

Scandinavian Object Shift, Remnant VP-Topicalisation, and Optimality Theory

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Abstract

The leftward movement of pronominal objects in Scandinavian called “Object Shift” requires the verb to have moved out of VP. This constraint is known as “Holmberg’s generalisation”.

In Holmberg (1999), placement of the non-finite verb in clause-initial position as in (i) is analysed as V°-topicalisation with subsequent Object Shift.

- (i) Sw. Kysst har jag henne inte ____ ____ (bara hållit henne i handen).
kissed have I her not (only held her by hand-the)
(example from Holmberg 1999:7)

Counterexamples to Holmberg's hypothesis are given in Fox & Pesetsky (2005a) which show that remnant VP-topicalisations may leave behind an object in Object Shift position in Scandinavian as long as the VP-internal order relations are maintained, as illustrated by the asymmetry between stranding of a direct object and stranding of an indirect object in double object constructions:

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

Based on an extended set of data, including e.g. remnant VP-topicalisation after passivization and remnant VP-topicalisation out of embedded clauses, we shall argue that within an Optimality Theory analysis, Holmberg's generalisation and the restrictions on object stranding may be seen to result from one and the same, more general (and violable) condition on order preservation.

1 Introduction

In the Scandinavian languages, an unstressed pronominal object may move from its base position behind the main verb to a position to the left of a sentential adverbial.¹ This movement operation is called Object Shift (OS). OS is obligatory in Icelandic, Faroese, and Danish, (1), but optional in Norwegian and Swedish, (2).

¹ In Icelandic, not only pronouns but also full DPs may undergo OS, (i). In the Mainland Scandinavian languages, in contrast, OS is restricted to weak pronouns; cf. (1) vs. (ii).

- (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)
- (ii) Da a. Hvorfor læste Peter aldrig ____ den her bog?
why read Peter never this here book
b. *Hvorfor læste Peter den her bog aldrig ____? (Vikner 2005: 417)

- (1) Da a. *Jeg kyssede ikke _____ hende.
 I kissed not her
 b. Jeg kyssede hende ikke _____ _____.
- (2) Sw a. Jag kysste inte _____ henne.
 b. Jag kysste henne inte _____ _____.

OS presupposes movement of the main verb; as shown in (3), it cannot cross a verb *in situ*.

- (3) Da a. Jeg har ikke kysset hende.
 I have not kissed her
 b. *Jeg har hende ikke kysset ____.

However, the main verb does not have to undergo head movement (V° -to- I° -to- C° movement²) as in (1). OS is also possible in clauses with a non-finite main verb if the verb occurs in clause-initial position, (4). In fact, OS has to take place in this case, (5).

- (4) Sw a. Kysst har jag henne inte ____ ____ (bara hållit henne i handen).
kisséd have I her not only held her by hand-the
(Holmberg 1999: 7)
- Da b. Kysset har jeg hende ikke ____ ____ (bare holdt hende i hånden).
kisséd have I her not only held her in hand-the
(Vikner 2005: 407)
- Ic c. Kysst hef ég hana ekki ____ ____ (bara haldið í höndina á henni).
kisséd have I her not only held in hand-the on her
(Vikner 2005: 431)
- (5) Sw a. *Kysst har jag inte ____ henne.
kisséd have I not her (Erteschik-Shir 2001: 59)
- Da b. *Kysset har jeg ikke ____ hende.
kisséd have I not her

The observation that the object only moves if the main verb has moved forms the basis of Holmberg's generalisation (Holmberg 1986: 165, 1997: 208).

² Note that the main verb need not move all the way up to C°; V°-to-I° movement as in Icelandic embedded clauses is sufficient to make OS possible (see also section 3.4 below).

- (i) Ic a. *Ég spurði af hverju Pétur aldrei læsi hana.
 I asked why Pétur never read it
 b. Ég spurði af hverju Pétur læsi hana aldrei _____. (Vikner 2005: 396)

(6) **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 (6) 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 3.1 below, the first option will be pursued here, taking HG to be the consequence of a violable condition on order preservation (cf. Déprez 1994, Müller 2001a, Sells 2001, Williams 2003, and Fox & Pesetsky 2005a).

Holmberg's generalisation prohibits OS across a non-adverbial constituent to its left. In fact, however, the condition on order preservation seems to be even more general than is expected by Holmberg's generalisation. As Fox & Pesetsky (2005a) observe, stranding of an object during remnant VP-topicalisation is only possible if the object is right-peripheral within VP: In double object constructions, topicalisation of a non-finite main verb may take along the IO, stranding the DO in shifted position, (7)a. By contrast, the opposite is not possible, topicalisation of the non-finite main verb carrying along the DO but stranding the IO, (7)b.³

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

In section 2, we set out the basics of our analysis which is couched in an Optimality Theory framework with constraints which are violable and ranked, in particular a constraint on order preservation. We also briefly compare our approach to the one in Fox & Pesetsky (2003, 2005a,b).

In section 3, we then go on to discuss four different asymmetries related to stranding during remnant VP-topicalisation: between direct and indirect objects in 3.1, between Danish and Swedish particle verbs and *let*-constructions in 3.2, between leaving behind an object and leaving behind a subject in 3.3, and finally between remnant VP-topicalisation out of a main clause and remnant VP-topicalisation out of an embedded clause in 3.4.

Section 4 summarizes the main points of the paper.

³ Considering Holmberg's generalisation to be a derivational condition, Holmberg (1999) takes examples like (4) to involve V^o-topicalisation: Moving the verb (and nothing but the verb) to topic position is what paves the way for OS. However, examples like (7) show that remnant VP-topicalisation is possible in Scandinavian, as admitted in Holmberg (2005:148), where Holmberg also gives the example repeated as (34)c below.

2 Approaches to Object Shift and order preservation

2.1 Order preservation as a ranked and violable constraint

OS is motivated by the constraint SHIFTPRON which outranks the constraint STAY that prohibits movement.⁴

(8) SHIFT PRONOUN (SHIFTPRON):

A [-focus] proform ("min = max")⁵ is adjoined to the maximal extended VP of its case-assigning verb.

(9) STAY:

Trace is not allowed.

(Grimshaw 1997: 374)

SHIFTPRON is satisfied if the pronoun is adjoined to the top VP, as illustrated in (11) below.⁶ As discussed in the next subsection, we follow Fox & Pesetsky (2005a) in assuming HG to result from a condition on order preservation (see also Müller 2001a).

(10) ORDER PRESERVATION (ORDPRES):

An independently moved constituent⁷ α must not precede a non-adverbial constituent β if α (or parts of α) followed β at the point in the derivation where case assignment took place.⁸

⁴ Recall that OS may also apply to full DPs in Icelandic but not in Mainland Scandinavian; cf. footnote 1. In Appendix 1 below and in Vikner & Engels (2006), we assume that full DP Shift is motivated by a more general version of SHIFTPRON, called SHIFT, which requires movement of all [-focus] constituents. Differences in the relative ranking between SHIFT and STAY account for the cross-linguistic contrasts as to the availability of full DP shift.

⁵ On the "min = max" condition, see Appendix 1.

⁶ The ranking SHIFTPRON >> STAY predicts that OS is obligatory. In Swedish and Norwegian, where pronominal OS is optional (cf. (2) above), STAY and SHIFTPRON might be tied, STAY <> SHIFTPRON: Both relative rankings of the two constraints, STAY >> SHIFTPRON and SHIFTPRON >> STAY, co-exist in these languages; depending on the actual ranking, movement is required or prohibited, accounting for its optionality. (In terms of Müller's (2001b) classification of constraint ties, we are here dealing with an ordered global tie.)

⁷ It is essential that because of the wording "independently moved constituent", topicalisation of a complete VP and topicalisation of a remnant VP give rise to the same number of ORDPRES violations, namely one for every constituent the VP moves across. In other words, the constituents inside the topicalised VP are not seen as "independently moved constituents".

⁸ This means that two kinds of movement cannot possibly violate order preservation: **DP-movement into a case-marked position** (e.g. passivisation, subject raising, and movement across a verb particle as in section 3.2 below) and **head movement necessary for case assignment** (e.g. particle incorporation as in section 3.2 below).

The ranking $\text{ORDPRES} \gg \text{SHIFTPRON} \gg \text{STAY}$ predicts that OS is only possible if it maintains the base order of certain constituents. Hence, for OS to be possible, all verbs in the clause verb must move to a position to the left of the target position of OS (such that the relative order between verbs and object is preserved)). The verbs of the clause do not necessarily have to undergo V° -to- I° -to- C° movement; ORDPRES is also satisfied if a non-finite verb moves into topic position as in (4). (The restriction to *non-adverbial* constituents is necessary to permit OS across clause-medial adverbials.)

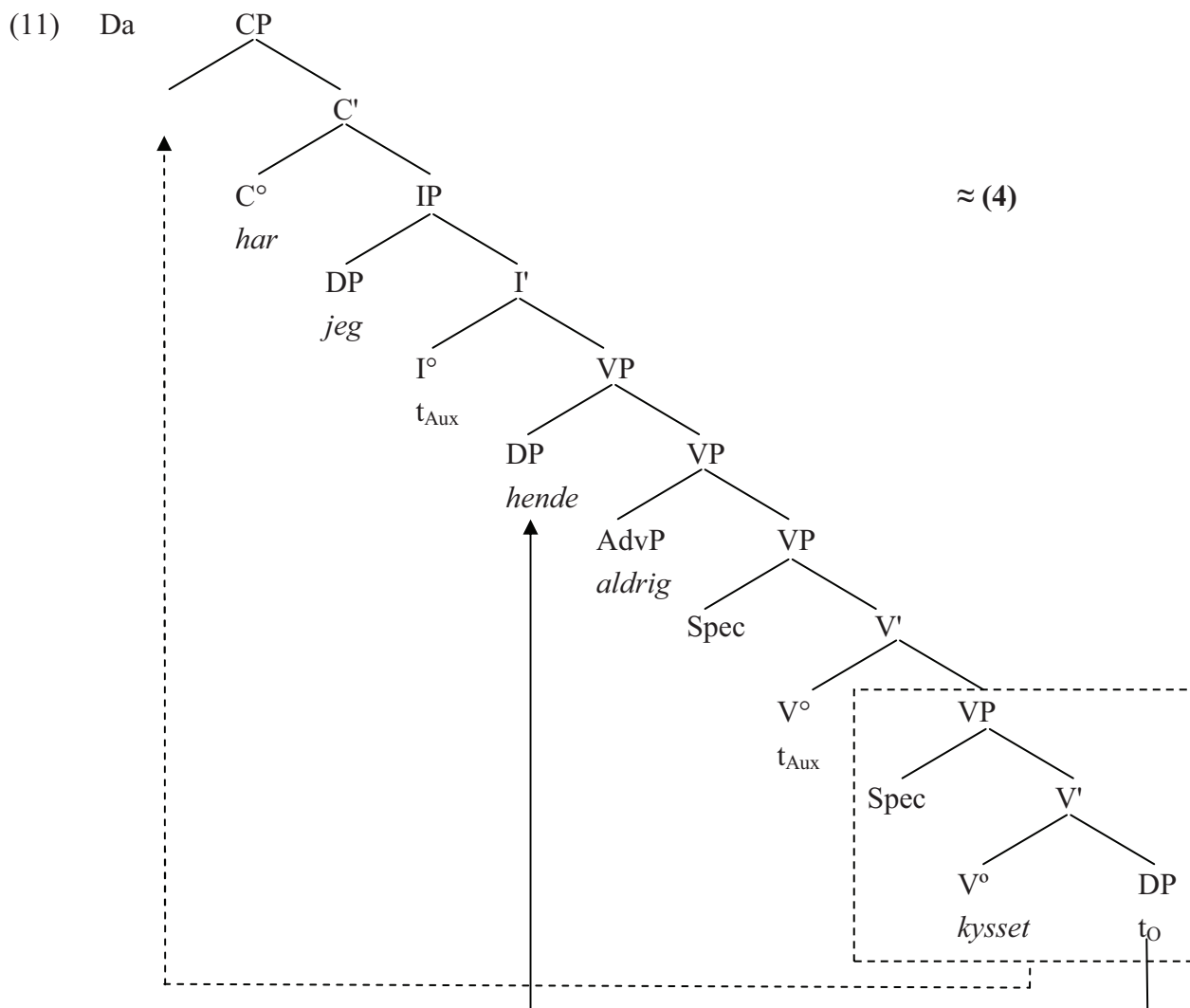


Tableau 1: OS & Holmberg's generalisation

Da		ORD PRES	SHIFT PRON	STAY	ex.
V in situ	☞ 1a S Aux Adv <u>V Pron-O</u>		*		(3)a
	1b S Aux <u>Pron-O</u> Adv <u>V</u> t ₀	*!		*	(3)b
V in C°	2a S <u>V</u> Adv t _V <u>Pron-O</u>		*!		(1)a
	☞ 2b S <u>V Pron-O</u> Adv t _V t ₀			*	(1)b
VP in SpecCP	3a [_{VP} <u>V</u> t ₀] Aux S Adv <u>Pron-O</u> t _{VP}		*!		(5)b
	☞ 3b [_{VP} <u>V</u> t ₀] Aux S <u>Pron-O</u> Adv t _{VP}			*	(4)/(11)

(In this and following tableaux, only STAY- and ORDPRES-violations induced by OS violations are

listed; STAY- and ORDPRES-violations induced by e.g. VP-topicalisation or V° -to- I° -to- C° movement are left out because they do not vary between competing candidates.)

The present approach assumes that occurrence of a non-finite main verb in topic position involves OS of the pronominal object prior to remnant VP-topicalisation; compare (11) above. The OT constraint ORDPRES 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.⁹

2.2 Fox & Pesetsky (2003, 2005a,b): Order preservation and cyclic linearization

Fox & Pesetsky (2003, 2005a,b) also discuss OS and remnant VP-topicalisation. They suggest that the order preservation effects arise in the following way: 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, 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 material outside VP, (12)c. This information is consistent 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. Spell-out VP: [_{VP} V O]
 Ordering: **$V < O$**
- c. Spell-out CP: [_{CP} S V [_{IP} t_S O Adv [_{VP} t_V t_O]]]
 Ordering: **$S < V$** **$V < O$**
 $V < O$
 $O < Adv$
 $Adv < VP$

Note that the adverbial is merged outside the VP Spell-out domain; its position relative to the object

⁹ Notice that OS, which is always motivated by the constraint SHIFTPRON, cannot force remnant VP-topicalisation because VP-topicalisation violates the higher ranking constraint ORDPRES (the topicalised VP moves across the finite auxiliary and the subject).

(and the main verb) is thus not fixed until Spell-out of CP, predicting OS across the adverb (i.e. the sequence O<Adv) to be possible.

OS across a verb *in situ* as in (3)b, repeated as (13)a, gives rise to contradictory ordering statements. The ordering statements produced at Spell-out of CP, (13)c, are in opposition to the statement "V<O" established at Spell-out of VP, (13)b.

- (13) Da a. *Jeg har hende ikke kysset ____.
 I have her not kissed
- b. Spell-out VP: [VP V O]
 Ordering: V<O
- c. Spell-out CP: [CP S Aux [IP t_S O Adv [VP t_{Aux} [VP V t_O]]]]
 Ordering: S<Aux V<O
 Aux<O
 O<Adv
 Adv<VP → Adv<V

Hence, Fox & Pesetsky (2005a) derive HG from ordering contradictions. OS cannot take place if it results in ordering statements at the Spell-out of CP that contradict those established at the Spell-out of VP. Correspondingly, the asymmetry between stranding of an IO and stranding of a DO by remnant VP-topicalisation illustrated in (7) above is expected by order preservation. Stranding of an IO, but not stranding of a DO gives rise to contradictory ordering statements at the various Spell-out domains: At VP, "IO<DO" is established, which is consistent with the Spell-out of CP in (7)a but not in (7)b.

Note that Fox & Pesetsky (2005a) predict that movement operations that do not obey HG have to proceed in a successive cyclic fashion: The underlined constituents in (14) have to move via 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), Engels (submitted)), topicalisation, and subject movement.

- (14) Da a. Måske har han ingen bøger solgt ____.
 probably has he no books sold
- b. Bøgerne har jeg solgt ____.
 books-the have I sold
- c. Måske blev bøgerne solgt ____.
 perhaps were books-the sold

- (15) Da a. Bøgerne har jeg solgt _____. = (14)b
books-the have I sold
- b. Spell-out VP: $[_{VP} \underline{O} [_{VP} V t_O]]$
Ordering: **O<V**
- c. Spell-out CP: $[_{CP} \underline{O} Aux [_{IP} S t_{Aux} [_{VP} t_O V t_O]]]$
Ordering: **O<Aux** **O<V**
Aux<S
S<VP → S<V

Hence, to Fox & Pesetsky the crucial difference between the various movement operations in (14) and OS is that the former may - and indeed must – go via the edge of VP, but as Fox & Pesetsky (2003) state, in their analysis OS cannot involve movement to the edge of VP, i.e. to them, OS is an exception to the rule. "Our proposals say nothing in themselves, however, about the circumstances under which movement to these left-edge positions is allowed or prohibited" (Fox & Pesetsky 2005a: 39).

Under the OT approach adopted here, this difference between the various movement operations in (14) and OS, i.e. that only OS must preserve the base order, follows from the standard OT-mechanism of constraint ranking: The constraint that motivates OS, SHIFTPRON, is outranked by ORDPRES (see Tableau 1 above), whereas the constraints that motivate the other movements, e.g. TOPIC, outrank ORDPRES. See Tableau 2 below as well as (16) repeated from (14)b above.

- (16) Da Bøgerne har jeg solgt _____.
books-the have I sold

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

Tableau 2: Object topicalisation

Da	TOPIC	ORDPRES	SHIFTPRON	STAY	ex.
a S Aux t _S V <u>O</u> _[+top]	*!			*	-
☞ b <u>O</u> _[+top] Aux S V t _O		***		*	(16)

Note also that Fox & Pesetsky (2003, 2005a,b) make an incorrect prediction concerning remnant VP-topicalisation in constructions with an auxiliary *in situ* (see also section 3.4 below). They assume that auxiliary verbs are merged outside vP (and therefore also after Spell-out of VP). As a consequence, the ordering of object and auxiliary verb is not fixed until Spell-out of CP, which incorrectly predicts that the sequence O<Aux is possible (because it is consistent with the ordering statements previously established, none of which mention the auxiliary at all). Fox & Pesetsky (2005b: 252) even go so far as to draw a tree diagramme of the problematic structure, but then they claim, following Holmberg (2005: 151) their prediction cannot be checked because VP-topicalisation is impossible across an auxiliary *in situ* anyway, regardless of whether or not OS out of the VP has taken place first. However, as shown in (18), this is incorrect: VP-topicalisation is actually possible across

an auxiliary *in situ*, but remnant VP-topicalisation is not; the object can neither precede nor follow the auxiliary *in situ*.

- (18) Da a. [_{VP} Kysse hende] har jeg aldrig villet.
 kiss her have I never wanted
 b. *_{[VP} Kysse ____] har jeg aldrig villet hende.
 c. *_{[VP} Kysse ____] har jeg hende aldrig villet.
- (19) Sw a. [_{VP} Kyssa henne] har jag aldrig velat.
 b. ??_{[VP} Kyssa ____] har jag aldrig velat henne.
 c. *_{[VP} Kyssa ____] har jag henne aldrig velat.

In the present OT approach, the ungrammaticality of (18)c follows from all (non-adverbial) elements being relevant for ORDPRES, which includes any auxiliaries *in situ*. The ill-formedness of (18)b and (19)b shows that since ORDPRES makes it impossible to comply with SHIFTPRON, there is no reason for the object to leave the VP.

Tableau 3: Remnant VP-topicalisation across an auxiliary *in situ*

Da	ORD PRES	SHIFT PRON	STAY	ex.
☞ a [_{VP} V <u>Pron-O</u>] Aux _[fin] S Adv Aux _[non-fin] t _{VP}		*		(18)a
b [_{VP} V t _O] Aux _[fin] S Adv Aux _[non-fin] <u>Pron-O</u> t _{VP}		*	*!	(18)b
c [_{VP} V t _O] Aux _[fin] S <u>Pron-O</u> Adv Aux _[non-fin] t _{VP}	*!		*	(18)c

Notice further that although these examples, (18) and (19), have a non-finite auxiliary *in situ* (as do the ungrammatical examples in Holmberg (2005: 151) that Fox & Pesetsky (2005b: 252) refer to), this is not the only possible case of auxiliaries *in situ*. In embedded clauses, finite auxiliaries remain *in situ* in Mainland Scandinavian, and also here topicalisation of the entire VP (but not of a remnant VP) is possible, and also here Fox & Pesetsky (2005b: 252) make the wrong prediction, as discussed in section 3.4 below.

independent of how many constituents are included in the topicalised VP.¹⁰

As Tableau 4 and Tableau 5 show, SHIFTPRON favours stranding of a pronoun, but this is only possible if the pronoun is not marked [+topic], due to the higher ranking constraint TOPIC. The asymmetry between stranding of a DO and stranding of an IO is expected by the ranking ORDPRES >> SHIFTPRON. Remnant VP-topicalisation with OS of a DO maintains the VP-internal ordering relations, satisfying ORDPRES (see Tableau 6). 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 (20)a, the c-command relations are not: Neither the verb nor the IO c-commands the shifted DO.

In contrast, remnant VP-topicalisation with OS of an IO does not re-establish the base order relations. The violation of ORDPRES therefore rules out stranding of the IO in OS position, see Tableau 7 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 5 and Tableau 7. (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 (21)b, Tableau 5.)

Tableau 6: 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 S Adv t _{VP}			***		(21)a
☞ b	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux S <u>Pron-DO</u> Adv t _{VP}			*	*	(20)a
c	[_{VP} V t _{IO} <u>Pron-DO</u>] Aux S <u>Pron-IO</u> Adv t _{VP}	*!	*	*	*	(20)b
d	[_{VP} V t _{IO} t _{DO}] Aux S <u>Pron-IO</u> <u>Pron-DO</u> Adv t _{VP}	*!			**	(21)b

Tableau 7: 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> <u>Pron-DO</u>] Aux S Adv t _{VP}			**		(21)a
b	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux S <u>Pron-DO</u> Adv t _{VP}	*!		*	*	(20)a
c	[_{VP} V t _{IO} <u>Pron-DO</u>] Aux S <u>Pron-IO</u> Adv t _{VP}		*!	*	*	(20)b
d	[_{VP} V t _{IO} t _{DO}] Aux S <u>Pron-IO</u> <u>Pron-DO</u> Adv t _{VP}	*!			**	(21)b

More generally, the ranking ORDPRES >> SHIFTPRON predicts that stranding of an object during remnant VP-topicalisation is only acceptable if the object is right-peripheral within VP. As shown in (22) and (23), topicalisation of the entire VP but not remnant topicalisation is possible in constructions in which the object is followed by other elements within VP, e.g. in constructions with a infinitival clause, (22), or with a verb and an additional PP-complement, (23) (see Appendix 3 for an analysis).

¹⁰ Furthermore, we are here assuming that OS of two objects take place as two independent movements, (21)b and candidate d in Tableau 4-Tableau 7. In (75) and Tableau 21 in Appendix I below, we show how this is due to SHIFTPRON. This might seem to open the possibility of multiple OS in which the DO precedes the IO, but such a candidate will never be optimal, as it will have exactly the same constraint violations as candidate d in Tableau 4-Tableau 7 **plus** an additional violation of ORDPRES.

- (22) 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)
- (23) 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.

As mentioned above, Holmberg's generalisation only prohibits OS across constituents to the left. This section has shown that the condition on order preservation is more general: OS is only grammatical if the VP-internal ordering relations are retained. Only right-peripheral objects may be stranded during remnant VP-topicalisation. In the present OT-analysis, this follows from the constraint ORDPRES and its dominance over SHIFTPRON.

3.2 Particle verbs and *let*-constructions in Danish vs. Swedish

The order preservation approach to OS and remnant VP-topicalisation advocated here is also supported by the contrast between Danish and Swedish particle verbs and *let*-constructions.

Vikner (1987: 263) and Haegeman & Guéron (1999:257-258), among others, suggest that particle constructions have a parallel structure to prepositional constructions, i.e. that the particle (Prt°) is the head of a particle phrase (PrtP), and that Prt° may be followed by a complement DP. Haegeman & Guéron (1999:257-258) further suggest that particles do not assign case to their complement DPs, and that in English, there are two ways out of this predicament: DP-movement and particle incorporation. Vikner (2009: 5-6) implements these two as follows: One option is that the DP moves to the specifier of the PrtP where it can be assigned case by the verb (much like ECM, exceptional case marking), see candidate (c) in Tableau 8 and Tableau 9. The other option is that the particle incorporates into the verb, which allows the case assignment properties of the verb to be shared with the particle, so that the DP may now be assigned case by the trace of the particle, see candidate (b) in Tableau 8 and Tableau 9. Both of these two options are found in English and Norwegian (with full DPs, at least), whereas Danish only allows DP-movement, (24), and Swedish only allows particle incorporation, (25):

- (24) Da a. *Jeg har [_{VP} smidt [_{PrtP} ud tæppet]]
 I have thrown out carpet-the
 b. Jeg har [_{VP} smidt [_{PrtP} tæppet ud _____]]
- (25) Sw a. Jag har [_{VP} kastat [_{PrtP} bort mattan]]
 I have thrown out carpet-the
 b. *Jag har [_{VP} kastat [_{PrtP} mattan bort _____]]

We would like to suggest that the difference between the Obj<Prt sequence in Danish and the Prt<Obj one in Swedish can be accounted for by means of three constraints: CASE, which penalises DPs that are not assigned case, NO INCORPORATION, which penalises particle incorporation as a means of achieving case assignment, and NO EXCEPTIONAL CASE MARKING, which penalises the DP moving to Spec,PrtP in order to be assigned case from the verb.

- (26) CASE:
DPs must be Case-marked. (Grimshaw 1997: 374)
- (27) NO INCORPORATION (NO INC):
A head must not incorporate into a lexical verb.
- (28) NO EXCEPTIONAL CASE MARKING (NO ECM):
A head must not assign Case to the specifier of its complement.

In Danish, NO INCORPORATION is ranked higher than NO EXCEPTIONAL CASE MARKING, whereas in Swedish, it is the opposite, NO ECM overrides NO INC, as seen in the tableaux for (24) and (25):

Tableau 8: Particle verb construction in Danish

Da		CASE	NO INC	NO ECM	ORD PRES	SHIFT PRON	STAY	Ex.
a	S Aux V Prt <u>DP</u>	*!			?			(24)a
b	S Aux V-Prt t _{Prt} <u>DP</u>		*!				*	(24)a
☞ c	S Aux V <u>DP</u> Prt t _O			*			*	(24)b

Tableau 9: Particle verb construction in Swedish

Sw		CASE	NO ECM	NO INC	ORD PRES	SHIFT PRON	STAY	ex.
a	S Aux V Prt <u>DP</u>	*!			?			(25)a
☞ b	S Aux V-Prt t _{Prt} <u>DP</u>			*			*	(25)a
c	S Aux V <u>DP</u> Prt t _O		*!				*	(25)b

There are no violations of SHIFTPRON in Tableau 8 and Tableau 9, as the complement DP is not a pronoun. Presumably there are no violations of ORDPRES either, as the two movements, particle incorporation (candidate b) and DP-movement (candidate c), both take place before case assignment and thus do not affect ORDPRES. As for the question whether there are any violations of ORDPRES in candidate a, this is clearly not crucial, given that the candidate violates the highest ranking constraint, CASE. In fact, we would like to suggest that CASE is part of the generator, i.e. that the evaluation procedure never even gets to evaluate candidates like candidate a, as the generator does not generate any candidates that violate CASE. Therefore the tableaux below will only consider versions of what corresponds to candidates b and c in Tableau 8 and Tableau 9.

Consider now cases similar to (24) and (25) above, but where the DP in question is a pronoun which is [-focus], i.e. cases where SHIFTPRON is potentially violated: The particle follows the pronoun in Danish, (29), as Danish only allows DP-movement, but the particle precedes the pronoun within VP in Swedish, (30), as Swedish only allows particle incorporation. Since the main verb stays *in situ*, OS is expected to be ungrammatical; cf. the (c)-examples in (29) and (30).

- (29) Da a. *Jeg har ikke [VP smidt [PrtP ud det]]
 I have not thrown out it
 b. Jeg har ikke [VP smidt [PrtP det ud ____]]
 c. *Jeg har det ikke [VP smidt [PrtP ____ ud ____]]
- (30) Sw a. Jag har inte [VP kastat [PrtP bort den]]
 I have not thrown out it
 b. *Jag har inte [VP kastat [PrtP den bort ____]]
 c. *Jag har den inte [VP kastat [PrtP ____ bort ____]]

As Tableau 10 and Tableau 11 show, the difference between the Obj<Prt sequence in Danish and the Prt<Obj one in Swedish can be seen here without interference from OS: The order is determined by the ranking of NO INC and NO ECM. The c and d candidates with OS are suboptimal because they violate ORDPRES, given that the verb is *in situ*.¹²

Tableau 10: OS with particle verb *in situ* in Danish



Da	No INC	No ECM	ORD PRES	SHIFT PRON	STAY	ex.
a S Aux Adv V-Prt t _{Prt} <u>Pron-O</u> ^o	*!			*	*	(29)a
 b S Aux Adv V <u>Pron-O</u> Prt t _O		*		*	*	(29)b
c S Aux <u>Pron-O</u> Adv V-Prt t _{Prt} t _O	*!		**		**	(29)c
d S Aux <u>Pron-O</u> Adv V t' _O Prt t _O		*	*!		**	(29)c

Tableau 11: OS with particle verb *in situ* in Swedish

Sw	No ECM	No INC	ORD PRES	SHIFT PRON	STAY	ex.
 a S Aux Adv V-Prt t _{Prt} <u>Pron-O</u>		*		*	*	(30)a
b S Aux Adv V <u>Pron-O</u> Prt t _O	*!			*	*	(30)b
c S Aux <u>Pron-O</u> Adv V-Prt t _{Prt} t _O		*	*!*		**	(30)c
d S Aux <u>Pron-O</u> Adv V t' _O Prt t _O	*!		*		**	(30)c

Consider now the interaction between OS and particle verbs. If the particle verb is itself finite and thus

¹² Whether the verb *in situ* and the incorporated particle, which are both crossed in candidate c, count as two distinct constituents or just one is not crucial, not even in Tableau 11, since one violation of ORDPRES is sufficient to rule out the candidate.

moves to C° because of V2, the object of a particle verb has to undergo OS in Danish, (31), but it cannot do so in Swedish, (32):

- (31) Da a. *Jeg smed ikke [VP ____ [PrtP ud det]].
 I threw not out it
 b. *Jeg smed ikke [VP ____ [PrtP det ud ____]].
 c. Jeg smed det ikke [VP ____ [PrtP ____ ud ____]].
- (32) Sw a. Jag kastade inte [VP ____ [PrtP bort den]].
 I threw not out it
 b. *Jag kastade inte [VP ____ [PrtP den bort ____]]
 c. *Jag kastade den inte [VP ____ [PrtP ____ bort ____]].

As shown in Tableau 12 and Tableau 13, ORDPRES plays no part in the choice between the two non-incorporating candidates, b and d, as neither candidate violates it (the verb has moved, the particle was crossed before case assignment). The crucial constraint in the Danish Tableau 12 then becomes SHIFTPRON, which favours the candidate with OS. ORDPRES does play a part, however, in the choice between the two incorporating candidates, a and c (see the Swedish Tableau 13), as it is fatally violated by c, where the particle is crossed after case assignment.

Tableau 12: OS with moved particle verb in Danish

Da	No INC	No ECM	ORD PRES	SHIFT PRON	STAY	ex.
a S V Adv t _V -Prt t _{Prt} <u>Pron-O</u>	*!			*	*	(31)a
b S V Adv t _V <u>Pron-O</u> Prt t _O		*		*!	*	(31)b
c S V <u>Pron-O</u> Adv t _V -Prt t _{Prt} t _O	*!		*		**	(31)c
☞ d S V <u>Pron-O</u> Adv t _V t' _O Prt t _O		*			**	(31)c

Tableau 13: OS with moved particle verb in Swedish

Sw	No ECM	No INC	ORD PRES	SHIFT PRON	STAY	ex.
☞ a S V Adv t _V -Prt t _{Prt} <u>Pron-O</u>		*		*	*	(32)a
b S V Adv t _V <u>Pron-O</u> Prt t _O	*!			*	*	(32)b
c S V <u>Pron-O</u> Adv t _V -Prt t _{Prt} t _O		*	*!		**	(32)c
d S V <u>Pron-O</u> Adv t _V t' _O Prt t _O	*!				**	(32)c

We are now in a position to consider the interaction between particle verbs and remnant VP-topicalisations. In Danish, the only option is to topicalise the entire VP, (33). In Swedish, on the other

¹⁴ Candidate a in Tableau 15 (which also corresponds to a grammatical sentence, (34)a), presumably wins a competition different from Tableau 15, namely the one where the object is also marked for topichood. In the competitions discussed in this subsection, Tableau 10-Tableau 15, the object is not marked for topichood, although the verb and the particle are.

hand, remnant VP-topicalisation is possible, (34).

- (33) Da a. *_{[VP Lukket ind den] har jeg ikke ...}
 let in it have I not
 b. _{[VP Lukket den ind ____] har jeg ikke ...}
 c. *_{[VP Lukket ind ____] har jeg den ikke ...}

- (34) Sw a. _{[VP Släppt in den] har jag inte ...}
 let in it have I not
 b. *_{[VP Släppt den in ____] har jag inte ...}
 c. _{[VP Släppt in ____] har jag den inte ...}

((34)c is from Holmberg 2005: 148)

Tableau 14 and Tableau 15 in a certain sense present a mirror image of Tableau 12 and Tableau 13 above: Because the particle here is part of the remnant VP that moves to Spec,CP, ORDPRES does not play a part in the choice between the two incorporating candidates, a and c, as the order remains V<Prt<Obj. The crucial constraint in the Swedish Tableau 15 then becomes SHIFTPRON, which favours the candidate with OS. ¹⁴ ORDPRES does play a part, however, in the choice between the two non-incorporating candidates, b and d (see the Danish Tableau 14), as it is fatally violated by d, where the order is Prt<Obj at the surface, but it was Obj<Prt at case assignment.

Tableau 14: OS with remnant VP-topicalisation of particle verb in Danish

Da	Topic: V & Prt	NO INC	NO ECM	ORD PRES	SHIFT PRON	STAY	ex.
a	_{[VP V-Prt t_{Prt} <u>Pr-O</u>] Aux S Adv t_{VP}}	*!			*	*	(33)a
☞ b	_{[VP V <u>Pr-O</u> Prt t_O] Aux S Adv t_{VP}}		*		*	*	(33)b
c	_{[VP V-Prt t_{Prt} t_O] Aux S <u>Pr-O</u> Adv t_{VP}}	*!				**	(33)c
d	_{[VP V t'_O Prt t_O] Aux S <u>Pr-O</u> Adv t_{VP}}		*	*!		**	(33)c

Tableau 15: OS with remnant VP-topicalisation of particle verb in Swedish

Sw	Topic: V & Prt	NO ECM	NO INC	ORD PRES	SHIFT PRON	STAY	ex.
a	_{[VP V-Prt t_{Prt} <u>Pr-O</u>] Aux S Adv t_{VP}}		*		*!	*	(34)a
b	_{[VP V <u>Pr-O</u> Prt t_O] Aux S Adv t_{VP}}	*!			*	*	(34)b
☞ c	_{[VP V-Prt t_{Prt} t_O] Aux S <u>Pr-O</u> Adv t_{VP}}		*			**	(34)c
d	_{[VP V t'_O Prt t_O] Aux S <u>Pr-O</u> Adv t_{VP}}	*!		*		**	(34)c

(35) Da a. *Jeg har [_{VP} ladet [_{VP} støvsuge tæppet]]
I have let vacuum-clean carpet-the
b. Jeg har [_{VP} ladet [_{VP} tæppet støvsuge ____]]
(adapted from Vikner 1987: 262)

- In the present analysis, this contrast again follows from differences in the relative ranking of NOINC and NOECM. In Danish, the object undergoes movement to SpecVP to be assigned case (NOINC >> NOECM) while the infinitival verb incorporates into *let* in Swedish to make case assignment possible (NOECM >> NOINC). This is thus completely parallel to Tableau 8 and Tableau 9.

(37) Da a. *Jeg lod ikke [VP ____ [VP støvsuge det]].
 I let not vacuum-clean it
 b. *Jeg lod ikke [VP ____ [VP det støvsuge ____]].
 c. Jeg lod det ikke [VP ____ [VP ____ støvsuge ____]].

(adapted from Vikner 1989: 145)

- In contrast, if the infinitive undergoes VP-topicalisation together with non-finite *let*, stranding of the object is impossible in Danish as it is non-peripheral within VP, (39), whereas it is acceptable in Swedish, where the relative ordering between VP-internal constituents is maintained, (40). This situation is thus the same as the one analysed in Tableau 14 and Tableau 15:

(39) Da Jeg har godt nok bemærket at at der ligger en del krummer på tæppet i spisesalen men...
(I did notice that there are a lot of crumbs on the carpet in the dining hall, but ...)

- a. *... [VP ladet støvsuge det] har jeg ikke.
let vacuum-clean it have I not
 b. ... [VP ladet det støvsuge ____] har jeg ikke.
 c. *... [VP ladet støvsuge ____] har jeg det ikke.

(40) Sw Jag har nog märkt att det ligger en del smulor på mattan i matsalen, men ...
(I did notice that there are a lot of crumbs on the carpet in the dining hall, but ...)

- a. ... [VP låtit dammsuga den] har jag inte.
let vacuum-clean it have I not
 b. *... [VP låtit den dammsuga ____] har jag inte.
 c. ?... [VP låtit dammsuga ____] har jag den inte.

(Anders Holmberg, p.c.)

Furthermore, notice that if the infinitive has an overt subject, the object follows the infinitival verb in both Danish and Swedish, see (41) and (42).¹⁶

- (41) Da a. Jeg har ladet Poul støvsuge tæppet.
I have let Poul vacuum-clean carpet-the
 b. *Jeg har ladet Poul tæppet støvsuge ____.

- (42) Sw a. Jag har låtit Paul dammsuga mattan.
I have let Paul vacuum-clean carpet-the
 b. *Jag har låtit Paul mattan dammsuga ____.

If *let* is finite and thus undergoes V°-to-I°-to-C° movement, OS of the infinitival subject is possible while OS of the infinitival object is prohibited, as it would have to cross the infinitival verb.

- (43) Da a. *Jeg lod ikke ham støvsuge det.
I let not him vacuum-clean it
 b. Jeg lod ham ikke ____ støvsuge det.
 c. *Jeg lod ham det ikke ____ støvsuge ____.

¹⁶ Notice that (42)a and (44)a,b show that Swedish actually has ECM constructions, as presumably *Paul/honom* is assigned accusative by the matrix verb *lät*. This might seem unexpected given the high ranking in Swedish of NO ECM, but actually, all that the Swedish ranking NOECM >> NOINC predicts is that incorporation is preferred to ECM, and so we would still expect ECM to be a possibility in cases where incorporation is not an option, as (42)a and (44)a,b. This may also explain the possibility of ECM in the (i), where presumably the passive affix -s on the embedded verb prevents incorporation:

(i) Sw Jag har [VP låtit [VP mattan dammsugas ____]]
I have let carpet-the vacuum-clean.PASS (adapted from Vikner 1987: 266)

- (44) Sw a. Jag lät inte honom dammsuga den.
 I let not him vacuum-clean it
 b. Jag lät honom inte _____ dammsuga den.
 c. *Jag lät honom den inte _____ dammsuga ____.

Moreover, if the infinitive undergoes VP-topicalisation together with non-finite *let*, neither the infinitival subject nor the infinitival object may be stranded; cf. (45) and (46).

- (45) Da Jeg har godt nok bemærket at at der ligger en del krummer på tæppet i spisesalen men...
 (I did notice that there are a lot of crumbs on the carpet in the dining hall, but ...)
 a. ... [VP ladet ham støvsuge det] har jeg ikke.
 let him vacuum-clean it have I not
 b. *... [VP ladet _____ støvsuge det] har jeg ham ikke.
 c. *... [VP ladet ham støvsuge _____] har jeg det ikke.
 d. *... [VP ladet _____ støvsuge _____] har jeg ham det ikke.
- (46) Sw Jag har nog märkt att det ligger en del smulor på mattan i matsalen, men ...
 (I did notice that there are a lot of crumbs on the carpet in the dining hall, but ...)
 a. ... [VP låtit honom dammsuga den] har jag inte.
 let him vacuum-clean it have I not
 b. *... [VP låtit _____ dammsuga den] har jag honom inte.
 c. *... [VP låtit honom dammsuga _____] har jag den inte.
 d. *... [VP låtit _____ dammsuga _____] har jag honom den inte.

That OS of the infinitival subject is not possible under remnant VP-topicalisation is expected in the present analysis since the infinitival subject occurs in a non-peripheral position. The infinitival object cannot be stranded although it is right-peripheral within VP. Stranding of the infinitival object is ruled out by the fact that SHIFTPRON requires adjunction to the maximal extended VP of the case-assigning verb (see the definition in (8) above). As the object is assigned case by (only) the infinitival verb in the presence of an infinitival subject, SHIFTPRON does not require the object to adjoin as high as to the extended VP of *let*; instead, the object would have to adjoin to the infinitival VP to satisfy SHIFTPRON, which is ruled out by the higher ranking constraint ORDPRES.¹⁷ (The infinitival subject, in contrast, is assigned case by *let* and may thus undergo OS into the matrix clause as long as order preservation is observed.)

Summing up, the contrasts between Danish and Swedish as to OS and remnant VP-topicalisation with particle verbs and *let*-constructions discussed in this subsection support the order preservation approach suggested here. Due to differences in case assignment captured by the relative ranking of NOINC and NoECM, an object precedes particle and subjectless infinitival verb in Danish but follows them in Swedish. As a consequence, the two languages display mirror images with regard to OS in

¹⁷ Notice that the ungrammaticality of (45)c and (46)c shows that the constraint SHIFTPRON must require surface occurrence of a weak pronoun in OS position and cannot be satisfied by a trace. Otherwise, the examples in (45)c and (46)c with further movement from the position adjoined to the infinitival VP to the higher position adjoined to the extended *let*-VP would be expected to be optimal under the ranking ORDPRES >> SHIFTPRON >> STAY.

position.¹⁹

Tableau 16: Stranding of an Object vs. Stranding of a Subject

Da	Topic: V & Prt	SUBJECT	ORDPRES	SHIFTPRON	STAY	Ex.
☞ 1a	[_{VP} V <u>Pron-O</u> Prt] Aux S Adv t _{VP}			*		(33)a
1b	[_{VP} V t _O Prt] Aux S <u>Pron-O</u> Adv t _{VP}		*!		*	(47)a
2a	[_{VP} V <u>Pron-S</u> Prt] Aux e Adv t _{VP}	*!		*		-
☞ 2b	[_{VP} V t _S Prt] Aux <u>Pron-S</u> Adv t _{VP}			*	*	(47)b

Whether or not it is possible to strand a phrase that is non-peripheral within VP during remnant VP-topicalisation is thus a matter of which kind of movement this phrase has undergone, subject movement vs. OS, and whether this movement is subject to order preservation.

3.4 Remnant VP-topicalisation out of a main vs. an embedded clause

Finally, there is an asymmetry between remnant VP-topicalisation out of a main clause and remnant VP-topicalisation out of an embedded clause in the Mainland Scandinavian languages, i.e. Danish, Norwegian and Swedish.

While the finite verb undergoes V^o-to-I^o-to-C^o movement in main clauses, it stays *in situ* in embedded clauses in Mainland Scandinavian, (49). As a consequence, OS is not possible in embedded clauses (ORDPRES >> SHIFTPRON); cf. (50).

- (49) Da a. Jeg spurgte hvorfor Peter aldrig læste bogen.
 I asked why Peter never read book-the
 b. *Jeg spurgte hvorfor Peter læste aldrig ____ bogen.
- (50) Da a. Jeg spurgte hvorfor Peter aldrig læste den.
 I asked why Peter never read it
 b. *Jeg spurgte hvorfor Peter den aldrig læste ____.

¹⁹ That subject movement need not comply with ORDPRES is also seen from the fact that it does not presuppose verb movement; i.e. subject movement may cross an intervening verb (ib, ic):

- (i) Da a. Derfor har Elsa ikke ____ ringet.
 therefore has Elsa not called
 b. Derfor er Elsa ikke kommet ____.
 therefore is Elsa not come
 c. Derfor blev Elsa ikke fotograferet ____.
 therefore was Elsa not photographed

As shown in (51), a full VP may be topicalised from both main clauses and embedded clauses.

- (51) 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, (52)a, not out of an embedded clause in Danish: The stranded object may neither follow the finite auxiliary (in its base position), (52)b, nor may it precede it, (52)c.

- (52) 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). In other words, stranding is only possible if motivated independently, in this case by SHIFTPRON, and does not violate higher ranking principles (ORDPRES). If the object had not been pronominal, none of the candidates would violate SHIFTPRON, and the only well-formed version would be predicted to be full VP-topicalisation. See appendix 1 for discussion of which DPs qualify as pronouns for SHIFTPRON, and see appendix 3 for discussion of different ways of motivating both OS and West Germanic Scrambling.

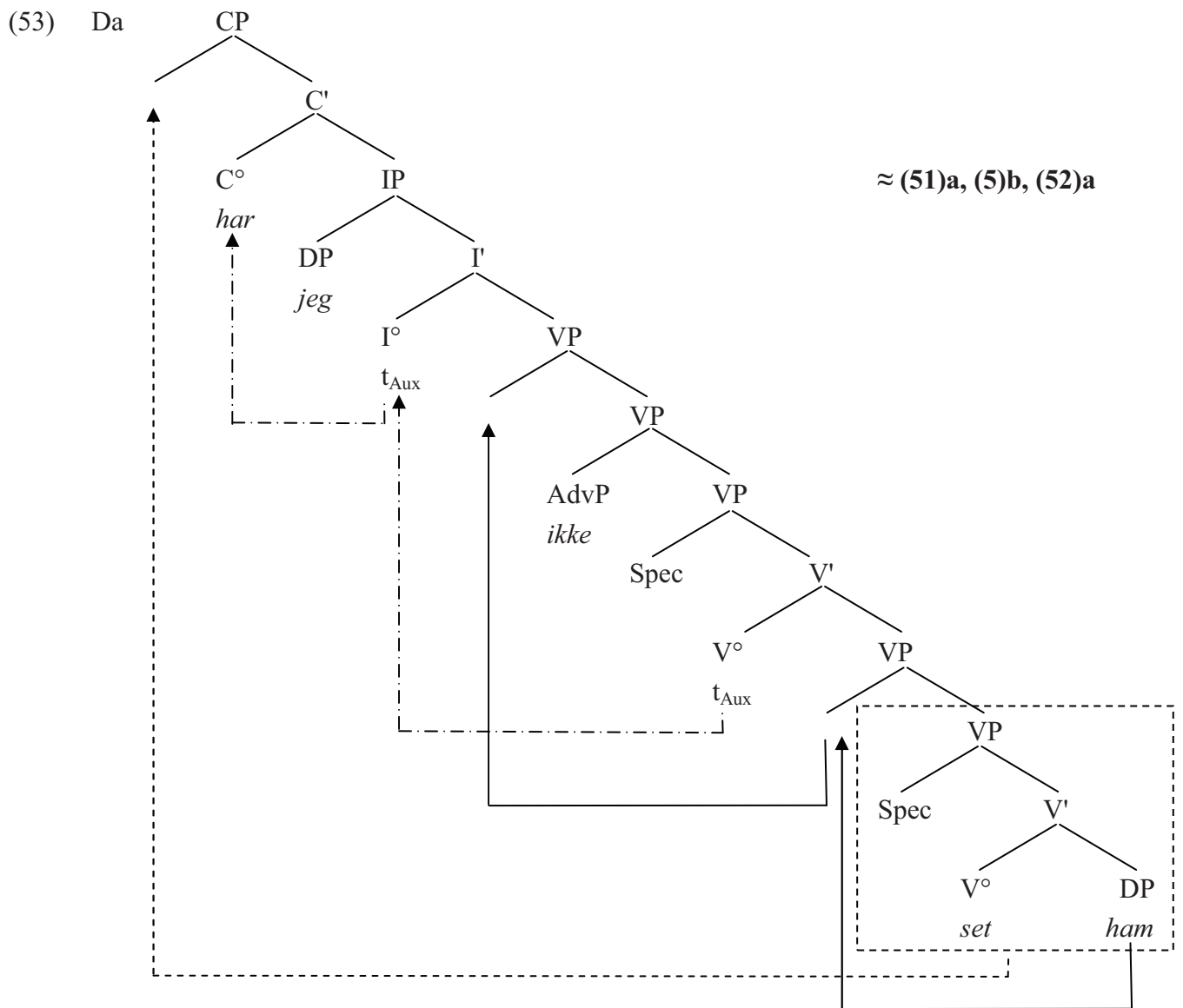


Tableau 17: Remnant VP-topicalisation out of a main clause

Da	Topic: V	ORDPRES	SHIFTPRON	STAY	ex.
a	[_{VP} V <u>Pron-O</u>] Aux S Adv t _{VP}		*!		(51)a ²⁰
b	[_{VP} V t _O] Aux S Adv <u>Pron-O</u> t _{VP}		*!	*	(5)b
☞ c	[_{VP} V t _O] Aux S <u>Pron-O</u> Adv t _{VP}			*	(52)a

²⁰ Candidate a (which also corresponds to a grammatical sentence, (51)a), presumably wins a different competition, namely the one where the object is also marked for topichood. In the two competitions discussed in this subsection, the object is not marked for topichood, only the verb is.

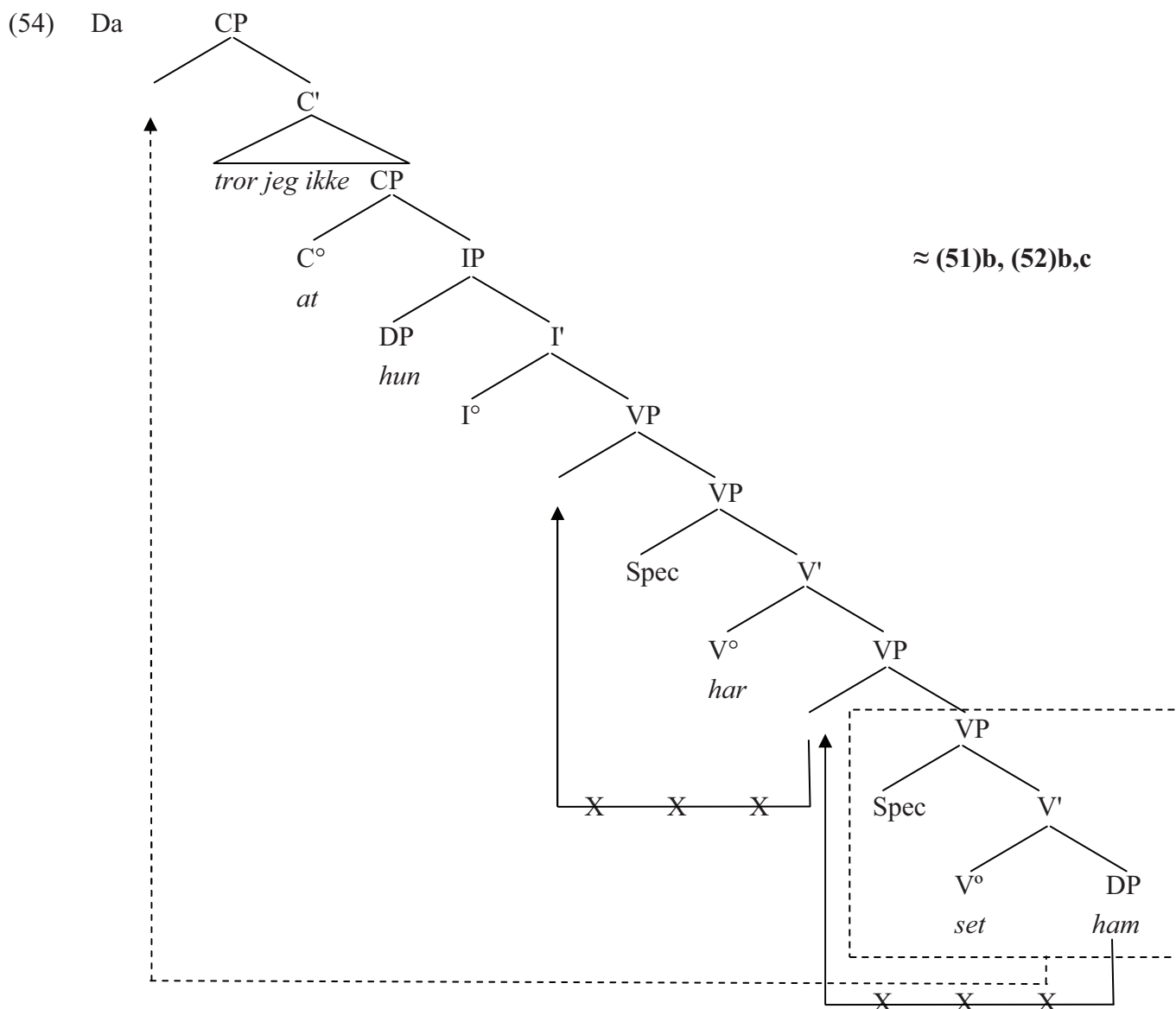


Tableau 18: No remnant VP-topicalisation out of an embedded clause

Da	Topic: V	ORDPRES	SHIFTPRON	STAY	ex.
☞ a	$[_{VP} \mathbf{V} \text{ Pron-O}] \text{ V S Adv Comp S Aux } t_{VP}$		*		(51)b
b	$[_{VP} \mathbf{V} t_O] \text{ V S Adv Comp S Aux } \text{Pron-O} t_{VP}$		*	*!	(52)b
c	$[_{VP} \mathbf{V} t_O] \text{ V S Adv Comp S } \text{Pron-O} \text{ Aux } t_{VP}$	*!		*	(52)c

VP-topicalisation out of an embedded clause with finite auxiliary *in situ*, (52), is completely parallel to the examples of VP-topicalisation out of a main clause with non-finite auxiliary *in situ* in (18) above, repeated here as (55). In both cases, the presence of an auxiliary *in situ* means that ORDPRES makes it impossible to comply with SHIFTPRON, and there is therefore no reason for the object to leave the VP at all (cf. also that Tableau 18 and Tableau 3 are completely parallel).

- (55) Da a. [_{VP} Kysse hende] har jeg aldrig villet.
 kiss her have I never wanted
 b. * [_{VP} Kysse _____] har jeg aldrig villet hende.
 c. * [_{VP} Kysse _____] har jeg hende aldrig villet.

The hypothesis that OS has to take place, i.e. that (a) a stranded object has to undergo movement to some position to the left of the finite verb, and (b) this movement is only possible if the finite verb itself has left its base position, would seem to be supported by phenomena of remnant VP-topicalisation in Icelandic. Icelandic which has V^o-to-I^o movement and therefore also OS in embedded clauses (cf. (56) and footnote 2 above), permits a remnant object in VP-topicalisation out of an embedded clause (as opposed to the Danish (52)b,c which are completely ungrammatical).

- (56) Ic a. *Ég spurði af hverju Pétur aldrei læsi hana.
I asked why Pétur never read it
 b. Ég spurði af hverju Pétur læsi hana aldrei ____ ____.
 (Vikner 2005: 396)

- [illegible]

Stranding of the object is expected to be possible under the present approach since SHIFTPRON can be satisfied without violating the higher ranking constraint ORDPRES due to movement of the finite auxiliary: OS is order-preserving; see Tableau 19 below.

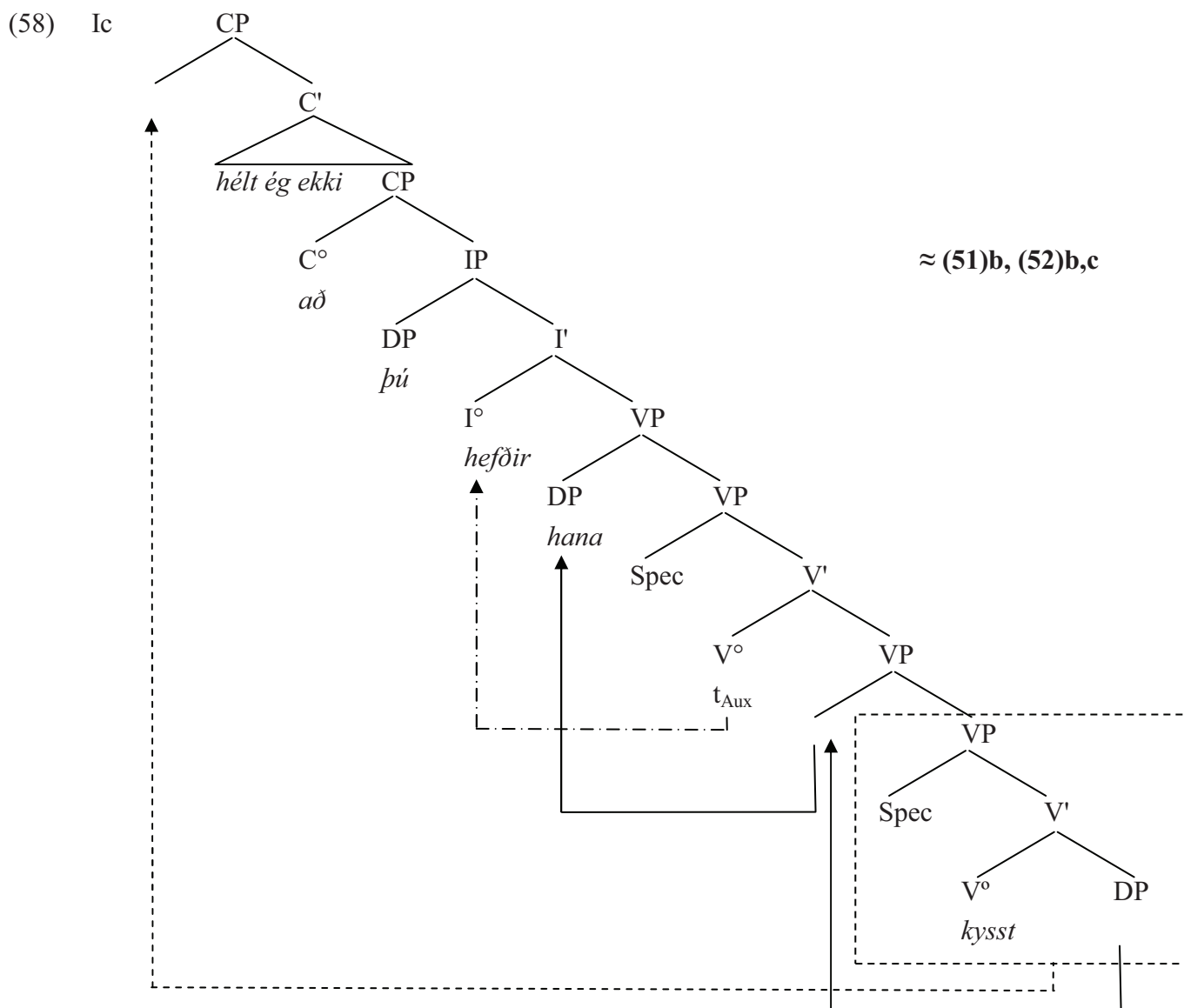


Tableau 19: Remnant VP-topicalisation out of an embedded clause in Icelandic

Ic	Topic: V	ORDPRES	SHIFTPRON	STAY	ex.
a	[_{VP} V <u>Pron-O</u>] V S Adv Comp S Aux <i>t</i> _{Aux} <i>t</i> _{VP}		*		-
b	[_{VP} V <i>t</i> _O] V S Adv Comp S Aux <i>t</i> _{Aux} <u>Pron-O</u> <i>t</i> _{VP}		*	*!	(57)
☞ c	[_{VP} V <i>t</i> _O] V S Adv Comp S Aux <u>Pron-O</u> <i>t</i> _{Aux} <i>t</i> _{VP}			*	(57)

As in Mainland Scandinavian, remnant VP-topicalisation is not possible in Icelandic in the presence of a non-finite auxiliary *in situ*, which prevents OS from complying with order preservation.

- [illegible]

Finally, note that remnant VP-topicalisation from embedded clauses is possible in passives, i.e. if the phrase left behind occurs in subject position. This follows from the fact that subject movement does not count for ORDPRES (see section 3.3 above).

- (60) Da a. [_{VP} Set _____] blev han ikke, ...
 seen *was he not*
- b. [_{VP} Set _____] tror jeg ikke at han blev, ...
 seen *think I not that he was*
- ... men der var nok mange der hørte ham.
but there were probably many who heard him.

Likewise, long-distance topicalisation of a VP that contains a trace of a *wh*-moved object is possible, (60). In contrast to subject movement, *wh*-movement takes place after case assignment. The fact that *wh*-movement is not subject to order preservation indicates that the constraint motivating *wh*-movement (WHSPEC) outranks ORDPRES, much like the constraint TOPIC in Tableau 2. Accordingly, stranding of a *wh*-object in SpecCP is predicted to be possible under the present approach – even if the object is non-peripheral within VP.

- (61) Da a. ?_[VP Læst ___] ved jeg ikke hvad for nogen bøger Poul har, ...
read know I not what for some books Poul has
... men jeg ved hvad for nogle han har købt.
but I know what for some he has bought
- b. ?_[VP Smidt ___ ud] ved jeg ikke hvor mange bøger Poul har, ...
thrown out know I not how many books Poul has
... men jeg ved hvor mange han har foræret væk.
but I know how many he has given away

The Mainland Scandinavian asymmetry between remnant VP-topicalisation out of a main clause and remnant VP-topicalisation out of an embedded clause discussed in the present subsection shows that stranding of an object must be motivated independently. Only if object extraction out of VP is required by some constraint (e.g. SHIFTPRON) and complies with higher ranking principles (e.g. ORDPRES) is stranding during VP-topicalisation possible.

4 Conclusion

Holmberg's well-known generalisation prohibits OS of an object across non-adverbial constituents to the left of the object. The present paper argued that the condition on order preservation is more general. As observed by Fox & Pesetsky (2003, 2005a), stranding of an object during remnant VP-topicalisation is only possible if it preserves the VP-internal ordering relations.

Based on an extended set of data concerning remnant VP-topicalisation, the present OT-approach considered the condition on order preservation to be a violable constraint, ORDPRES. The ranking of ORDPRES relative to the constraints that motivate the various types of movement accounts for the contrast as to whether or not a certain movement operation has to be order preserving. In particular, the ranking ORDPRES >> SHIFTPRON predicts that OS may only take place as long as it is order preserving (section 2.1).

In contrast, Fox & Pesetsky (2003, 2005a,b) suggest a minimalist analysis where Spell-out applies at various points in the derivation (in particular, at VP and at CP) and where the linearisation of the material of a newly constructed Spell-out domain must not contradict the cumulated linearisation information from previous applications of Spell-out. Fox & Pesetsky capture that OS differs radically from other types of (A- and A-bar-) movement that may result in a reversal of the order of elements, such as e.g. *wh*-movement or subject raising, by positing that most movements except OS have to proceed successive cyclically via the left edge of VP. In addition, Fox & Pesetsky's approach makes incorrect predictions as to remnant VP-topicalisation in constructions with an auxiliary verb *in situ* (section 2.2).

Section 3 discussed four asymmetries as to remnant VP-topicalisation.

The asymmetry between stranding of an IO and stranding of a DO examined in section 3.1 showed that only objects that originate in a right-peripheral position within VP may be left behind during remnant VP-topicalisation, as stranding preserves the VP-internal ordering relations.

The order preservation approach to OS was supported by the contrasts between Danish and Swedish particle verb and *let*-constructions investigated in section 3.2. Differences in the VP-internal object position (V<DP<X in Danish and V<X<DP in Swedish), which were taken to result from differences in case assignment, were argued to give rise to mirror images with regard to OS in clauses with finite verb movement of the matrix main verb (OS possible in Danish but not in Swedish) and remnant VP-topicalisation (OS possible in Swedish but not in Danish).

Moreover, the asymmetry between stranding of a subject and stranding of an object discussed in section 3.3 showed that a non-peripheral trace within a topicalised remnant VP is not problematic as such. Instead, whether or not a non-peripheral phrase may be stranded by remnant VP-topicalisation depends on whether or not the extracting movement operation has to be order preserving.

Finally, the asymmetry between main and embedded clauses as to the applicability of remnant VP-topicalisation in Mainland Scandinavian (section 3.4) illustrated that stranding is only possible if it is independently motivated and complies with higher ranking principles. Hence, stranding of a pronominal object during remnant VP-topicalisation is ruled out as the auxiliary *in situ* prevents OS from complying with order preservation.

Appendix 1: Syntactic complexity of pronouns and "min = max"

In Mainland Scandinavian, OS may only apply to weak pronouns, (62) repeated from (1); neither full DPs, (63), nor syntactically complex pronouns, i.e. modified or conjoined ones, (64) and (65), may undergo OS (cf. footnote 4 on full DP shift in Icelandic).

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

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

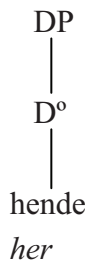
- (66) Da a. Hvorfor læste Peter aldrig _____ DEN?
why read Peter never it
b. *Hvorfor læste Peter DEN aldrig _____ _____. (Vikner 2005: 417)
why read Peter book-the never

In our analysis, OS is triggered by the constraint SHIFTPRON in (8), repeated here as (67).

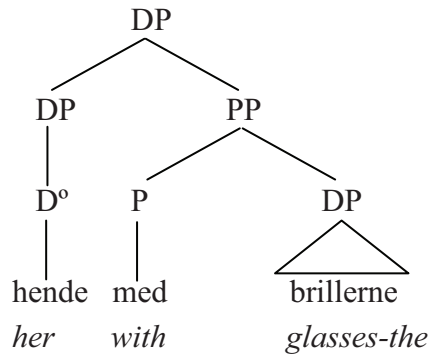
- (67) SHIFT PRONOUN (SHIFTPRON):
A [-focus] proform ("min = max") must adjoin to the maximal extended VP of its case-assigning verb.

The fact that focused pronouns do not move is captured by the restriction of SHIFTPRON to [-focus] constituents. Furthermore, a syntactically simple pronoun, (68)a, differs from a modified, (68)b, or conjoined one, (68)c, in that the phrasal status of the former but not the one of the latter two is "min = max" (cf. also Josefsson 1999).

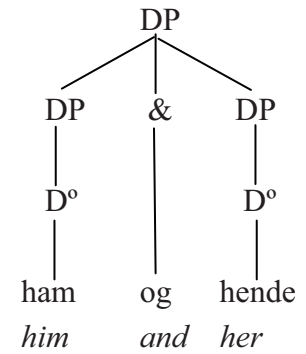
(68) a. simple pronoun



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 (68)a, but not in (68)b,c. Hence, SHIFTPRON does not affect modified or conjoined pronouns; they are thus expected to remain *in situ* due to STAY in Mainland Scandinavian.²¹

Tableau 20

Da	SHIFT PRON	STAY	ex.
1a Sub V [_{VP} Adv [_{VP} ... [_{DP=D°} <u>Pron-Obj</u>]]]	*!		(62)a
☞ 1b Sub V [_{VP} [_{DP=D°} <u>Pron-Obj</u>] [_{VP} Adv [_{VP} ... t _{Obj}]]]		*	(62)b
☞ 2a Sub V [_{VP} Adv [_{VP} ... [_{DP≠D°} <u>Pron-Obj Mod</u>]]]			(64)a
2b Sub V [_{VP} [_{DP≠D°} <u>Pron-Obj Mod</u>] [_{VP} Adv [_{VP} ... t _{Obj}]]]		*!	(64)b
☞ 3a Sub V [_{VP} Adv [_{VP} ... [_{DP≠D°} <u>Pron-Obj & Pron-Obj</u>]]]			(65)a
3b Sub V [_{VP} [_{DP≠D°} <u>Pron-Obj & Pron-Obj</u>] [_{VP} Adv [_{VP} ... t _{Obj}]]]		*!	(65)b

As mentioned in footnote 1, OS is not restricted to weak pronouns in Icelandic; it may also apply to full DPs, (69). Likewise, syntactically complex pronouns may undergo OS; cf. (70) and (71).

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

- (70) 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)

²¹ Note that there are elements which are "min = max" in the conjoined structure in (68)c, namely each single conjunct, and which are thus expected to be able to move due to the ranking SHIFTPRON >> STAY. However, movement out of a conjoined structure is impossible for independent and universal reasons (cf. Ross' (1967) coordinate structure constraint).

- (71) 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.

- (72) SHIFT:
 A [-focus] element must adjoin to the maximal extended VP of its case-assigning verb.

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

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

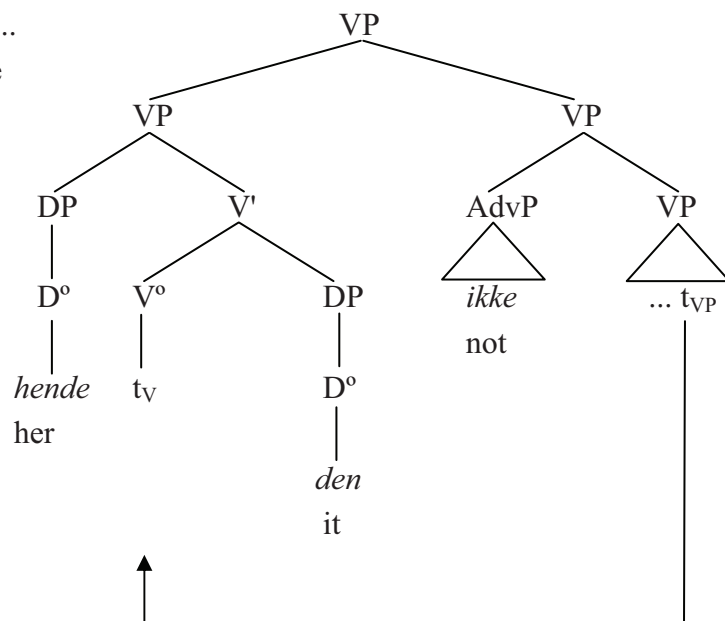
The account presented so far thus captures the facts that OS in Mainland Scandinavian only applies to [-focus] DPs that satisfy the "min = max" condition, and that OS in Icelandic applies to all [-focus] DPs. The account is thus incompatible with some accounts of multiple OS, see (74)c, in that it does not allow the analysis of OS as movement of one constituent including several pronouns (contrary to 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 the adjunction requirement and with the definition of "min = max".

If multiple OS was movement of one constituent including several pronouns, then the shifted objects would not themselves be adjoined to the relevant VP, (75)a. The formulation of SHIFTPRON and of SHIFT is such that every shifted object must fulfill the condition that a shifted object is adjoined to the relevant VP, as is indeed the case in the alternative analysis, where the objects move individually, (75)b; cf. also candidate d in Tableau 21.

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", just like (68)c), and thus it would not be affected by SHIFTPRON; movement of a complex constituent is ruled out by the ranking STAY >> SHIFT in Mainland Scandinavian.

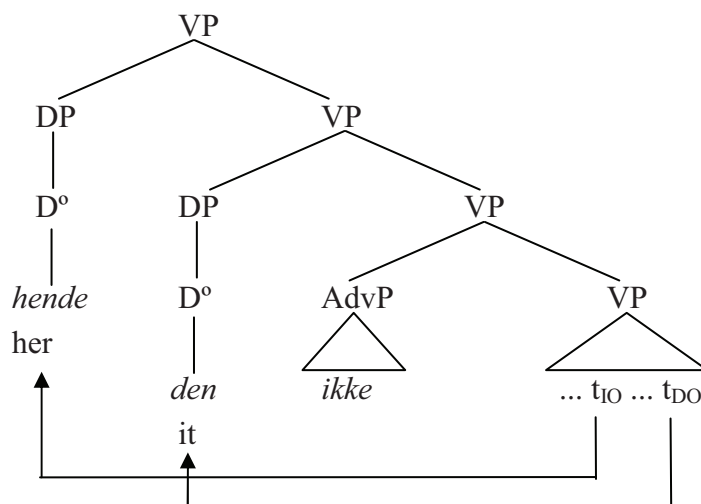
- (74) Da a. *Jeg gav ikke _____ hende den.
 I gave not her it
 b. *Jeg gav hende ikke _____ den.
 c. Jeg gav hende den ikke _____ _____.

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



≈ (74)c

b. *Jeg gav...*
I gave



≈ (74)c

Tableau 21

Da	SHIFT PRON	STAY	ex.
a Sub V [VP Adv [VP ... [DP=D° <u>Pron-IO</u>] [DP=D° <u>Pron-DO</u>]]]	*!*		(74)a
b Sub V [VP [DP=D° <u>Pron-IO</u>] [VP Adv [VP ... t _{IO} [DP=D° <u>Pron-DO</u>]]]]	*!	*	(74)b
c Sub V [VP [VP ... [DP=D° <u>Pron-IO</u>] [DP=D° <u>Pron-DO</u>]] [VP Adv t _{VP}]]	*!*	*	(74)c= (75)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}]]]]]		**	(74)c= (75)b

Appendix 2: Structure preservation

There are native speakers of Danish whose intuitions do not agree with the acceptability judgments given above (and the same is true for Swedish, Holmberg 1999:11). These speakers do not allow for object stranding during remnant VP-topicalisation at all, whereas topicalisation of a full VP is found acceptable:

- (76) 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.

These speakers thus contrast with the speakers whose intuitions were discussed in the main body of this paper, and who had remnant VP-topicalisation provided it observes a linear restriction, permitting stranding of an object in OS position as long as it did not change the VP-internal order of elements (cf. (20) and (21) above).

The more restrictive pattern in (76) can be accounted for if in addition to order preservation, (10), a constraint on structure preservation is considered to restrict OS (cf. Déprez 1994, Müller 2001a, Sells 2001, and Williams 2003).

(77) STRUCTURE PRESERVATION (STRUCPRES):

An independently moved constituent α must not c-command a non-adverbial constituent β if α (or parts of α) were c-commanded by β at the point in the derivation where case assignment took place.

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

Like ORDPRES, the constraint STRUCPRES overrides SHIFTPRON, which predicts that OS cannot cross an intervening non-adverbial constituent: For example, OS across a verb *in situ* as in (78)b changes the c-command relation between the verb and the shifted object.

- (78) 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 (76)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 22: 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}			**	(76)a
b	[_{VP} V t _{IO} t _{DO}] Aux Sub <u>Pron-IO</u> <u>Pron-DO</u> Adv t _{VP}		*!*		(76)b
c	[_{VP} V <u>Pron-IO</u> t _{DO}] Aux Sub <u>Pron-DO</u> Adv t _{VP}		*!*	*	(76)c
d	[_{VP} V t _{IO} <u>Pron-DO</u>] Aux Sub <u>Pron-IO</u> Adv t _{VP}		*!*	*	(76)d

Hence, variation between speakers as to the stranding possibilities for 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 (8), 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. (79)c,d/(80)c,d. The only option is to topicalise the whole VP as in (79)a and (80)a. (The b-sentences in (79) and (80) are ruled out by ORDPRES >> SHIFTPRON, see section 3.2 above.)

- (79) 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.
- (80) 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 (79)c/(80)c: 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 23

Da	Topic: V & Obj-Pron	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
☞ a	[_{VP} V <u>Obj-Pron</u> PP] Aux Sub Adv t _{VP}			*		(80)a
b	[_{VP} V t _{Pron} PP] Aux Sub <u>Obj-Pron</u> Adv t _{VP}	*!	*		*	(80)b
c	[_{VP} V <u>Obj-Pron</u> t _{PP}] Aux Sub Adv PP t _{VP}			*	*!	(80)c
d	[_{VP} V t _{Pron} t _{PP}] Aux Sub <u>Obj-Pron</u> Adv PP t _{VP}	*!			**	(80)d

However, the ranking $\text{SHIFT}_{\text{PRON}} \gg \text{STAY}$ 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 $\text{SHIFT}_{\text{PRON}}$ requires its stranding in clause-medial position. In order to satisfy ORD_{PRES} , 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 ORD_{PRES} and $\text{SHIFT}_{\text{PRON}}$.

Tableau 24

Da	Topic: V	TOPIC	ORD PRES	SHIFT PRON	STAY	ex.
a	[_{VP} V <u>Obj-Pron</u> PP] Aux Sub Adv t _{VP}			*!		(80)a
b	[_{VP} V t _{Pron} PP] Aux Sub <u>Obj-Pron</u> Adv t _{VP}		*!		*	(80)b
c	[_{VP} V <u>Obj-Pron</u> t _{PP}] Aux Sub Adv PP t _{VP}			*!	*	(80)c
☹ d	[_{VP} V t _{Pron} t _{PP}] Aux Sub <u>Obj-Pron</u> Adv PP t _{VP}				**	(80)d

As mentioned in Appendix 1, while OS is restricted to pronominal elements in Mainland Scandinavian, 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 $\text{SHIFT}_{\text{PRON}}$; cf. (73).

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 $\text{SHIFT}_{\text{PRON}}$), apparently STAY must be differentiated according to syntactic complexity, STAY and $\text{STAY}_{\text{COMPLEX}}$ (= *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 $\text{STAY}_{\text{COMPLEX}}$ (and STAY).

- (81) a. MSc: $\text{STAY}_{\text{COMPLEX}} \gg \text{SHIFT} \gg \text{STAY}$
b. Ic: $\text{SHIFT} \gg \text{STAY}_{\text{COMPLEX}}, \text{STAY}$

The ranking $\text{STAY}_{\text{COMPLEX}} \gg \text{SHIFT} \gg \text{STAY}$ in Mainland Scandinavian predicts that OS is only possible for weak pronouns but not for more complex phrases. In contrast, the ranking $\text{SHIFT} \gg$

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 (e.g. if the verb is moved to a position further leftwards).

- (82) Da a. Hvorfor læste Peter ikke _____ bogen?
 why read Peter not book-the
 b. *Hvorfor læste Peter bogen ikke _____ ?
- (83) Da a. *Hvorfor læste Peter ikke _____ den?
 why read Peter not it
 b. Hvorfor læste Peter den ikke _____ ?

Tableau 25

Da		TOPIC	ORD PRES	STAY COMPLEX	SHIFT	STAY	ex.
full DP	☞ 1a wh V Sub Adv <u>DP-Obj</u>				*		(82)a
	1b wh V Sub <u>DP-Obj</u> Adv t _{DP}			*!		*	(82)b
pronoun	2a wh V Sub Adv <u>Pron-Obj</u>				*!		(83)a
	☞ 2b wh V Sub <u>Pron-Obj</u> Adv t _{Pron}					*	(83)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 26

Da	Topic: V	TOPIC	ORD PRES	STAY COMPL	SHIFT	STAY	ex.
☞ a	[_{VP} V <u>Pron-Obj</u> <u>PP</u>] Aux Sub Adv t _{VP}				**		(80)a
b	[_{VP} V t _{Pron} <u>PP</u>] Aux Sub <u>Pron-Obj</u> Adv t _{VP}		*!		*	*	(80)b
c	[_{VP} V <u>Pron-Obj</u> t _{PP}] Aux Sub Adv <u>PP</u> t _{VP}			*!	*	*	(80)c
d	[_{VP} V t _{Pron} t _{PP}] Aux Sub <u>Pron-Obj</u> Adv <u>PP</u> t _{VP}			*!		**	(80)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, (84), complex adverbials are not – independent of their syntactic category, PP or DP, and independent of whether they are free or selected for; cf. (85) and (86).

- (84) Ic a. Býr Pétur ekki lengur _____ þar?
lives Peter not longer there
b. Býr Pétur þar ekki lengur _____ ? (Vikner 2005: 422)
- (85) Ic a. Býr Pétur ekki lengur _____ í Kaupmannahöfn?
lives Peter not longer in Copenhagen
b. *Býr Pétur í Kaupmannahöfn ekki lengur _____ ?
(Vikner 2005: 424)
- (86) Ic a. Pétur kemur sennilega _____ næstu viku.
Pétur comes probably next week
b. *Pétur kemur næstu viku sennilega _____ .
(Gunnar Hrafn Hrafnbjargarson, p.c.)

To account for the asymmetry in OS of arguments and OS of adverbials, we would need an even more specialized version of STAYCOMPLEX, namely STAYCOMPLEXADVERBIAL (which outranks SHIFT).

Tableau 27

Ic	ORD PRES	STAY COMP ADV	SHIFT	STAY COMP	STAY	ex.
☞ 1a wh V Sub Adv <u>PP-Adv</u>			*			(85)a
1b wh V Sub <u>PP-Adv</u> Adv t _{pp}		*!		*	*	(85)b
2a wh V Sub Adv <u>Pron-Adv</u>			*!			(84)a
☞ 2b wh V Sub <u>Pron-Adv</u> Adv t _{pron}					*	(84)b

Furthermore, although 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).

- (87) Du a. *... dat Jan waarschijnlijk Marie 't gegeven heeft.
that Jan probably Marie it given has
b. ... dat Jan 't waarschijnlijk Marie ___ gegeven heeft.
c. ... dat Jan 't Marie waarschijnlijk ___ ___ gegeven heeft.

- (88) Du a. ... dat ik gisteren de jongen het boek gegeven heb.
 that I yesterday the boys the book given have
 b. *... dat ik het boek gisteren de jongen _____ gegeven heb.
 c. *... dat ik het boek de jongen gisteren _____ _____ gegeven heb.
- (De Hoop & Kosmeijer 1995:150)

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.

Hence, we would seem to end up with differentiation according to syntactic complexity twice, for SHIFT and for STAY. (Note that SHIFTPRON would have to be ranked below STAYCOMPLEX in Mainland Scandinavian to avoid the problem of the original approach.)

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