Object Shift and Scrambling

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In the formal part of our research project on object positions, we have been spending a lot of the time in the first year on collecting data, and these data often turned out to be different from what the literature would have led us to expect. What follows is hopefully not just a long list of different data, but rather a number of new and old sets of data which will be able to shed light on what determines the positions of objects. In our project description (www.hum.au.dk/engelsk/engsv/objectpositions/proj-en.htm), we set out some of the potentially crucial factors, such as morphological and abstract case, the mapping between syntax and information structure, and the question of to which extent language particular properties can be derived from more general (potentially universal) properties.

In the context here, this last question turns into a question of to which extent the differences between the two movements discussed (object shift, OS, in the Scandinavian languages and scrambling, SCR, in the continental West Germanic languages) can be derived from independent differences between the two types of languages.

In what follows, we will give an overview over these two clause-internal object movements (OS and SCR) covering the following:

- Although both place an object to the left of a sentential adverbial, OS and SCR are normally treated as two different phenomena since they do not take place under exactly the same circumstances.

- We want to investigate their properties and show that they are quite similar in what moves and which position movement can target, provided one considers the entire range of OS and SCR languages.

- The main difference between OS and SCR is that the former presupposes movement of the main verb whereas the latter does not. This property might be related to the contrast in basic verb placement, VO in Scandinavian vs. OV in the continental West Germanic languages.

- Moreover, some specific characteristics of OS and SCR will be discussed, including the contrast between OS of arguments and OS of adverbials as well as differences in the information-structural contexts that facilitate OS and SCR. In part II, we will then focus on a particular set of data, Vº-vs. VP-topicalisation, as first discussed by Holmberg (1997, 1999).
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PART I

Introduction to Object Shift and Scrambling

1 Object positions

1.1 Object positions in Danish and Icelandic (Object Shift)

The position of the object in Danish and Icelandic depends on the position of the main verb.

Embedded clauses with a non-finite main verb: The object follows its verb which again follows *aldrig* 'never'.

(1) Da a. Jeg spurgte hvorfor Peter aldrig havde læst bogen.  
I asked why Peter never had read book-the  

b. *Jeg spurgte hvorfor Peter aldrig havde læst ___.

(2) Da a. Jeg spurgte hvorfor Peter aldrig havde læst den.  
I asked why Peter never had read it  

b. *Jeg spurgte hvorfor Peter den aldrig havde læst ___.

Main clauses with a non-finite main verb: The object follows its verb which follows *aldrig* 'never'.

(Notice that the difference in verb positions between the embedded clauses in (1) and (2) and the main clauses in (3) and (4) concerns the finite auxiliary *havde* 'had' and not the non-finite main verb *læst* 'read'.)

(3) Da a. Hvorfor havde Peter aldrig læst bogen?  
why had Peter never read book-the  

b. *Hvorfor havde Peter bogen aldrig læst ___.

(4) Da a. Hvorfor havde Peter aldrig læst den?  
why had Peter never read it  

b. *Hvorfor havde Peter den aldrig læst ___.


Embedded clauses with a finite main verb: The object follows its verb which follows *aldrig* 'never'.

(5) Da a. Jeg spurgte hvorfor Peter *aldrig læste* bogen.
    \[ I \text{ asked why Peter never read book-the} \]
    b. *Jeg spurgte hvorfor Peter *bogen aldrig læste* ____.

(6) Da a. Jeg spurgte hvorfor Peter *aldrig læste* den.
    \[ I \text{ asked why Peter never read it} \]
    b. *Jeg spurgte hvorfor Peter *den aldrig læste* ____.

Main clauses with a finite main verb:

a. The verb moves to the second position of the clause. (One of the few ways in which a form of a main verb like *læse* 'read' can precede a sentential adverbial like *aldrig* 'never' is when it is the finite verb in a main clause.)

b. If the object is **non-pronominal**, it simply stays behind, (7)a.
   If the object is **pronominal**, it moves to a position just left of the adverbial *aldrig* 'never', (8)b.
   This movement is commonly referred to as **object shift (OS)**.

(7) Da a. *Hvorfor læste* Peter aldrig ___ bogen?
    \[ why \text{ read Peter never book-the} \]
    b. *Hvorfor læste* Peter *bogen aldrig ___ ____?*

(8) Da a. *Hvorfor læste* Peter aldrig ___ den?
    \[ why \text{ read Peter never it} \]
    b. Hvorfor læste Peter *den aldrig ___ ____?*
The observation that the object only moves if the main verb has moved forms the basis of what is called Holmberg's generalisation (Holmberg 1986:165), see also (33) below.
Icelandic differs from Danish in that finite verb movement also takes place in embedded clauses (see (15) and (16) below) and a full DP object may optionally move in front of a sentential adverbial in object shift contexts.

Embedded clauses with a non-finite main verb: The object follows the verb which follows *aldrei* 'never'.

(11)  
Icelandic  

| (11) | Icelandic examples  
|------|-------------------
| a.   | Ég spurði af hverju Pétur hefði aldrei lesið *bessa bók*?  
| I    | asked why Pétur had never read this book  
| b.   | *Ég spurði af hverju Pétur hefði *bessa bók* aldrei lesið ____?  

(12)  
Icelandic  

| (12) | Icelandic examples  
|------|-------------------
| a.   | Ég spurði af hverju Pétur hefði aldrei lesið *hana*?  
| I    | asked why Pétur had never read it  
| b.   | *Ég spurði af hverju Pétur hefði *hana* aldrei lesið ____?  

Main clauses with a non-finite main verb: The object follows the verb which follows *aldrei* 'never'.

(13)  
Icelandic  

| (13) | Icelandic examples  
|------|-------------------
| a.   | Af hverju hafði Pétur aldrei lesið *bessa bók*?  
| why  | had Pétur never read this book  
| b.   | *Af hverju hafði Pétur *bessa bók* aldrei lesið ____?  

(Vikner 2005: 395)

(14)  
Icelandic  

| (14) | Icelandic examples  
|------|-------------------
| a.   | Af hverju hafði Pétur aldrei lesið *hana*?  
| why  | had Pétur never read it  
| b.   | *Af hverju hafði Pétur *hana* aldrei lesið ____?  

(Vikner 2005: 395)
Embedded clauses with a finite main verb: The non-pronominal object may precede the verb which precedes aldrei 'never', (15), the pronominal object must do so, (16).

(15)  
(a) Ég spurði af hverju Pétur læsi aldrei ____ bessa bók.
     I asked why Pétur read never this book
(b) Ég spurði af hverju Pétur læsi bessa bók aldrei ____ ________.

(Vikner 2005: 396)

(16)  
(a) *Ég spurði af hverju Pétur læsi aldrei ____ hana.
     I asked why Pétur read never it
(b) Ég spurði af hverju Pétur læsi hana aldrei ____ ____.

(Vikner 2005: 396)

Main clauses with a finite main verb: The non-pronominal object may precede the verb which precedes aldrei 'never', (17), the pronominal object must do so, (18).

(17)  
(a) Af hverju las Pétur aldrei ____ bessa bók?
     why read Pétur never this book
(b) Af hverju las Pétur bessa bók aldrei ____ ________?

(Vikner 2005: 394)

(18)  
(a) *Af hverju las Pétur aldrei ____ hana?
     why read Pétur never it
(b) Af hverju las Pétur hana aldrei ____ ____?

(Vikner 2005: 394)
Object Shift and Scrambling, Introduction

(19) Ic

Object shift, (17)b, main clause

(20) Ic

Object shift, (15)b, embedded clause
1.2 Object positions in German (Scrambling)

Object positions in German do not depend on the position of the main verb; in other words, object movement does not depend on Holmberg's generalisation.

Main clauses with a non-finite main verb: A non-pronominal object may either precede or follow the adverbial *nie* 'never', whereas a pronominal object must precede the adverbial *nie*. We take the verb-adjacent position of the object to be its base position, see for instance (21)a; i.e. there is object movement in e.g. (21)b. This movement is commonly referred to as **scrambling (SCR)**.

\[(21)\]
\[
\begin{align*}
\text{Ge a. } & \quad \text{Ich frage mich warum Peter \textbf{nie} das Buch liest.} \\
& \quad I \text{ ask myself why Peter never the book reads} \\
\text{b. } & \quad \text{Ich frage mich warum Peter das Buch \textbf{nie} _____ liest.}
\end{align*}
\]

\[
\begin{align*}
\text{Ge a. } & \quad *\text{Ich frage mich warum Peter \textbf{nie} es liest.} \\
& \quad I \text{ ask myself why Peter never it reads} \\
\text{b. } & \quad \text{Ich frage mich warum Peter es \textbf{nie} __ liest.}
\end{align*}
\]

Main clauses with a finite main verb: Same as above.

\[(23)\]
\[
\begin{align*}
\text{Ge a. } & \quad \text{Warum liest Peter \textbf{nie} das Buch ____?} \\
& \quad why reads Peter never the book \\
\text{b. } & \quad \text{Warum liest Peter das Buch \textbf{nie} ______ ____?}
\end{align*}
\]

\[(24)\]
\[
\begin{align*}
\text{Ge a. } & \quad *\text{Warum liest Peter \textbf{nie} es ____?} \\
& \quad why reads Peter never it \\
\text{b. } & \quad \text{Warum liest Peter es \textbf{nie} __ ____?}
\end{align*}
\]

The same pattern is found in clauses with a non-finite main verb.
### 1.3 Summary

<table>
<thead>
<tr>
<th>main verb</th>
<th>object type</th>
<th>object examples</th>
<th>examples</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a. stays</td>
<td>b. moves</td>
<td></td>
</tr>
<tr>
<td>Danish</td>
<td>stays</td>
<td>DP √ *</td>
<td>(1), (3), (5)</td>
</tr>
<tr>
<td></td>
<td>pronoun</td>
<td>√ *</td>
<td>(2), (4), (6)</td>
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<td>moves</td>
<td>stays</td>
<td>DP √ *</td>
<td>(7)</td>
</tr>
<tr>
<td></td>
<td>pronoun</td>
<td>* √</td>
<td>(8)</td>
</tr>
<tr>
<td>Icelandic</td>
<td>stays</td>
<td>DP √ *</td>
<td>(11), (13)</td>
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<td></td>
<td>pronoun</td>
<td>√ *</td>
<td>(12), (14)</td>
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<td>moves</td>
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<td>pronoun</td>
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<td>(16), (18)</td>
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<td>German</td>
<td>stays</td>
<td>DP √ *</td>
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<td>* √</td>
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<tr>
<td>moves</td>
<td>stays</td>
<td>DP √ *</td>
<td>(23)</td>
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<tr>
<td></td>
<td>pronoun</td>
<td>* √</td>
<td>(24)</td>
</tr>
</tbody>
</table>

As was said above, the object movement found in Danish, Icelandic, and the other Scandinavian languages is called object shift (OS), whereas the object movement found in German and the other continental West Germanic languages is called scrambling (SCR). Although both these movements may move an object into a position to the left of a sentential adverbial, they do not take place under exactly the same circumstances, and they are therefore normally treated as two different phenomena. In the following, we want to examine how many properties these two movements have in common.

### 1.4 Other Germanic languages

#### 1.4.1 English

One Germanic language was not covered by the formulation above, namely English, which is neither Scandinavian nor continental West Germanic. It is clear that English does not have SCR, as the object may not freely be moved to the left of the sentential adverbial.

(27) En a. Why has Peter never read the book?
     b. *Why has Peter the book never read _______?

Whether or not English has OS is impossible to say, as one would have to see whether a (pronominal) object could move when the finite main verb moves. The problem is that a main verb never moves in modern English (a main verb may never precede e.g. *never*).
(28) En a. Peter never read the book.
    b. *Peter read never ____ the book.

(29) En a. Why did Peter never read the book?
    b. *Why read Peter never ____ the book?

1.4.2 Yiddish

Like the other continental West Germanic languages, Yiddish has SCR: a full DP can be moved to a position before the adverbial nekhtn 'yesterday', independently of whether or not the main verb moves:

(30) Yi a. Maks hot dos bukh nekhtn geleyent.
    Max has the book yesterday read

Yi b. Maks hot nekhtn dos bukh geleyent.

Yi c. Maks hot nekhtn geleyent dos bukh.

(based on Diesing 1997: 390-391)

The most prevalent view of Yiddish (e.g. den Besten & Moed-van Walraven 1986: 113, Diesing 1997: 388, Sadock 1998) is that it is SVO, i.e. that the underlying order is the one in (30)c. This is undoubtedly also the most frequent word order: In the first 411 sentences with mono-transitive verbs in the anecdote collection Royte pomerantsen (by Immanuel Olsvanger, published in 1947 by Schocken, New York), Santorini (1993: 238) found VO order in 94% of the cases and OV order only in 6% of them.

However, if Yiddish would be SVO just like Scandinavian, it would then be an open question why it would have SCR rather than OS. We shall therefore follow Hall (1979), Geilfuß (1991), Haider & Rosengren (1998: 78-81) and Vikner (2001, 2003) in assuming the basic order in modern Yiddish to be SOV. This would then mean that only (30)a would be a case of SCR. (30)b on the other hand would illustrate the underlying word order, and (30)c would be a case of extraposition.

That Yiddish allows extraposition much more freely than all other Germanic languages (SOV or SVO) is independently supported by the examples in (31):

(31) Yi a. Geveyntlekh hot ongehoybn esn der balebos.
    normally has begun eat the host
    'Normally, the host would be the one who took the first bite'

Yi b. Hot men derlangt oyfn tish fish.
    has one served on-the table fish
    'Fish was put on the table.'

(Santorini 1993: 231)
2 Restrictions on the syntactic environment of movement: Holmberg's Generalisation

As shown above, OS presupposes movement of the main verb. However, note that OS does not require the main verb to move to V2 position: OS is also possible if the non-finite main verb is topicalised. (This construction and some of its properties will be discussed in much more detail in PART II later on.)

(32) Sw a. Kysst har jag henne inte ___ ___ (bara hållit henne i handen).
    kissed have I her not only held her by hand-the

    (Holmberg 1997: 205)

     Da b. Kysset har jeg hende ikke ___ ___ (bare holdt hende i hånden).
    kissed have I her not only held her in hand.the

    (Vikner 2005: 407)

     Ic c. Kysst hef ég hana ekki ___ ___ (bara haldir í hóndina á henni).
    kissed have I her not only held in hand.the on her

    (Vikner 2005: 431)

More generally, OS is possible as long as it does not have to cross any non-adverbial material, as expressed by Holmberg's generalisation:

(33) Holmberg's Generalisation (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 elements adjoined to VP, e.g. adverbials) may block object shift.
     E.E. & S.V.]

The following sections will discuss whether the actual differences across the Germanic languages are as striking as we should expect on the assumption that HG is a constraint on OS but not on SCR.

2.1 Prepositional Phrases

2.1.1 OS languages

OS cannot move an object across a preposition, i.e. an object cannot be extracted out of a PP by OS, (34) and (36). By contrast, preposition stranding is obligatory in Danish wh-movement, (35), and also possible, though not obligatory in Swedish where wh-movement may pied-pipe a preposition, (37).
2.1.2 SCR languages

Similar to OS, SCR of full DPs cannot move an argument across a preposition (or rather: out of a PP). This may not be so surprising given that preposition stranding is impossible in German, (39).

(34) Da a. Hvorfor læste Peter aldrig i den?
     why read Peter never in it
b. *Hvorfor læste Peter den aldrig i ___?
c. *Hvorfor læste Peter i den aldrig ___?  
   (Vikner 2005: 397)

(35) Da a. Hvorfor læste Peter aldrig i hvad?
     why read Peter never in what
b. Hvad læste Peter aldrig i ___?
c. *I hvad læste Peter aldrig ___?

(36) Sw a. Varför läste Peter aldrig i den?
    why read Peter never in it
b. *Varför läste Peter den aldrig i ___?
c. *Varför läste Peter i den aldrig ___?  
   (Gunlög Josefsson, p.c.)

(37) Sw a. Varför läste Peter aldrig i vad?
    why read Peter never in what
b. Vad läste Peter aldrig i ___?
c. I vad läste Peter aldrig ___?  
   (Gunlög Josefsson, p.c.)

2.1.2 SCR languages

Similar to OS, SCR of full DPs cannot move an argument across a preposition (or rather: out of a PP). This may not be so surprising given that preposition stranding is impossible in German, (39).

(38) Ge a. ... weil er wahrscheinlich mit seiner Entlassung rechnet.
    because he probably on a discharge counts
b. *... weil er seiner Entlassung wahrscheinlich mit ___________ rechnet.

(39) Ge a. Mit wessen Entlassung hätte er nie gerechnet?
    on whose discharge had he never counted
b. *Wessen Entlassung hätte er nie mit gerechnet?

By contrast, pronominal adverbials may be split by SCR and by wh-movement.

(40) Ge a. ... weil er wahrscheinlich damit rechnet.
    because he probably on that counts
b. ... weil er da wahrscheinlich mit rechnet.
(41) Ge a. Womit hätte er nie gerechnet?
   *on what had he never counted
   
   b. Wo hätte er nie mit gerechnet?

2.2 Particle Verbs

2.2.1 OS languages

In languages in which the object precedes a verb particle, OS is possible in particle verb constructions, compare (44) and (47). In Danish, the object always precedes the verb particle, (see (42) and (43)), and in Norwegian, Icelandic, and Faroese, the object has to precede the particle if it is a pronoun and it may do so if it is a lexical DP, (45) and (46).

(42) Da a. *Jeg har ikke skrevet op nummeret.
   I have not written up number-the
   
   b. Jeg har ikke skrevet nummeret op.

(43) Da a. *Jeg har ikke skrevet op det.
   I have not written up it
   
   b. Jeg har ikke skrevet det op.

(44) Da a. *Jeg skrev ikke det op.
   I wrote not it up
   
   b. Jeg skrev det ikke ___ op.

(45) No a. Jeg har ikke skrevet opp nummeret.
   I have not written up number-the
   
   b. Jeg har ikke skrevet nummeret opp.

   I have not written up it
   
   b. Jeg har ikke skrevet det opp.

(47) No a. *Jeg skrev ikke det opp.
   I wrote not it up
   
   b. Jeg skrev det ikke ___ opp.

By contrast, in languages in which the object follows the particle as in Swedish, (48), (49), OS is banned in case the particle occurs in VP, (50), but not if the particle is fronted, (51).\(^1\)
In contrast to OS, SCR is not blocked by particles. Particles occupy a verb-adjacent position in German; consequently, they do not intervene between a scrambled argument and its trace (at least not linearly, but they might do so structurally).

2.3 Double Object Constructions

2.3.1 OS languages

A direct object (DO) pronoun cannot shift across an in situ indirect object (IO), (54); yet, the DO may undergo OS if the IO is moved out of the way – by wh-movement, (55)a, topicalisation, (55)b, or OS, (55)c:
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(54) Sw a.  
Jag gav inte Elsa den.  
(I gave not Elsa it)  
(Sells 2001: 48)

b. *Jag gav den inte Elsa ___.  
(Holmberg 1997: 203)

(55) Sw a.  
Vem gav du den inte ____ __?  
(who gave you it not)  
(Holmberg 1997: 208)

b. Henne visar jag den helst inte ____ __.  
(her show I it rather not)

c. Jag visar henne den inte ____ __.  
(I show her it not)  
(Holmberg 1997: 209)

Likewise, multiple OS cannot change the order of objects in Danish and Icelandic:

(56) Da a.  
Jeg gav hende den ikke __ __.  
(I gave her it not)

b. *Jeg gav den hende ikke __ __.

(57) Ic a.  
P gaf örrugglega konunginum ambáttina.  
(P gave certainly king-the slave-the)  
(Gunnar Hrafn Hrafnbjargarson, p.c.)

b. P gaf konunginum ambáttina örrugglega ________ ________.  
c. *P gaf ambáttina konunginum örrugglega ________ ________.  

(58) No a.  
Eg ga ikkje ho den.  
(I gave not her it)  
(Christensen 2005: 160)

b. Eg ga ho ikkje __ den.

c. Eg ga ho den ikkje __ __.

d. Eg ga den ho ikkje __ __.

e. *Eg ga den ikkje ho __.

In Norwegian, in contrast, multiple OS may reverse the order of objects, (58)d, although a DO pronoun cannot be moved across an in situ IO, (58)e:

In Swedish, it seems to be a question of dialectal variation whether or not the order of pronominal objects may be reversed by OS. According to Hellan & Platzack (1999), a DO pronoun may move across an in situ IO pronoun (but not across a full DP IO, compare (54) above), and Holmberg (1986) gives an example in which multiple OS changes the order of objects. According to Josefsson (2003: 205), however, the basic order IO < DO cannot be changed by OS: (59)b and (60)b were judged unacceptable in her tests.
2.3.2 SCR languages

SCR may reverse the order of arguments in German: A DO can be moved across an IO, irrespective of whether the IO occurs \textit{in situ}, (61)d, or in a scrambled position itself, (61)e. However, the pronouns in (62) have to occur in a particular order, namely DO<IO, i.e. the reverse of the basic order.

(61) Ge a. ... weil er nie dem Mann das Buch gegeben hat.
   \hspace{2cm} because he never the man the book given has
b. ... weil er dem Mann nie ______ das Buch gegeben hat.
c. ... weil er dem Mann das Buch nie ______ gegeben hat.
d. ... weil er das Buch nie dem Mann ______ gegeben hat.
e. ... weil er das Buch dem Mann nie ______ gegeben hat.

(62) Ge a. ... dass Fritz \textit{es} ihm wahrscheinlich ___ ___ gegeben hat.
   \hspace{2cm} that Fritz \textit{it} him probably given has
b. *... dass Fritz ihm \textit{es} wahrscheinlich ___ ___ gegeben hat.

In Dutch, in contrast, the order of (non-focused) full DP objects cannot be reversed.\footnote{In Dutch, the order of DPs is fixed, with the exception of clitic pronouns, which can move across DPs.}

(63) Du a. ... dat ik gisteren \textit{de jongen} het boek gegeven heb.
   \hspace{2cm} that I yesterday the boys the book given have
b. ... dat ik \textit{de jongen} gisteren ______ het boek gegeven heb.
c. ... dat ik \textit{de jongen} het boek gisteren ______ ______ gegeven heb.
d. *... dat ik \textit{het boek} gisteren \textit{de jongen} gegeven heb.
e. *... dat ik \textit{het boek} \textit{de jongen} gisteren ______ ______ gegeven heb.

(De Hoop & Kosmeijer 1995:150)

A clitic DO pronoun, however, is able to move across a full DP IO in Dutch, and the order of two object pronouns is variable:
2.4 Summary

Given the contrast between OS and SCR (i.e. that OS is subject to Holmberg's generalisation whereas SCR is not), we would expect the two movements to differ in a number of respects. That this only holds to a certain extent, was shown in the above chapter:

a. OS cannot extract an element out of a PP; and SCR cannot extract a DP out of a PP either, with pronominal da 'there' constituting an exception (section 2.1).
b. OS cannot move an object across a particle; if the object originates from a position to the left of the particle, OS is possible. In the SCR languages, a particle occupies a verb-adjacent position so that SCR never has to cross it (linearly, but maybe structurally).
c. There seems to be cross-linguistic variation in whether or not object movement may reverse the order of arguments: The order of objects may be changed by OS in certain dialects of Swedish and by multiple OS in Norwegian; similarly, SCR in German may reverse the order of arguments (indeed, SCR has to do so for pronominal arguments). By contrast, OS has to maintain the relative order of objects in Danish and Icelandic. Likewise, SCR of DPs cannot change the order of arguments in Dutch while a pronominal object may be moved across another argument.

3 Restrictions on the moved constituent

3.1 Phrasal status of the moved constituent

3.1.1 SCR languages

As shown in examples (23) and (24), repeated here as (66) and (67), full DPs may precede or follow a sentential adverbial in German whereas pronouns have to precede it.

(66)  Ge a.  Warum  liest  Peter  nie  das Buch  _____?
   why  reads  Peter  never  the book
   b.  Warum  liest  Peter  das Buch  nie  _______  ____?
**Object Shift and Scrambling, Introduction**

(67) Ge a. *Warum liest Peter nie es ____?

why reads Peter never it

b. Warum liest Peter es nie __ ____?

However, as noted by Haider & Rosengren (1998: 97), pronoun movement is not obligatory: a pronoun may stay within VP as long as it is not located directly to the right of an adverbial / modal particle as in (68) and (69).³

(68) Ge a. Heute hat ja PETER es ihm gezeigt.
today has PRT Peter it him shown

b. Heute hat ja Peter ihm das Buch geZEIGT.
c. Heute hat ja das Buch ihm PETER gezeigt.
d. *Heute hat ja es ihm PETER __ __ gezeigt.
today has PRT it him Peter shown

(Haider & Rosengren 1998: 97/98)

(69) Ge a. *Heute hat doch er Maria es gegeben.
today has PRT he Maria it given

b. Heute hat er doch __ Maria es gegeben.
c. *Heute hat er Maria doch __ _____ es gegeben.
d. *Heute hat er Maria es doch __ _____ __ gegeben.

Thus, SCR of a pronoun in German seems to be obligatory only in those contexts in which pronominal OS would take place, i.e. if the pronoun would otherwise occur to the immediate right of an adverbial. However, in those cases in which OS could not have taken place (i.e. if there is a non-adverbial element intervening between the base position and the target position of object movement), pronominal SCR is optional.

In contrast to German, Dutch non-clitic pronouns may stay to the immediate right of an adverb, (70), whereas clitic pronouns cannot, (71).

(70) Du a. Jan heeft gisteren haar gekust.

Jan has yesterday her kissed

b. Jan heeft haar gisteren ___ gekust. (Haegeman 1991: 32)

(71) Du a. *Jan heeft gisteren 'r gekust.

Jan has yesterday her kissed

b. Jan heeft 'r gisteren ___ gekust. (Haegeman 1991: 32)
3.1.2 OS languages

As mentioned in section 1.1, movement of a full DP in front of a sentential adverbial is possible in Icelandic, but not in the MSc languages, compare (7) vs. (17), repeated as (72) and (73).

(72)  
Ic  a.  Af hverju las Pétur aldrei bessa bók?  
why read Pétur never this book
b.  Af hverju las Pétur bessa bók aldrei ________?

(73)  
Da  a.  Hvorfor læste Peter aldrig bogen?  
why read Peter never book-the
b.  *Hvorfor læste Peter bogen aldrig _____?

Likewise, syntactically complex pronouns, i.e. modified and conjoined ones, cannot undergo OS in the MSc languages.

(74)  
Da  a.  Hvorfor læste Peter aldrig den her?  
why read Peter never this here
b.  *Hvorfor læste Peter den her aldrig _____? (Vikner 2005: 417)

(75)  
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)

Whether or not movement of a "weak", syntactically simple pronoun (i.e. non-modified, non-conjoined pronoun) may take place is subject to cross-linguistic variation. While in Danish and Icelandic, pronominal OS has to take place if possible, (76), OS is optional in Swedish, (77), as well as in the south-eastern dialects of Danish, (78), and ungrammatical in Finland Swedish, (79), and in the Swedish dialect Älvdalsmålet, (80) (Levander 1909, see also Hellan & Platzack 1999).

(76)  
Da  a.  *Peter læste aldrig den.
Peter read never it
b.  Peter læste den aldrig ___.

(77)  
Sw  a.  Jag såg inte den.
I saw not it
b.  Jag såg den inte ___. (Erteschik-Shir 2001: 54)

(78)  
SD  a.  Du når såmænd 'nok ødet.
you will.make indeed likely it
(from Årø, Pedersen 1993: 205)
b. Nej, jeg tror 'ikke det.
   no I think not it          (from Langeland, Pedersen 1993: 205)

(79) FS a. Ja, ser du, jag vet inte det själv.
     yes see you I know not it self
b. *Ja, ser du, jag vet det inte ___ själv.       (Bergroth 1917: 172)

(80) Ål a. An såg inte mig.
     he saw not me
b. *An såg mig inte ___.                   (Levander 1909:124)

Furthermore, in dialects that are able to use subject pronoun forms even as objects in certain contexts (e.g. Skellefteå in Sweden or Malax in Finland), such "nominative" object pronouns may not undergo OS, whereas OS is possible with pronouns that have the standard object pronoun form (accusative).

(81) Sw a. Maria ville kyssa jag / du / han / vi.
     Maria wanted-to kiss I / you / he / we
b. Maria kysste inte jag.
     Maria kissed not I
  c. *Maria kysste jag inte ___.
  d. Maria kysste mej inte ___.       (Holmberg 1986: 212)

According to Jørgensen (2000), in the Swedish dialect from Umeå as well as in the Finland Swedish dialect from Västra Nyland, subject forms in object positions are only acceptable if they are contrastively stressed. The fact that these forms cannot undergo OS could then have to do with their prosodic properties (see the following section).

(82) U a. Har dom också frågat DU – dom har frågat mej?
     have they also asked you they have asked me
b. *Har dom också frågat du?
     (Jørgensen 2000: 206)

(83) U a. Elsa tycker om DU – int’ om jag.
     Elsa cares for you – not for me
3.2 Prosody and Focus

3.2.1 OS languages

Not all pronouns may undergo OS: Focused ones have to stay in situ; they must follow a medial adverb.

\[(84) \text{Da } a. \quad \text{Hvorfor læste Peter aldrig DEN?} \]
\[\text{why read Peter never it}\]
\[b. \quad \text{*Hvorfor læste Peter DEN aldrig ____?} \]
\[(\text{Vikner 2005: 417)}\]

\[(85) \text{Ic } a. \quad \text{Af hverju las Pétur aldreri HANA?} \]
\[\text{why read Pétur never it}\]
\[b. \quad \text{*Af hverju las Pétur HANA aldreri ____?} \]
\[(\text{Gunnar Hrafn Hrafnbjargarson, p.c.)}\]

OS of a focused full DP is, however, more or less acceptable in Icelandic.

\[(86) \text{Ic } a. \quad \text{Pétur las aldreri PESSA BÓK.} \]
\[\text{Pétur read never this book}\]
\[b. \quad \text{Pétur las PESSA BÓK aldreri.} \]
\[(\text{Gunnar Hrafn Hrafnbjargarson, p.c.)}\]

\[(87) \text{Ic } a. \quad \text{Sennilega las Pétur ekki PESSA BÓK HÉRNA,} \]
\[\text{probably read Pétur not this book here}\]
\[b. \quad ?\text{Sennilega las Pétur PESSA BÓK HÉRNA ekki _________________.} \]
\[\quad \text{... heldur PESSA ÞARNA.} \]
\[\quad \text{but this there} \]
\[(\text{Gunnar Hrafn Hrafnbjargarson, p.c.)}\]

\[(88) \text{Ic } a. \quad \text{Sennilega las Pétur ekki BÆKURNAR,} \]
\[\text{probably read Pétur not books-the}\]
\[b. \quad ??\text{Sennilega las Pétur BÆKURNAR ekki ____________,} \]
\[\quad \text{... heldur DAGBLADID.} \]
\[\quad \text{but newspaper-the} \]
\[(\text{Gunnar Hrafn Hrafnbjargarson, p.c.)}\]

3.2.2 SCR languages

In the SCR languages, movement of a focused item is possible, irrespective of its phrasal status, pronoun vs. full DP.

\[(89) \text{Ge } a. \quad \text{Gestern traf Peter nicht IHN (sonderm SIE).} \]
\[\text{yesterday met Peter not HIM but HER}\]
\[b. \quad ?\text{Gestern traf Peter IHN nicht ____, (sonderm SIE).}\]
(90) a. Gestern traf Peter nicht **PAUL** (aber **HANS**)
    yesterday met Peter not **PAUL** but **HANS**

b. ?Gestern traf Peter **PAUL** nicht ____ (aber **HANS**).

(91) a. Heeft Jan nog nooit zijn moeder gebeld?
    has Jan yet never his mother called

b. Nee, zijn moeder heeft **HEM** nog nooit ____ gebeld.
    no his mother has him yet never called

    (Delfitto & Corver 1998: 321)

(92) 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.

    (De Hoop & Kosmeijer 1995: 150)

Note that in contrast to "neutral" SCR, movement of a focused object may reverse the order of arguments, compare (63) above.

3.3 Adverbials

3.3.1 OS languages

Not only arguments but also pronominal adverbials may undergo OS:

(93) a. ??Bor Peter **ikke længere** der?
    lives Peter **not longer** there

b. Bor Peter **der** ikke længere ____?

    (Vikner 2005: 422)

(94) a. *Peter sov **alligevel ikke** der.
    Peter slept **after.all not** there

b. Peter sov **der** alligevel ikke ___.

    (Haider, Olsen, & Vikner 1995: 20)

(95) a. Býr Pétur **ekki lengur** bar?
    lives Peter **not longer** there

b. Býr Pétur **bar** ekki lengur ____?

    (Vikner 2005: 422)
However, a PP cannot shift, not even in Icelandic:

(96) Ic a. Býr Pétur ekki lengur í Kaupmannahöfn?
   *lives Pétur not longer in Copenhagen
   b. *Býr Pétur í Kaupmannahöfn ekki lengur ______________?
      (Vikner 2005: 424)

Likewise, a modified pronominal adverbial cannot be shifted in Icelandic.

(97) Ic a. Býr Pétur ekki lengur þarna vinstra megin?
   *lives Pétur not longer there left side
   b. *Býr Pétur þarna vinstra megin ekki lengur ______________?
      (Gunnar Hrafn Hrafnbjargarson, p.c.)

Furthermore, although a full DP argument may undergo OS in Icelandic, a DP adverbial cannot be shifted in Icelandic either - independent of whether it is free (98) or selected for (99).

(98) Ic a. Pétur las hana örugglega allan daginn.
   *Pétur read it certainly every day
   b. *Pétur las hana allan daginn örugglega __________.
      (Gunnar Hrafn Hrafnbjargarson, p.c.)

(99) Ic a. Ökuferðin tók örugglega tvær stundir.
   *drive-the took certainly two hours
   b. *Ökuferðin tók tvær stundir örugglega __________.
      (Gunnar Hrafn Hrafnbjargarson, p.c.)

In other words, Icelandic adverbials are apparently subject to the same restrictions as arguments in the MSc languages: only light pronouns may shift.

3.3.2 SCR languages

In German, by contrast, movement of (certain) adverbials and PPs is possible:

(100) Ge a. ... weil Hans wahrscheinlich nicht dafür bezahlen will.
   *because Hans probably not for that pay wants to
   b. ... weil Hans dafür wahrscheinlich nicht ___ bezahlen will.

(101) Ge a. ... weil Hans wahrscheinlich nicht für das Buch bezahlt.
   *because Hans probably not for the book pays
   b. ... weil Hans für das Buch wahrscheinlich nicht ______ bezahlt.
Object Shift and Scrambling, Introduction

However, leftward movement of a PP in Dutch is subject to certain restrictions.

SCR of a PP is only possible with a restricted set of adverbial phrases: the PP op mijn opmerking 'on my remarks' may scramble across an adverbial like nauwelijks 'hardly', (103), but not across an adverbial like gisteren 'yesterday', (104); in contrast, SCR of a DP across gisteren is possible, (105).

Furthermore, SCR of a PP complement across an adverbial PP is always blocked, (106), SCR of a DP across such an adverbial PP, (107), - as well as across an adverbial DP, (108) - is always possible.
Moreover, PPs that contain a definite pronoun may scramble when the pronoun has its non-reduced form, (109), whereas usage of a weak pronoun is impossible in scrambled position, (110). In other words, the scrambled PP must be assigned stress, whereas object shift normally has the effect of destressing the moved element, leading Broekhuis (2006) to suggest that PP-movement does not involve SCR but rather focus movement. Like movement of focused DPs (compare (92) above), PP-movement may reverse the order of arguments, (111).

(109) Du a. ... dat Jan nauwelijks naar hem luisterde.
that Jan hardly to him listened
b. ... dat Jan naar hem nauwelijks ______ luisterde. (Broekhuis 2006: 21)

(110) Du a. ... dat Jan nauwelijks naar 'm luisterde.
that Jan hardly to him listened
b. *... dat Jan naar 'm nauwelijks ______ luisterde. (Broekhuis 2006: 21)

d. ... dat aan de jongen ik het boek ______ gegeven heb.
(De Hoop & Kosmeijer 1995: 150)
Object Shift and Scrambling, Introduction

(113) Ic a. Jón las bað líklega aldrei ___.
    Jón read it probably never
b. *Jón las líklega bað aldrei ___.
    (Jónsson 1996: 66)

(114) Ic a. Jón las bókina líklega aldrei _____.
    Jón read book-the probably never
b. Jón las líklega bókina aldrei ___.
    (Jónsson 1996: 66)

(115) Sw a. Han läste ju alltså troligen inte dem.
    he read as-you-know thus probably not them
b. Han läste ju alltså troligen dem inte __.
    c. Han läste ju alltså dem troligen inte __.
    d. Han läste dem ju alltså troligen inte __.
    (adapted from Erteschik-Shir 2005: 72)

4.1.2 SCR languages

A scrambled DP may appear between several adverbs and - according to some speakers - this placement is also marginally acceptable for weak pronouns in German.

(116) Ge a. Peter hat ohne Zweifel nicht das Buch gelesen.
    Peter has without doubt not the book read
b. Peter hat ohne Zweifel das Buch nicht ______ gelesen.
    c. Peter hat das Buch ohne Zweifel nicht ______ gelesen.

    Peter has probably not them met
b. ?Peter hat wahrscheinlich sie nicht ___ getroffen.
    c. Peter hat sie wahrscheinlich nicht ___ getroffen.

Hence, SCR is similar to Icelandic OS of a full DPs and pronominal OS in Swedish in that it may target an intermediary position. Note, however, that a pronoun has to scramble across one adverb at least, (117)a, whereas OS is optional in Swedish, compare (77)a and (115)a.
5 Conclusion
The clause-internal leftward object movements in the Scandinavian languages and the continental
West Germanic languages are similar in that

a. weak pronominal objects are placed to the left of a sentential adverbial by SCR and OS, except for Swedish and the south-eastern dialects of Danish where OS is optional and for Finland Swedish and Älvdalsmålet where OS is ungrammatical; section 3.1.2. Similarly, SCR of Dutch non-clitic pronouns is optional and German pronouns only have to scramble if they would otherwise show up to the immediate right of the (lowest) adverb (compare sections 3.1.1 and 4.1.2),

b. the SCR languages and Icelandic may optionally move full DPs (section 3.1),

c. neither OS nor SCR can extract an element out of a PP (except for German da and Dutch daar 'there', 2.1),

d. both OS and SCR are possible in particle verb constructions if the object originates in a position to the left of the particle (which is the case in all SCR languages but only in some of the OS languages, see section 2.2),

e. it varies from language to language whether or not OS and SCR may reverse the order of arguments (this is possible in Norwegian and some varieties of Swedish as well as in German, but not in Danish, Icelandic, and not in Dutch, either, as far as full DPs are concerned; see section 2.3),

f. focused objects may stay in situ (and must do so in the OS languages if pronominal, section 3.2),

g. both OS and SCR may apply to both arguments and adverbials (though OS cannot apply to complex adverbial phrases whereas it is subject to cross-linguistic variation whether SCR does; see section 3.3),

h. object movement may target an intermediary position in the SCR languages as well as in Swedish and Icelandic (full DPs only; section 4.1).

Hence, the main difference between OS and SCR is merely that the former presupposes movement of the main verb whereas the latter does not (Holmberg's generalisation, section 1). This contrast might have to do with the difference in basic verb placement, VO in the OS languages vs. OV in the SCR languages.

The number of other properties which may be linked to or even made to follow from Holmberg's generalisation would seem to be much smaller than often assumed in the literature.
Notes

1 According to Vinka (1998, 1999), there are two classes of verbal particles in some Swedish varieties, transparent and non-transparent ones. Non-transparent particles do not permit the order object < particle whereas transparent ones do. Note that this order is only possible with pronominal objects.

(i) %Sw  a. *Kalle smutsade den ner.
Kalle dirtied it down
b. Kalle tog dem av.
Kalle took them off
c. Kalle satte den på.
Kalle switched it on
(Störn 2002: 239 from Vinka 1998: 271)
d. *Kalle satte TVn på.
Kalle switched TV on
(Sells 2001: 69)

The possibility of particle shift order is independent of OS: it may occur in embedded clauses.

(ii) %Sw Jag vet [att Kalle inte tog dem av].
I know that Kalle not took them off
(Bobaljik 2002: 239 from Vinka 1998: 272)

Particle shift in this dialect feeds OS. OS is impossible across non-transparent particles (compare (50)b above), but acceptable in constructions with transparent particles.

(iii) %Sw Kalle tog dem inte ___ av.
Kalle took them not ___ off
(Bobaljik 2002: 239)

Furthermore, an object may be placed in front of a particle in Swedish if the particle is complex, and may not follow the entire particle phrase. OS is possible in this case.

(iv) Sw a. Vi kastade den ut genom fönstret.
we threw it out through window-the
b. Vi kastade ut den genom fönstret.
vi threw it out
(Holmberg 1986: 201)
c. *Vi kastade ut genom fönstret den.
(v) Sw Vi kastade den genast ut genom fönstret.
we threw it at-once out through window-the
(Holmberg 1986: 201)

Moreover, note that adjectives that take an NP complement may precede or follow their complement in Swedish (vi).

(vi) Sw a. Hunden var tillgiven sin husse.
dog-the was devoted its master
b. Hunden var sin husse tillgiven.
(Holmberg 1986: 168)

According to Holmberg (1986), the fact that the preposed NP and the adjective can be topicalized or left-dislocated together indicates that they form a constituent.

(vii) Sw Sin husse tillgiven (det) var den verklig.
his master devoted it was it truly
(Holmberg 1986: 168)

If the NP complement is a weakly stressed pronoun it may undergo OS, i.e. OS may extract a pronoun out of an AP. Hence, OS is obviously possible if the object does not have to cross overt material as in case of particle verb constructions.

(viii) Sw a. Hundarna var alla honom tillgivna.
dogs-the were all him devoted
b. Hundarna var honom alla ___ tillgivna.
(Holmberg 1986: 168)

(ix) Sw a. Hundarna var alla Erik tillgivna.
dogs-the were all Erik devoted
b. *Hundarna var Erik alla ___ tillgivna.
(Holmberg 1986: 169)

2 Reversal of the basic order of (non-focused) DP arguments is only possible if it results in the order nominative < non-nominative:
Moreover, movement of a focused object may cross another argument, compare (92) below. Likewise, a PP-object may be moved in front of a DP one, see (111).

3 But compare also the examples in (117), section 4.1.2, which show that German pronouns may show up in between several adverbials, i.e. that they may occur to the immediate right of a sentential adverbial as long as it is not the lowest sentential adverbial in the clause.

(i)  

a. ... dat het meisje de ergste rampen overkwamen.

b. ... dat de ergste rampen het meisje overkwamen.

c. ... dat (er) een meisje erge rampen overkwamen.

d. ... dat (er) erge rampen een meisje overkwamen.

(Haider & Rosengren 2003: 248)
PART II

Remnant VP-Topicalisation

1 Holmberg's Generalisation: Vº-topicalisation or remnant VP-topicalisation?

As we have shown in PART I, the main verb has to leave VP for OS to be possible. However, that does not mean that it has to undergo Vº-to-Iº (see (1)b vs. (2)b) or Vº-to-Iº-to-Cº movement (see (1)a/(2)a vs. (1)c/(2)c), in that the main verb may also occur in clause-initial position, (3).

(1) Da a. Hvorfor læste Peter den aldrig ___ ___? why read Peter it never 
b. *Jeg spurgte hvorfor Peter den aldrig læste ___. I asked why Peter it never read 
c. *Hvorfor har Peter den aldrig læste ___? why has Peter it never read

(2) Ic a. Af hverju las Pétur bessa bók aldrei ___ ____? why read Pétur this book never 
b. Ég spurði af hverju Pétur læsi bessa bók aldrei ____ ____. I asked why Pétur read this book never 
c. *Af hverju hefur Pétur bessa bók aldrei lesið ____? why has Pétur this book never read

(3) Sw a. Kysst har jag henne inte ___ ___ (bara hållit henne i handen). kissed have I her not only held her by hand-the 

Da b. Kysset har jeg hende ikke ___ ___ (bare holdt hende i hånden). kissed have I her not only held her in hand.the 

Ic c. Kysst hef ég hana ekki ___ ___ (bara haldið í höndina á henni). kissed have I her not only held in hand.the on her

Not just pronominal objects may be left behind when the verb occurs in clause-initial position, but also (epithetic) DPs may be stranded.1 A stranded DP has to appear after the sentential adverbial, (4).
Holmberg (1997, 1999) assumes that Holmberg's generalisation is due to the filter in (5) that permits pronominal objects in front of an adverbial only if no phonological material follows.

(5) *Object Adverb X, unless X is phonologically empty.  

The fact that OS of an infinitival clause subject across a non-finite main verb as in (6)b cannot be rescued by subsequent VP-topicalisation (7)b indicates that the filter in (5) may not be violated at any point in the course of derivation.

(6) Sw a. Jag har inte sett [IP henne arbeta] 

b. *Jag har henne inte sett [IP _____ arbeta] 

c. Jag såg henne inte [IP _____ arbeta] 

(7) Sw a. Sett henne arbeta har jag inte. 

b. *Sett _____ arbeta har jag henne inte. 

Holmberg (1997, 1999) concludes that the sentences in (3) must be derived by Vº-topicalisation, with subsequent OS (compare (8) below) and cannot involve OS prior to (remnant) VP-topicalisation, see (9).


Sw a. [CP har [IP jag [VP1 inte [VP2 kysst henne]]]]

b. [CP [Vº Kysst] har [IP jag [VP1 inte [VP2 _____ henne]]]]

c. [CP [Vº Kysst] har [IP jag henne [VP1 inte [VP2 _____ _____]]]]
(9) **Remnant VP-topicalisation? Holmberg (1997, 1999): NO!**

Sw a. \([\text{CP } \text{har } [\text{IP } \text{jag inte } [\text{VP2 kysst henne}]])\]

b. \([\text{CP } \text{har } [\text{IP } \text{jag henne } [\text{VP1 inte } [\text{VP2 kysst } \underline{\text{____}}]]]])\]

\[\text{violation of Holmberg's Generalisation!!!} \]

c. \([\text{CP } [\text{VP2 Kysst } \underline{\text{____}}] \text{ har } [\text{IP } \text{jag henne } [\text{VP1 inte } \underline{\text{____}}]]]\]

However, if Vº-topicalisation would be possible, we would expect the sentences in (10)b-(13)b to be acceptable, contrary to fact.

(10) Da a. Jeg har ikke smidt den ud.

b. *Smidt har jeg den ikke ___ ___ ud.


b. *Læst har jeg den aldrig ___ ___ højt.

(12) Da a. Jeg har ikke stillet det på bordet.

b. *Stillet har jeg det ikke ___ ___ på bordet.

(13) Da a. Jeg har ikke sendt dem hjem.

b. *Sendt har jeg dem ikke ___ ___ hjem.

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

(14) a. The material in Spec,CP has to be a contiguous part of a (remnant) VP, see sections 2.1, will be revised in section 3.

b. Just like Holmberg (1997, 1999), we consider OS (and "pseudo-OS", see below) to be subject to Holmberg's generalisation at every point of the derivation, see section 2.2. Therefore, an object may not be extracted out of VP by OS (or "pseudo-OS") prior to VP-topicalisation. Extraction of an underlying object out of VP may only take place by "legal" movement, such as e.g. subject movement to Spec,IP (= passivisation).

c. Theta-requirements force the entire site of the VP in the clause itself to be completely empty. If only some parts of the VP have moved to Spec,CP, the remnant parts of the VP
will also have to be moved elsewhere, see section 2.3 for the effects of this and section 3 for the reasons and the details of the analysis.

d. The remnant part(s) has to undergo either OS or "pseudo-OS". "Pseudo-OS" is similar to OS in that it targets a position in front of the base position of the finite verb and is subject to HG, i.e. it may only take place if the finite verb has left its base position. Yet, in contrast to OS, it applies to full DPs in the MSc languages and it targets a position to the **RIGHT** of a sentential adverbial, hence "pseudo-OS".

2 Asymmetries in Remnant VP-Topicalisation

2.1 Stranding of DO vs. Stranding of IO

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, (15)a. By contrast, stranding of an IO pronoun alone is not possible, (15)b. Moreover, both objects may be taken along or left behind together, (16).

(15) Sw a. \(?[VP \text{ Gett } \text{ henne } \_\_\_] \text{ har } \text{jag } \text{ den } \text{ inte.}\) *(Fox & Pesetsky 2005: 25)*

b. \(*[VP \text{ Gett } \_\_\_ \text{ den} ] \text{ har } \text{jag } \text{ henne} \text{ inte.})*

(16) Sw a. \([VP \text{ Lånat } \text{ Peter } \text{någon bok}] \text{ har } \text{jag } \text{ inte.}\) *(Gunlög Josefsson, p.c.)*

b. \([VP \text{ Lånat } \_ \_ \_] \text{ har } \text{jag } \text{ honom } \text{ den } \text{ inte.}\)

According to Fox & Pesetsky (2005), the relative order of elements at one Spell-out phase may not be changed on another Spell-out phase, predicting that if IO precedes DO at the VP-phase (i.e. inside VP), it must also do so at the CP-phase (i.e. inside CP).

In German, there is also an asymmetry in stranding IO vs. DO by remnant VP-topicalisation. However, it goes in the opposite direction: Stranding of the IO is preferred over stranding of the DO (though the contrast is not as sharp as in Swedish / Danish, (17)c being marginal but not ungrammatical). In other words, changing the base order of the objects as in (17)b is preferable to keeping the base order as in (17)c under remnant VP-topicalisation in German.
Although the asymmetries in remnant VP-topicalisation go in opposite directions in German and the
Scandinavian languages (German permits IO stranding and disprefers DO stranding; Scandinavian
permits DO stranding and prohibits IO stranding), they apparently have one property in common:
Only the edge-most object may be left behind alone by remnant VP-topicalisation; in other words,
only elements that form a contiguous string may be topicalised together. Since the Scandinavian
languages and German display the same basic order of objects (IO precedes DO) but contrast in basic
verb position (VO in the Scandinavian languages, OV in German), the languages differ in which one
of the two objects may be stranded alone: the lower, rightmost DO in Scandinavian and the higher,
leftmost IO in German, compare (15) vs. (17).

Note that the unacceptable sentence in (7)b, repeated here as (18)b, which led Holmberg (1997,
1999) to assume that remnant VP-topicalisation is not possible, violates this restriction that the
phrases in Spec,CP have to be contiguous.

The assumption that remnant VP-topicalisation is restricted in this way (that they should have been
contiguous before the movement to Spec,CP) is supported by the fact that stranding of the object is
unacceptable in constructions with a particle verb, a verb with an additional PP-complement or with
an adverbially modified VP, see (19)b-(22)b. In contrast, topicalisation of the full VP is possible.
2.2 Object vs. Subject
The restriction that remnant VP-topicalisation may only apply to a contiguous string would seem only to hold for objects. Traces of a subject (as in passives) are apparently not subject to this restriction, compare (23)a-(26)a vs. (23)b-(26)b.

(23) Da a. *[VP Smidt ___ ud] har jeg den ikke.
    sent out have I it not
b. [VP Smidt ___ ud] blev den ikke.
    sent out was it not

(24) Da a. *[VP Sendt ___ hjem] har jeg dem ikke.
    sent home have I them not
b. [VP Sendt ___ hjem] blev de ikke.
    sent home were they not

    put on table-the have I it not
b. *[VP Stillet ___ på bordet] blev det ikke.
    put on table-the was it not

(26) Da a. *[VP læst ___ højt] har jeg den aldrig.
    read aloud have I it never
b. [VP læst ___ højt] blev den aldrig.
    read aloud was it never

The contrasts in (23)-(26) suggest that Holmberg's generalisation holds at every level of the derivation: The underlying object cannot be moved out of VP by OS (prior to remnant VP-topicalisation) but may be moved to the subject position, Spec,IP, in passives. The a-examples in (23)-(26) are ill-formed, because e.g. *[smidt ___ ud] in (23)a cannot be seen as a constituent: The trace/gap between smidt and ud could not have come about prior to the movement of the VP to Spec,CP. The b-examples in (23)-(26), on the other hand, are well-formed, because e.g. *[smidt ___ ud] in (23)b is a legitimate constituent: The trace/gap between smidt and ud has come about through passivisation prior to the movement of the VP to Spec,CP.
2.3 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.

Remember that there is a contrast between main and embedded clauses in finite verb movement in the MSc languages and Icelandic and therefore also in the availability of OS, compare PART I.

(27) Da a. *Hvorfor e Peter aldrig lest den? 
   why Peter never read it
   b. Hvorfor lest Peter den aldrig ____ ____?

(Vikner 2005: 394)

(28) Da a. Jeg spurgte hvorfor Peter e aldrig lest den. 
   I asked why Peter never read it
   b. *Jeg spurgte hvorfor Peter lest den aldrig ____ ____.

(Vikner 2005: 396)

(29) Ic a. *Af hverju e Pétur aldrrei las hana?
   why Pétur never read it
   b. Af hverju las Pétur hana aldrrei ____ ____?

(Vikner 2005: 394)

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

(Vikner 2005: 396)

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

(31) Da a. [VP Set ham] har jeg ikke, ...
    seen him have I not
    b. [VP Set det fjols] har jeg ikke, ...
    seen that fool have I not
    c. [VP Set Peter] har jeg ikke, ...
    seen Peter have I not

... hvis jeg skal være ærlig, men jeg har talt i telefon med ham.

if I should be totally honest but I have spoken in phone with him
Object Shift and Scrambling, Remnant VP-Topicalisation

Topicalisation of a remnant VP, by contrast, is only possible out of a main clause, (33), not out of an embedded clause in Danish: the stranded object may neither follow the finite auxiliary (in its base position), (34), nor may it precede it, (35).

(32) Da a. $[\text{VP Set } \text{ham} \text{]}$ tror jeg ikke at du har, ...
\hspace{1cm} seen him believe I not that you have

b. $[\text{VP Set } \text{det fjols} \text{]}$ tror jeg ikke at du har, ...
\hspace{1cm} seen that fool believe I not that you have

c. $[\text{VP Set } \text{Peter} \text{]}$ tror jeg ikke at du har, ...
\hspace{1cm} seen Peter believe I not that you have

... men du kan måske nok have talt i telefon med ham.
\hspace{1cm} but you may perhaps well have spoken in phone with him

(33) Da a. $?[\text{VP Set } ____ \text{]}$ har jeg ham ikke, ...
\hspace{1cm} seen have I him not

b. $?[\text{VP Set } ____ \text{]}$ har jeg ikke det fjols, ...
\hspace{1cm} seen have I not that fool

c. $?[\text{VP Set } ____ \text{]}$ har jeg ikke Peter, ...
\hspace{1cm} seen have I not Peter

... hvis jeg skal være ærlig, men jeg har talt i telefon med ham.
\hspace{1cm} if I should be totally honest but I have spoken on phone-the with him

... jeg har kun set Johannes.
\hspace{1cm} I have only seen Johannes

(34) Da a. $#[\text{VP Set } ____ \text{]}$ tror jeg ikke at du har ham, ...
\hspace{1cm} seen believe I not that you have him

b. $#[\text{VP Set } ____ \text{]}$ tror jeg ikke at du har det fjols,.
\hspace{1cm} seen believe I not that you have that fool

c. $#[\text{VP Set } ____ \text{]}$ tror jeg ikke at du har Peter, ...
\hspace{1cm} seen believe I not that you have Peter

... men du kan måske nok have talt i telefon med ham.
\hspace{1cm} but you may perhaps well have spoken in phone with him

... du har garanteret kun set Johannes.
\hspace{1cm} you have guaranteed only seen Johannes
This asymmetry suggests that a stranded object has to occur in a position to the left of the base position of a finite verb, but can only do so if this verb has itself left its base position. Thereby, a pronominal object is placed to the left of a sentential adverbial, OS (33)a, whereas a full DP occurs to the right of a sentential adverbial, "pseudo-OS" (33)b,c. For reasons to be discussed below, this movement has to take place so that nothing is left in the base position of VP.

Note that remnant VP-topicalisation from embedded clauses is possible in passives, i.e. if the element left behind occurs in subject position:

The hypothesis that (a) a stranded object has to undergo movement to some position to the left of the finite verb and (b) that this movement is only possible if the finite verb itself has left its base position (i.e. that OS or "pseudo-OS" has to take place) seems to be supported by the fact that Icelandic which has Vº-to-Iº movement in embedded clauses marginally permits a remnant object in VP-topicalisation out of an embedded clause.
Object Shift and Scrambling, Remnant VP-Topicalisation

(38) a. ??[VP Kysst ____] hélt ég ekki að þú hefðir hana oft, ...
kissed think I not that you have her often

(Gunnar Hrafn Hrafnbjargarson, p.c.)
b. ??[VP Kysst ____] hélt ég ekki að þú hefðir fífliði, ...
kissed think I not that you have fool-the

c. ??[VP Kysst ____] hélt ég ekki að þú hefðir stelpuna, ...
kissed think I not that you have girl-the

(Theóðóra Torfadóttir, Ásgrímur Angantýsson, p.c.)
... bara haldið í hóndina á henni / því.
only held in hand.the on her / it

Since particles, PPs and (VP-internal) adverbials cannot undergo OS nor "pseudo-OS", they cannot be stranded by remnant VP-topicalisation, (irrespective of whether or not the object is taken along by VP-topicalisation or stranded as well).

(39) Da a. *[VP Smidt den ____] har jeg ikke ud.
thrown it have not out

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

(40) Da a. *[VP Læst den ____ ____] har jeg aldri højt.
read it have I never aloud

b. *[VP Læst ____ ____ ____] har jeg den aldri højt.

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

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

(42) Da a. *[VP Sendt dem ____ ____] har jeg ikke hjem.
sent them have I not home

b. *[VP Sendt ____ ____ ____] har jeg dem ikke hjem.

We might however expect that VP-adjoined adverbials could be left behind (irrespective of whether an object is stranded or not): Given that the adverbial is external to the VP itself, nothing is pronounced at the base position of the core VP. As opposed to what was the case in (39)b-(42)b above, the adverbial in (43) should not need to undergo movement in order to guarantee that the phrase in Spec,CP can be analysed as a VP.
3 Is being contiguous enough?

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.

Thus, besides the linear restriction, there would seem to also be a structural restriction, ruling out the leaving behind of an object which is too deeply embedded.\(^3\)

Consider now the following facts. Leaving behind a remnant object when a main verb and a VP-adjoined adverbial are topicalised together is not only ungrammatical when the adverbial is right-adjoined, (45)c, but unexpectedly also when the adverbial is left-adjoined, (46)c:

\[(45)\]
\[
\begin{array}{ll}
\text{Da. a. } & \text{Han har nok \quad [VP læst \quad den omhyggeligt]} \\
\text{he has probably \quad read \quad it \quad carefully} \\
\text{b. } & \text{[VP Læst \quad den omhyggeligt] har han \quad nok, ...} \\
\text{c. } & \quad *[\quad \text{[VP Læst \quad ___ omhyggeligt]} \text{ har han \quad den \quad nok, ...}} \\
& \quad \text{... men har han forstået den?} \\
& \text{but has he understood it?}
\end{array}
\]

\[(46)\]
\[
\begin{array}{ll}
\text{Da. a. } & \text{Han har nok \quad [VP omhyggeligt \quad læst \quad den]} \\
\text{he has probably \quad read \quad it} \\
\text{b. } & \text{[VP Omhyggeligt \quad læst \quad den] har han \quad nok, ...} \\
\text{c. } & \quad *[\quad \text{[VP Omhyggeligt \quad læst \quad ___]} \text{ har han \quad den \quad nok, ...}} \\
& \quad \text{... men har han forstået den?} \\
& \text{but has he understood it?}
\end{array}
\]
Also with Swedish particle verbs where the particle must precede the object, and the trace of the object therefore would occur at the edge, the object cannot be left behind during (remnant) VP-topicalisation:

(47) Sw a. \([\text{VP} \text{Kastat} \text{ bort den}] \text{ har jag inte.} \]
    \(\text{thrown out it have I not}\)

b. *\([\text{VP} \text{Kastat} \text{ bort ___}] \text{ har jag den inte.} \]
   \(\text{Gunlög Josefsson, p.c.}\)

Also here, one possibility is that the objects in question are too deeply embedded. However, in cases of OS in clauses without VP-topicalisation, this depth of embedding would not seem to be a problem:

(48) Da a. *\([\text{Han læste} \text{ nok omhyggeligt _____ den}] \]
    \(\text{he read probably carefully it}\)

b. \([\text{Han læste den nok omhyggeligt _____ ___}] \]

It could now be suggested that although depth of embedding might not seem to be a problem for object shift, it is a problem for remnant topicalisation, i.e. that it is impossible to remnant-topicalise the underlined elements:

(49) Da a. \([\text{VP omhyggeligt læst den}] = (46)\text{b}\)
    \(\text{carefully read it}\)

Sw b. \([\text{VP kastat bort den}] = (47)\text{b}\)
    \(\text{thrown out it}\)

The problem with this is just that the same would be predicted to be the case when the remnant VP-topicalisation concerns a ditransitive verb and its indirect object,

(50) Da a. \([\text{VP gett henne den}] = (15)\text{a}\)
    \(\text{given her it}\)

and this is not completely impossible, cf. (15) and (16) above.
Here is another attempt to see what the difference is between the ill-formed (49)a,b and the more or less well-formed (50). It amounts to fleshing out the condition on contiguity in (14)a.

Assume that in order for only part of an XP to be topicalised (i.e. to move to Spec,CP), the part left behind has to be interpreted as adjoined to the topicalised XP.

Assume further that it is only possible for an element to be reanalysed as adjoined to the minimal XP whose Xº contains its selecting/theta-assigning head (i.e. an object can only be adjoined to an XP which has in its Xº the verb that selected the object).

(51)  
\[
\begin{align*}
\text{a. } & \text{VP } V^o \ YP \ ZP ] \quad \text{may be reanalysed as} \\
\text{b. } & \text{VP } [V^o \ YP ] ZP
\end{align*}
\]

(52)  
\[
\begin{align*}
\text{a. } & \text{UP } [V^o \ YP ZP ] ] \quad \text{may NOT be reanalysed as} \\
\text{b. } & \text{UP } [V^o \ YP ] ZP
\end{align*}
\]

In (51), the string Vº-YP may be moved to Spec,CP leaving behind ZP, because it is possible to reanalyse Vº-YP in (51)a as a constituent that excludes ZP, (51)b. In other words, ZP can be seen as adjoined to the minimal XP that contains its selecting verb in its Xº. In (52), on the other hand, the string Uº-Vº-YP could not be moved to Spec,CP leaving behind ZP, because this would presuppose ZP was adjoined to UP, i.e. to an XP that does not contain ZP's selecting verb in its Xº. (Note that we are here only talking about whether or not ZP may be left behind. In those cases where ZP may be left behind, it would have to undergo either OS or pseudo-OS, cf. section 2.3 above and further below.)

This would still keep the generalisation that only XPs at the edge can be left behind, hence the ungrammaticality of leaving an indirect object behind, e.g. (15)b, simply because the order is changed:

(53)  
\[
\begin{align*}
\text{Sw a. } & \text{VP get } \underline{\text{henne}} \ \text{den} ] \quad \text{may NOT be reanalysed as} \\
& \text{given } \underline{\text{her}} \ \text{it} \ \underline{\text{henne}}
\end{align*}
\]

and the same goes for the ungrammaticality of leaving an object behind but taking a following right-adjoined adverbial along, as in (45)c (as well as for particle constructions with the object-particle order as in Danish, e.g. (19)b, and for verbs with a PP-complement, e.g. (21)b):

(54)  
\[
\begin{align*}
\text{Sw a. } & \text{VP } [\text{VP læst } \underline{\text{den}} \ \text{omhyggeligt}] ] \quad \text{may NOT be reanalysed as} \\
& \text{read } \underline{\text{it}} \ \text{carefully} \ \underline{\text{omhyggeligt}} \ \underline{\text{den}}
\end{align*}
\]

It would also predict the ungrammaticality of leaving behind an object which is inside an infinitival clause when the topicalised VP is the VP that contains the infinitival clause, as in (44)b, where the problem is not the order, but that the potential reanalysis would require that hende was adjoined to the higher VP, i.e. to a VP that does not contain hende's selecting verb in its Vº:
(55) Da a. \[\text{[VP set [IP ham [VP fotografer\ hende]]]}\] may NOT be reanalysed as seen \(\text{him}\) photograph \(\text{her}\) b. \[\text{[VP [VP set [IP ham [VP fotografer]]] hende]}\]

The same goes for the ungrammaticality of leaving behind an object inside a particle phrase which is itself inside the topicalised VP, e.g. (47)b, where the potential reanalysis would require that \(\text{den}\) was adjoined to the VP, even though the Vº of this VP does not contain \(\text{den}\)'s selecting head, the particle \(\text{bort}\):

(56) Sw a. \[\text{[VP kastat [PrtP bort \text{den}]\]}\] may NOT be reanalysed as thrown out it b. \[\text{[VP [VP kastat [PrtP bort \text{den}]]]}\]

(This presupposes that the particle is not incorporated into the verb, contrary to suggestions in e.g. Haegeman & Guéron 1999: 258).

A slightly different case is the ungrammaticality of leaving behind an object inside a VP which is itself inside the topicalised VP, e.g. (46)b, which shows that the object may only be reanalysed as adjoined to the minimal VP (i.e. excluding any adjuncts to this VP) that contains its selecting verb in its Vº:

(57) Da a. \[\text{[VP omhyggeligt [VP læst \text{den}]\]}\] may NOT be reanalysed as carefully read it b. \[\text{[VP [VP omhyggeligt [VP læst \text{den}]\]}\]

Finally, consider the well-formed case: Given a Larson-style (1988) analysis of double objects, the above would correctly predict the grammaticality of topicalising a double object VP, leaving behind the direct object, as in (15)a/(50):

(58) Sw a. \[\text{[VP1 \text{gett} [VP2 henne V\text{\_}2 \text{den}]\]}\] may be reanalysed as given her it b. \[\text{[VP1 [VP1 \text{gett} [VP2 henne V\text{\_}2 \text{den}]\]}\]

because the VP\text{\_}1 that \(\text{den} \ 'it'\) is adjoined to does contain the verb selecting \(\text{den}\), i.e. \(\text{gett} \ 'given'\) in its head position.
Summing up, we are changing condition (14)a from
"the material in Spec,CP has to be a contiguous part of a (remnant) VP"
into
"it must be possible to (re)analyse the material in Spec,CP as a constituent"

and then we are adding a condition on what is a possible reanalysis, namely that an element can only be reanalysed as adjoined to the minimal XP that contains its selecting verb (or particle) in its X°, maybe a condition that is a consequence of theta-role-assignment.

The intuition is something like the following: If you must have a VP that contains the verb but not all its arguments, the "missing" argument should at least be adjoined to this VP, (59)b. Subsequently, it is then possible to move the "inner" VP to Spec,CP, (59)c. As we have seen, at this point ZP has to undergo OS or pseudo-OS, (59)d, and we would like to suggest that this is because we have to arrive the last stage, (59)e. The reason why we could not just stop at (59)c but had to go on to (59)e, is that in (59)c, ZP was no longer adjoined to the minimal XP that contains its selecting verb (or particle) in its X°, and therefore something must have gone wrong with the theta-requirements. Moving ZP (by means of OS or pseudo-OS) makes it possible to arrive at a structure that can be (re)analysed as having a trace of ZP inside Spec,CP, i.e. a structure without any problems with the theta-requirements.

(59)  

\[
\begin{align*}
\text{a.} & \quad [\text{VP } V^o \ YP \ ZP] \\
\text{b.} & \quad [\text{VP } V^o \ YP] \quad \text{ZP} \\
\text{c.} & \quad [\text{CP } [\text{VP } V^o \ YP] \quad ... \quad [\text{VP } \underline{\underline{\text{ZP}}}] \\
\text{d.} & \quad [\text{CP } [\text{VP } V^o \ YP] \quad ... \quad \text{ZP} \quad ... \quad [\text{VP } \underline{\underline{\text{ZP}}}]] \\
\text{e.} & \quad [\text{CP } [\text{VP } V^o \ YP] \quad ... \quad \text{ZP} \quad ... \quad [\text{VP } \underline{\underline{\underline{\text{ZP}}}}]]
\end{align*}
\]

It is not quite obvious whether or not this analysis could be adapted to also account for the impossibility of leaving behind non-arguments, as in (39)-(42).
4 Conclusion

We have tried to argue for an alternative analysis of both Holmberg’s (1997, 1999) Vº-topicalisations and Fox & Pesetsky’s (2005) remnant double object VP topicalisations by assuming the following:

a. It must be possible to (re)analyse the material in Spec,CP as a constituent. In order for only part of an XP to be topicalised (i.e. to move to Spec,CP), the part left behind has to be interpreted as adjoined to the topicalised XP. Furthermore, it is only possible for an element to be reanalysed as adjoined to the minimal XP whose Xº contains its selecting/theta-assigning head (i.e. an object can only be adjoined to an XP which has in its Xº the verb that selected the object).

b. Just like Holmberg (1997, 1999), we consider OS (and "pseudo-OS", see below) to be subject to Holmberg’s generalisation at every point of the derivation, see section 2.2. Therefore, an object may not be extracted out of VP by OS (or "pseudo-OS") prior to VP-topicalisation. Extraction of an underlying object out of VP may only take place by "legal" movement, such as e.g. subject movement to Spec,IP (= passivisation).

c. It must be possible to (re)analyse the material in Spec,CP as a constituent. This is fine if a VP is topicalised, but if a remnant VP is topicalised, it must have been reanalysed as a constituent, i.e. without the remnant object which is now seen as adjoined to the VP: An object can only be reanalysed as adjoined to the minimal XP that contains its selecting verb (or particle) in its Xº, maybe a condition that is a consequence of theta-role-assignment.

d. The remnant part(s) has to undergo either OS or "pseudo-OS", in order for the remnant VP in Spec,CP to be analysed as an entire VP. "Pseudo-OS" is similar to OS in that it targets a position in front of the base position of the finite verb and is subject to Holmberg’s generalisation, i.e. it may only take place if the finite verb has left its base position. Yet, in contrast to OS, it applies to full DPs in the MSc languages and it targets a position to the right of a sentential adverbial, hence "pseudo-OS".
Notes

1 Note that stranding of a full DP is not only possible for epithetic ones: non-epithetic DPs may be left behind if focused.

(i) Da Kysset har jeg ikke MARIE, men SOPHIE.

2 Note that OS in the V₀-topicalisation analysis is countercyclical: It targets a lower position than the previous movement of V₀, violating Chomsky's (1993) Extension Principle (unless OS is adjunction and the Extension Condition is restricted to specifier positions / substitution).

3 The fact that stranding of the infinitival clause object is also (close to) unacceptable if the infinitival verb is topicalised alone, i.e. if the object trace would not be that deeply embedded, as in (i)d, may not be a problem, as the various topicalisations of the infinitival clause are all rather problematic:

(i) Da 
   a. ?? [IP Ham [VP fotografere hende]] så jeg ikke.
   b. * [IP Ham [VP fotografere ___]] så jeg hende ikke.
   c. ?? [VP fotografere hende] så jeg Ham ikke.
   d. ??/* [VP fotografere ___] så jeg ham hende ikke.
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