _{VP}			**	(57)a
b	[_{VP} V t _{IO} t _{DO}] Aux Sub <u>Pron-IO</u> <u>Pron-DO</u> Adv t _{VP}		*!*		(57)b
c	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux Sub <u>Pron-DO</u> Adv t _{VP}		*!*	*	(57)c
d	[_{VP} V t _{IO} <u>Pron-DO</u>] Aux Sub <u>Pron-IO</u> Adv t _{VP}		*!*	*	(57)d

Hence, variation between speakers as to the strandability of objects during VP-topicalisation may be accounted for by a contrast in the ranking of two very similar constraints, one requiring order preservation, the other structure preservation.

Appendix 3: Differentiation according to syntactic complexity: SHIFT, STAY, or both?

Under our formulation of SHIFTPRON in (18), it is predicted that a pronominal object may force stranding of other (right-peripheral) elements such as DPs, PPs, or particles whose movement is not motivated by an independent constraint, i.e. which cannot move to a sentence-medial position otherwise. This prediction is not borne out. A right-peripheral particle/PP cannot be stranded, irrespective of whether or not the pronominal object is stranded as well; cf. (60)c,d/(61)c,d. The only option is to topicalise the whole VP as in (60)a and (61)a. (The b-sentences in (60) and (61) are ruled out by ORDPRES >> SHIFTPRON, cf. section 2.1 above.)

(60) Da a. [VP Smidt den ud] har jeg ikke.
thrown it out have I not

b. *[VP Smidt ____ ud] har jeg den ikke.

c. *[VP Smidt den ____] har jeg ikke ud.

d. *[VP Smidt ____ ____] har jeg den ikke ud.

(61) Da a. [VP Stillet det på bordet] har jeg ikke.
put it on table-the have I not

b. *[VP Stillet ____ på bordet] har jeg det ikke.

c. *[VP Stillet det ____] har jeg ikke på bordet.

d. *[VP Stillet ____ ____] har jeg det ikke på bordet.

We might be able to rule out the c-sentences: Assuming that TOPIC requires the verb and the object to occur in Spec,CP, STAY predicts that stranding of the particle/PP alone is not possible since its movement out of VP is not motivated otherwise. (Remember that taking along to much material to Spec,CP does not violate TOPIC.)

Tableau 13

Da: Topic: V & Obj-Pron	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
☞ a [VP V <u>Obj-Pron</u> PP] Aux Sub Adv			*		(61)a
b [VP V t _{Pron} PP] Aux Sub <u>Obj-Pron</u> Adv	*!	*		*	(61)b
c [VP V <u>Obj-Pron</u> t _{PP}] Aux Sub Adv <u>PP</u>			*	*!	(61)c
d [VP V t _{Pron} t _{PP}] Aux Sub <u>Obj-Pron</u> Adv <u>PP</u>	*!			**	(61)d

However, the ranking SHIFTPRON >> STAY falsely predicts that a phrase (particle/PP) which follows a pronominal object within VP is stranded together with the object if only the verb is marked as [+topic]. The object thus does not have to occur in Spec,CP, and SHIFTPRON requires its stranding in clause-medial position. In order to satisfy ORDPRES, the right-peripheral particle/PP has to be stranded as well. The extra violation of STAY induced by stranding of the particle/PP is now "legalized" by the satisfaction of the higher ranking constraints ORDPRES and SHIFTPRON.

Tableau 14

Da: Topic: V	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
☞ a [VP V <u>Obj-Pron</u> PP] Aux Sub Adv			*!		(61)a
b [VP V t _{Pron} PP] Aux Sub <u>Obj-Pron</u> Adv		*!		*	(61)b
c [VP V <u>Obj-Pron</u> t _{PP}] Aux Sub Adv PP			*!	*	(61)c
d [VP V t _{Pron} t _{PP}] Aux Sub <u>Obj-Pron</u> Adv PP				**	(61)d

As mentioned in Appendix 1, while OS is restricted to pronominal elements in MSc, not only pronouns but also full DPs may undergo OS in Icelandic. This contrast as to the applicability of OS to phrases of different complexity may be accounted for by the ranking of STAY relative to SHIFT and SHIFTPRON; cf. (54).

To resolve the problem described above, it would seem necessary (instead of distinguishing between elements for which movement is/is not independently motivated, i.e. for which there is a constraint above STAY) to distinguish between elements for which movement is/is not explicitly prohibited. Hence, instead of differentiating SHIFT according to syntactic complexity (SHIFT and SHIFTPRON), apparently STAY must be differentiated according to syntactic complexity, STAY and STAYCOMPLEX (= *Don't move elements that are "min ≠ max" (i.e. non-pronominals)*). The cross-linguistic variation as to the mobility of elements of different syntactic complexity might then be accounted for by differences in the ranking between SHIFT and STAYCOMPLEX (and STAY).

- (62) a. MSc: STAYCOMPLEX >> SHIFT >> STAY
b. Ic: SHIFT >> STAYCOMPLEX, STAY

The ranking STAYCOMPLEX >> SHIFT >> STAY in MSc predicts that OS is only possible for weak pronouns but not for more complex phrases. In contrast, the ranking SHIFT >> STAYCOMPLEX, STAY permits OS of both pronouns and full DPs in Icelandic. ORDPRES >> SHIFT makes sure that OS only takes place if the base order is maintained.

- (63) Da a. Hvorfor læste Peter ikke bogen?
why read Peter not book-the
b. *Hvorfor læste Peter bogen ikke ____?

- (64) Da a. *Hvorfor læste Peter ikke den?
why read Peter not it
b. Hvorfor læste Peter den ikke ____?

Tableau 15

Da:	TOPIC	ORD PRES	STAY COMPLEX	SHIFT	STAY	ex.
☞ 1a wh V Sub Adv <u>DP-Obj</u>				*		(63)a
1b wh V Sub <u>DP-Obj</u> Adv t _{DP}			*!		*	(63)b
2a wh V Sub Adv <u>Pron-Obj</u>				*!		(64)a
☞ 2b wh V Sub <u>Pron-Obj</u> Adv t _{Pron}					*	(64)b

Though pronominal OS is required (SHIFT >> STAY), it is predicted that stranding of the pronominal object during VP-topicalisation is not possible if there is a phrase within VP that follows the object (i.e. particle or PP). ORDPRES rules out stranding of the object alone, and the demand for pronominal OS cannot force stranding of the following phrase due to the higher ranking STAYCOMPLEX.

Tableau 16

Da: Topic: V	TOPIC	ORD PRES	STAY COMPL	SHIFT	STAY	ex.
☞ a [VP V <u>Pron-Obj</u> PP] Aux Sub Adv				**		(61)a
b [VP V t _{Pron} PP] Aux Sub <u>Pron-Obj</u> Adv		*!		*	*	(61)b
c [VP V <u>Pron-Obj</u> t _{pp}] Aux Sub Adv PP			*!	*	*	(61)c
d [VP V t _{Pron} t _{pp}] Aux Sub <u>Pron-Obj</u> Adv PP			*!		**	(61)d

However, a distinction between STAY and STAYCOMPLEX would seem not to suffice. Though both pronominal and non-pronominal arguments may undergo OS in Icelandic (SHIFT >> STAYCOMPLEX, STAY), movement of adverbials depends on syntactic complexity. While pronominal adverbials are able to undergo OS, (65), complex adverbials are not – independent of their syntactic category, PP or DP, and independent of whether they are free or selected for; cf. (66) and (67).

- (65) Ic a. Býr Pétur ekki lengur þar?
lives Peter not longer there
b. Býr Pétur þar ekki lengur ____? (Vikner 2005: 422)

- (66) Ic a. Býr Pétur ekki lengur í Kaupmannahöfn?
lives Petur not longer in Copenhagen
b. *Býr Pétur í Kaupmannahöfn ekki lengur _____? (Vikner 2005: 424)

- (67) Ic a. Pétur kemur sennilega næstu viku.
Pétur comes probably next week
b. *Pétur kemur næstu viku sennilega _____.
(Gunnar Hrafn Hrafnbjargarson, p.c.)

Tableau 17

Though the cross-linguistic variation as to the mobility of pronouns and more complex phrases might be accounted for by a differentiation of STAY (i.e. STAY, STAYCOMPLEX, and STAYCOMPLEXADVERBIAL), the distinction between SHIFT and SHIFTPRON will still have to be retained. In Vikner & Engels (2006), we argued that Scrambling (SCR) in the West Germanic languages might be treated on a par with OS in the Scandinavian languages by considering both movement devices to be triggered by SHIFT (and SHIFTPRON). Though both pronouns and complex phrases may undergo movement in Dutch (SHIFT >> STAY, STAYCOMPLEX), they contrast in the ability to scramble across an intervening argument, i.e. in whether or not their movement has to maintain the ordering relations (ORDPRES).

- This asymmetry may only be accounted for if movement of pronouns and movement of more complex phrases are motivated by distinct constraints, SHIFTPRON and SHIFT. Only if pronominal movement is additionally triggered by some other constraint than movement of full DPs, this asymmetry might be derived from differences in the constraint ranking relative to ORDPRES: SHIFTPRON >> ORDPRES >> SHIFT.

Engels & Vikner: OS, Remnant VP-Topicalisation & OT, p. 30

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