

114 Object Shift in Scandinavian

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Abstract:

As set out in section 1, this chapter takes 'object shift' to only refer to the kind of object shift typically found in the Scandinavian languages (following the original use of the term in Holmberg 1986:165), to the exclusion of e.g. scrambling as found in Afrikaans, Dutch, Frisian, German, and Yiddish.

Section 2 reviews a number of properties and restrictions that apply to object shift but not to scrambling: E.g. that the verb has to leave the VP, section 2.1.1; that prepositions, particles, and indirect objects block object shift, section 2.1.2; that object shift does not license parasitic gaps, section 2.2; and that only DPs (or almost only DPs) undergo object shift, section 2.3. Finally, the potential landing sites were discussed in section 2.4.

The difference between Icelandic object shift, which applies to all DPs, and object shift in the other Scandinavian languages, which only applies to pronouns, is discussed in section 3.4.

The bulk of the chapter discusses the various suggestions as to key factors in the analysis of object shift and the restrictions which it underlies: Case in section 3, equidistance in section 4, focus/interpretation in section 5, and prosody in section 6.

Key words:

object shift, scrambling, Holmberg's generalisation, equidistance, order preservation, remnant VP-topicalisation

1. Introduction

The definition of ‘object shift’ to be used in this chapter¹ is a narrow one, covering only the kind of object shift typically found in the Scandinavian languages, following the original use of the term in Holmberg (1986:165). Sometimes object shift has been taken to include also at least some instances of scrambling as found in the Continental West Germanic languages (Afrikaans, Dutch, Frisian, German, and Yiddish); see among others Vanden Wijngaerd (1989), Bobaljik (1995:85), Aboh (2005), Woolford (2007). For a thorough discussion of scrambling, please refer to the chapter on *Mittelfeld Phenomena: Scrambling in Germanic*.

Scrambling (as in the German examples (1)b,c) and object shift (as in Icelandic (2)b,c and Danish (3)c) have in common that both move a DP leftward, from a position inside VP to a position outside VP but inside the same clause:

(1) Scrambling (German)

- | | | | | | |
|----|--------------|------------------|--------------------------------|---|--|
| a. | Peter | hat _v | ohne Zweifel nie | [_{VP} Bücher gelesen] | t _v . |
| | <i>Peter</i> | <i>has</i> | <i>without doubt never</i> | <i>books read</i> | |
| b. | Peter | las _v | die Bücher _i | ohne Zweifel nie | [_{VP} t _i t _v]. |
| | <i>Peter</i> | <i>read</i> | <i>the books</i> | <i>without doubt never</i> | |
| c. | Peter | las _v | sie _i | ohne Zweifel nie | [_{VP} t _i t _v]. |
| | <i>Peter</i> | <i>read</i> | <i>them</i> | <i>without doubt never</i> | |

(2) Object shift (Icelandic)

- | | | | | | | |
|----|--------------|--------------------|------------------------------|--------------------|--------------------------------------|--|
| a. | Peter | hefur _v | eflaust | aldrei | t _v [_{VP} lesið | bækur]. |
| | <i>Peter</i> | <i>has</i> | <i>doubtlessly</i> | <i>never</i> | <i>read</i> | <i>books</i> |
| b. | Pétur | las _v | bækurnar _i | eflaust | aldrei | [_{VP} t _v t _i]. |
| | <i>Peter</i> | <i>read</i> | <i>books-the</i> | <i>doubtlessly</i> | <i>never</i> | |
| c. | Pétur | las _v | þær _i | eflaust | aldrei | [_{VP} t _v t _i]. |
| | <i>Peter</i> | <i>read</i> | <i>them</i> | <i>doubtlessly</i> | <i>never</i> | |

(3) Object shift (Danish)

- | | | | | | | |
|----|--------------|--------------------|-----------------------------|----------------------|-------------------------------------|--|
| a. | Peter | har _v | uden tvivl | aldrig | t _v [_{VP} læst | bøger]. |
| | <i>Peter</i> | <i>has</i> | <i>without doubt</i> | <i>never</i> | <i>read</i> | <i>books</i> |
| b. | * Peter | læste _v | bøgerne _i | uden tvivl | aldrig | [_{VP} t _v t _i]. |
| | <i>Peter</i> | <i>read</i> | <i>books-the</i> | <i>without doubt</i> | <i>never</i> | |
| c. | Peter | læste _v | dem _i | uden tvivl | aldrig | [_{VP} t _v t _i]. |
| | <i>Peter</i> | <i>read</i> | <i>them</i> | <i>without doubt</i> | <i>never</i> | |

All the above examples are verb second (V2), i.e., the finite verb has been moved from the position marked t_v to its present position as the second constituent of the main clause. In addition, in all examples the base position of the object is inside the VP, i.e., to the right of the adverbials *no doubt* and *never*, cf. (1)a, (2)a and (3)a. When scrambling, (1)b,c, or object shift, (2)b,c, (3)c, takes place, the object moves to a position to the left of these adverbials. From these examples, which focus on the similarities between object shift and scrambling, it might appear that there are no differences. This is not so; there are many

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All data taken from the literature are listed with their sources, all other data have been thoroughly checked with native speakers.

differences between the two types of movement, as object shift is much more restricted than scrambling. Only object shift requires verb movement, and only object shift is restricted to DPs (though see also (84)b and (86)b below).

Section 2 will review a number of properties and restrictions that apply to object shift but not to scrambling: E.g. that the verb has to leave the VP, section 2.1.1, that prepositions, particles, and indirect objects block object shift, section 2.1.2, that object shift does not license parasitic gaps, section 2.2, that only DPs (or almost only DPs) undergo object shift, section 2.3, and finally the potential landing sites will be discussed in section 2.4.

There is also a difference between Icelandic object shift and object shift as found in the other Scandinavian languages, namely, the difference between (2)b and (3)b. In Icelandic both full DPs and pronouns may undergo object shift, whereas only pronouns may do so in the other Scandinavian languages. This will be discussed further in section 3.4.

The rest of the chapter will then discuss what has been suggested as key factors in the analysis of the movement and the restrictions it underlies: Case in section 3, equidistance in section 4, focus in section 5, and prosody in section 6.

2. Differences between object shift and scrambling

2.1 When does object shift apply?

2.1.1 Verb movement required (Holmberg's generalisation)

Object shift is blocked if the main verb which selects the object does not move out of its base position in V°. Because the Scandinavian languages (like all other Germanic languages except English) are V2, one context in which the main verb moves out of V° is a main clause where the main verb is also the finite verb; see (4) and (5).

(4) Icelandic: full DPs

- | | | |
|----|--|---|
| a. | Af hverju las _v Pétur | aldrei [VP t _v þessa bók] ? |
| | <i>Why read Peter</i> | <i>never this book</i> |
| b. | Af hverju las _v Pétur þessa bóki aldrei [VP t _v t _i] ? | |
| | <i>Why read Peter this book never</i> | |

(5) Icelandic: pronouns

- | | | |
|----|--|------------------------------------|
| a. | * Af hverju las _v Pétur | aldrei [VP t _v hana] ? |
| | <i>Why read Peter</i> | <i>never it</i> |
| b. | Af hverju las _v Pétur hana aldrei [VP t _v t _i] ? | |
| | <i>Why read Peter it never</i> | |

(6) Danish: full DPs (impossible)

- | | | |
|----|---|---|
| a. | Hvorfor læste _v Peter | aldrig [VP t _v den her bog] ? |
| | <i>Why read Peter</i> | <i>never this book</i> |
| b. | * Hvorfor læste _v Peter den her bog aldrie [VP t _v t _i] ? | |
| | <i>Why read Peter this book never</i> | |

(7) Danish: pronouns

- | | | |
|----|---|-----------------------------------|
| a. | * Hvorfor læste _v Peter | aldrig [VP t _v den] ? |
| | <i>Why read Peter</i> | <i>never it</i> |
| b. | Hvorfor læste _v Peter den aldrie [VP t _v t _i] ? | |
| | <i>Why read Peter it never</i> | |

This observation, that the object may move only if verb movement has taken place, goes back to Hansen (1977:60) and Holmberg (1986:165), and it has been known as Holmberg's generalisation at least since Collins and Thráinsson (1993:135). Furthermore, (5)a and (7)a illustrate the obligatory nature of pronominal object shift (see also sections 3.4 and 5.1): If a(n unstressed) pronoun can undergo object shift, it must. This is definitely true for Icelandic and Danish, but as shown by e.g. Josefsson (2003:200-202), object shift of pronouns in Swedish is optional² rather than obligatory³:

² The question of whether the two options (object shift and no object shift) are completely equally acceptable is far from settled. Andréasson (2010) points out a weak correlation between whether a pronominal object shifts or not and whether this pronominal object has a nominal antecedent or a propositional antecedent (see also Ørnsnes 2013 concerning Danish):

(i) Swedish

- a. Agnes sa **någonting på tyska.** Förstod du **det_i** inte *t_i* ?
Agnes said something in German. Understood you it not ?
- b. **Agnes köpte boken.** Förstod du inte **det** ?
Agnes bought book-the. Understood you not it ?

((i)b is from Andréasson 2010: 30, (9))

What is important is that unstressed pronouns with a nominal antecedent as well as ones with a propositional antecedent may occur in shifted and non-shifted position in Swedish (see Andréasson 2008, 2013). In contrast, Anderssen, Bentzen & Rodina (2011) claim that only weak pronouns that refer to an individuated referent can undergo OS in Norwegian; see the contrast between (ii) and (iii):

(ii) Norwegian

- A: Spiste dere fisken idag?
Ate you fish-the today
- B: * Nej, jeg fant ikke **den**.
No I found not it
- B': Nej, jeg fant **den_i** ikke *t_i*.

(from Anderssen, Bentzen & Rodina 2011:42, (7))

(ii) Norwegian

- A: Hva med fisk til middag?
What about fish for dinner
- B: Nej, Per spiser ikke **det**.
No Per eats not it
- B': # Nej, Per spiser **det_i** ikke *t_i*.

(from Anderssen, Bentzen & Rodina 2012:42, (8))

³ The south-eastern dialects of Danish reported in Pedersen (1993) seem to be like Swedish in that pronominal object shift is far from obligatory:

(i) South-eastern Danish: pronouns

- a. Du når såmænd nok **det**.
You will-make indeed likely it
- b. Nej, jeg tror ikke **det**.
No I think not it

(from Pedersen 1993: 205, (i)a is from Ærø, (i)b from Langeland)

where standard Danish would have obligatory object shift:

(ii) Danish: pronouns

- a. Du når **det_i** såmænd nok *t_i*.
You will-make it indeed likely
- b. Nej, jeg tror **det_i** ikke *t_i*.
No I think it not

(8) Swedish: pronouns

- a. Varför läste_v Peter aldrig [_{VP} t_v **den**] ?
Why read Peter never it
- b. Varför läste_v Peter **den**_i aldrig [_{VP} t_v t_i] ?
Why read Peter it never

In those main clauses where the finite verb is an auxiliary verb, the main verb, *read*, occurs in a non-finite form and does not leave the VP. Consequently object shift may not take place:

(9) Icelandic

- a. Af hverju hefur_v Pétur aldrei t_v [_{VP} **lesið þessa bók**] ?
Why has Peter never read this book
- b. * Af hverju hefur_v Pétur **þessa bóki** aldrei t_v [_{VP} **lesið** t_i] ?
Why has Peter this book never read

(10) Icelandic

- a. Af hverju hefur_v Pétur aldrei t_v [_{VP} **lesið hana**] ?
Why has Peter never read it
- b. * Af hverju hefur_v Pétur **hana**_i aldrei t_v [_{VP} **lesið** t_i] ?
Why has Peter it never read

(11) Danish

- a. Hvorfor har_v Peter aldrig t_v [_{VP} **læst den her bog**] ?
Why has Peter never read this book
- b. * Hvorfor har_v Peter **den her bog**_i aldrig t_v [_{VP} **læst** t_i] ?
Why has Peter this book never read

(12) Danish

- a. Hvorfor har_v Peter aldrig t_v [_{VP} **læst den**] ?
Why has Peter never read it

It should also be mentioned that at least two Scandinavian languages and dialects clearly seem to disallow pronominal object shift, viz. Finland Swedish and Älvdalsmålet:

(iii) Finland Swedish: pronouns

- a. Ja, ser du, jag vet inte **det** själv.
Yes see you I know not it self
- b. * Ja, ser du, jag vet **det**_i inte t_i själv.

(from Bergroth 1917: 172)

(iv) Älvdalsmålet: pronouns

- a. An såg it **mig**.
He saw not me
- b. * An såg **mig**_i it t_i.

(from Garbacz 2010: 79, (29)b,d)

For a corpus-based investigation of the object shift variation in Danish, Norwegian and Swedish, see Bentzen, Anderssen & Waldmann (2013). For more detailed data as to all the various Scandinavian languages and dialects, see the *Nordic Syntax Database* and the *Nordic Dialect Corpus*, as summarised and discussed in Bentzen (2014).

- b. * Hvorfor har_v Peter **den_i** aldrig t_v [_{VP} læst t_i] ?
 Why has Peter it never read

In most embedded clauses, the Scandinavian languages differ (i.e. in the majority of embedded clauses which do not display V2, cf. the chapter on *Embedded Root Phenomena*). In Icelandic, the finite verb moves to I°, whereas in the other languages, it seems to stay in V°; see e.g. Holmberg and Platzack (1995:76–77); Vikner (1995:139, 1997b); Rohrbacher (1999:56–80). Consequently, object shift is found in embedded clauses only in Icelandic (and only if the main verb moves out of VP, i.e., only if the main verb is finite), (13)b and (14)b, and not at all in the other Scandinavian languages (16)b:⁴

(13) Icelandic

- a. Ég spurði af hverju Pétur læsi_v aldrei [_{VP} t_v **þessa bók**].
 I asked why Peter read never this book
 b. Ég spurði af hverju Pétur læsi_v **þessa bók_i** aldrei [_{VP} t_v t_i].
 I asked why Peter read this book never

(14) Icelandic

- a. * Ég spurði af hverju Pétur læsi_v aldrei [_{VP} t_v **hana**].
 I asked why Peter read never it
 b. Ég spurði af hverju Pétur læsi_v **hana_i** aldrei [_{VP} t_v t_i].
 I asked why Peter read it never

(15) Danish

- a. Jeg spurgte hvorfor Peter aldrig [_{VP} læste **den her bog**].
 I asked why Peter never read this book
 b. * Jeg spurgte hvorfor Peter **den her bog_i** aldrig [_{VP} læste t_i].
 I asked why Peter this book never read

(16) Danish

- a. Jeg spurgte hvorfor Peter aldrig [_{VP} læste **den**].
 I asked why Peter never read it
 b. * Jeg spurgte hvorfor Peter **den_i** aldrig [_{VP} læste t_i].
 I asked why Peter it never read

Scrambling, on the other hand, does not require the verb to be moved as it may take place regardless of whether the main verb has left its VP (17)a or not (17)b:

⁴ In Icelandic control infinitives (see Thráinsson 1986:247; Holmberg 1986:155–158; Sigurðsson 1989:49–56; Johnson and Vikner 1994; Jónsson 1996:159–166), the infinitival verb embedded under the control verb must leave VP as it must precede negation, (i)a,b. Given that the verb must leave its VP, it is not surprising that object shift is possible, (i)c:

(i) Icelandic

- a. * María lofaði_v [_{IP} að ekki **lesa bókina**].
 María promised to not read book-the
 b. María lofaði_v [_{IP} að **lesa_v** ekki t_v **bókina**].
 María promised to read not book-the
 c. María lofaði_v [_{IP} að **lesa_v bókina_i** ekki t_v t_i].
 María promised to read book-the not
 'María promised not to read the book'

(from Jónsson 1996:164, (149))

(17) German

- a. Warum liest_v Peter **dieses Buch_i** oft [VP t_i t_v] ?
Why reads Peter this book often
- b. Warum hat_v Peter **dieses Buch_i** oft [VP t_i gelesen] t_v ?
Why has Peter this book often read

The fact that (17)b is grammatical thus shows that scrambling does not fall under Holmberg's generalisation, at least not as formulated here ('the object may only move if verb movement has taken place'), assuming that neither German nor e.g. Dutch have finite-verb movement in embedded clauses (see the chapter on *Mittelfeld Phenomena: Scrambling in Germanic* and also e.g. Vikner 2005). If the generalisation is formulated as in Déprez (1994:111), 'Object movement never crosses a thematic verb', scrambling does not go against the generalisation, since the object does not scramble across the verb as the object is base-generated in a position left of the verb (assuming that the base order of German is SOV). There are still many types of object movement that do not fall under the generalisation, however e.g. object cliticisation in Romance (see section 3.4 and the chapters on *Clitic Climbing*, *Clitic Clusters*, and *Clitic Doubling*), or another case of Germanic object movement, namely, scrambling in Yiddish. Yiddish is normally taken to be an SVO language, which means that when scrambling takes place in a sentence where the main verb is not finite, the object moves across the main verb:⁵

(18) Yiddish

- a. Far vos hot_v Moyshe nit t_v [VP **geleyent dos dozike bukh**] ?
Why has Moses not read this book
- b. Far vos hot_v Moyshe **dos dozike bukh_i** nit t_v [VP **geleyent** t_i] ?
Why has Moses this book not read

In section 3 and the following sections below, various suggestions as to why object shift (but not scrambling) requires the verb to have left its VP will be discussed.

2.1.2 Prepositions, particles, and indirect objects block object shift

Object shift is blocked if it has to cross a c-commanding preposition:

(19) Icelandic

- a. Af hverju las_v Pétur aldrei t_v [PP **í þessari bók**] ?
Why read Peter never in this book
- b. * Af hverju las_v Pétur **þessari bóki** aldrei t_v [PP **í** t_i] ?
Why read Peter this book never in

(20) Icelandic

- a. Af hverju las_v Pétur aldrei t_v [PP **í henni**] ?
Why read Peter never in it
- b. * Af hverju las_v Pétur **henni** aldrei t_v [PP **í** t_i] ?
Why read Peter it never in

⁵ Den Besten and Moed-van Walraven (1986:113), Diesing (1997:388), and Sadock (1998) take Yiddish to be a VO language with remnants of OV, whereas Santorini (1993) classifies it as mixed OV/VO and Hall (1979), Geilfuss (1991), Haider and Rosengren (1998:78-81), and Vikner (2001b, 2003) assume the basic order in modern Yiddish to be OV.

(21) Danish

- a. Hvorfor læste_v Peter aldrig t_v [PP **i den her bog**] ?
 Why read Peter never in this book
- b. * Hvorfor læste_v Peter **den her bog**_i aldrig t_v [PP **i** t_i] ?
 Why read Peter this book never in

(22) Danish

- a. Hvorfor læste_v Peter aldrig t_v [PP **i den**] ?
 Why read Peter never in it
- b. * Hvorfor læste_v Peter **den**_i aldrig t_v [PP **i** t_i] ?
 Why read Peter it never in

Object shift is also blocked if it has to cross a c-commanding verb particle, like *out* in *Peter threw out the old carpet*. For independent reasons (see e.g. Taraldsen 1984; Åfarli 1985; Vikner 1987:266; Johnson 1991; Collins and Thráinsson 1993:163), the particle always c-commands its complement in Swedish, (23), whereas this never happens in Danish, (25). In Icelandic, (28), and also in Norwegian, the situation is parallel to the one in English in that the particle may either precede (and c-command) a full DP complement or follow it, but a pronominal complement must precede the particle. It is therefore only in Swedish that we can observe how a particle blocks object shift, (24)c:

(23) Swedish

- a. Peter har_v inte t_v kastat **bort mattan**.
 Peter has not thrown away carpet-the
- b. * Peter har_v inte t_v kastat **mattan**_i **bort** t_i.
 Peter has not thrown carpet-the away

(24) Swedish

- a. Peter kastade_v inte t_v **bort den**.
 Peter threw not away it
- b. * Peter kastade_v inte t_v **den**_i **bort** t_i.
 Peter threw not it away
- c. * Peter kastade_v **den**_i inte t_v **bort** t_i.
 Peter threw it not away

In Danish, the particle has to follow its complement whether or not object shift has taken place, (25), and presumably therefore the particle does not have any blocking effect (26)c. In fact, the pronoun may not follow the particle, (26)a, and has to undergo object shift, (26)b,c. If the complement of the particle is a full DP, it still precedes the particle, (27)a, b, but it cannot undergo object shift, (27)c:

(25) Danish

- a. * Peter har_v ikke t_v smidt **ud tæppet**.
 Peter has not thrown away carpet-the
- b. Peter har_v ikke t_v smidt **tæppet**_i **ud** t_i.
 Peter has not thrown carpet-the away

(26) Danish

- a. * Peter smed_v ikke t_v **ud** **det**.
Peter threw not away it
- b. * Peter smed_v ikke t_v **det_i** **ud** t_i.
Peter threw not it away
- c. Peter smed_v **det_i** ikke t_v **ud** t_i.
Peter threw it not away

(27) Danish

- a. * Peter smed_v ikke t_v **ud** **tæppet**.
Peter threw not away carpet-the
- b. Peter smed_v ikke t_v **tæppet_i** **ud** t_i.
Peter threw not carpet-the away
- c. * Peter smed_v **tæppet_i** ikke t_v **ud** t_i.
Peter threw carpet-the not away

In Icelandic, the particle may or may not precede its complement whether or not object shift has taken place, (28), and therefore the particle does not have any blocking effect, (29)c and (30)c. Though a full DP may occur in any of the three positions, (29), a pronoun may not follow the particle, nor may it fail to undergo object shift (30)a,b:

(28) Icelandic

- a. Pétur hefur_v ekki t_v hent **út** **mottunni**.
Peter has not thrown away carpet-the
- b. Pétur hefur_v ekki t_v hent **mottunni_i** **út** t_i.
Peter has not thrown carpet-the away

(29) Icelandic

- a. Pétur henti_v ekki t_v **út** **mottunni**.
Peter threw not away carpet-the
- b. Pétur henti_v ekki t_v **mottunni_i** **út** t_i.
Peter threw not carpet-the away
- c. Pétur henti_v **mottunni_i** ekki t_v **út** t_i.
Peter threw carpet-the not away

(30) Icelandic

- a. * Pétur henti_v ekki t_v **út** **henni**.
Peter threw not away it
- b. * Pétur henti_v ekki t_v **henni_i** **út** t_i.
Peter threw not it away
- c. Pétur henti_v **henni_i** ekki t_v **út** t_i.
Peter threw it not away

In Norwegian, the situation is the same as in Icelandic as far as the particle is concerned (the particle may or may not precede its complement independently of whether object shift has taken place), but the object-shift situation is not the same in the two languages as only pronouns undergo object shift in Norwegian. Norwegian versions of the Icelandic (28), (29), and (30) would therefore basically have the same judgments as in Icelandic, with at least one major exception, namely, that (29)c would be ungrammatical in Norwegian because full DPs cannot undergo object shift (though see Nilsen 1997).

The fact that prepositions and (Swedish) particles block object shift might be related to the blocking of object shift by verbs inside VP. The generalisation (first formulated in Holmberg 1986:176, 199) could be

that object shift is impossible if the object is governed (or assigned case) by an overt governor (or case-assigner) as opposed to object shift of objects which are governed (or assigned case) by the trace of a governor/case-assigner. The crucial difference would thus be the following: When object shift is blocked by a non-finite verb, a finite main verb in embedded clauses (except in Icelandic), a preposition, or a particle (only in Swedish), the governor/case-assigner is not a trace. When object shift is not blocked, the governor/case-assigner is a trace (e.g., when the main verb has undergone V2 in main clauses, or in Icelandic when the main verb has moved to I° in embedded clauses). For further discussion of this, see sections 3.1 and 5.2.

The next set of data to be considered is not covered by this generalisation. Object shift of a direct object is blocked by an indirect object, (31)b and (32)b, even though object shift of both objects, (31)c and (32)c, or object shift of the indirect object alone, (31)d and (32)d, are not blocked:⁶

(31) Icelandic

- a. Ég lána_v ekki t_v **Maríu** **bækurnar**.
I lend not Maria.DAT books-the.ACC
- b. *Ég lána_v **bækurnar**_i ekki t_v **Maríu** t_i.
I lend books-the.ACC not Maria.DAT
- c. Ég lána_v **Maríu**_j **bækurnar**_i ekki t_v t_j t_i.
I lend Maria.DAT books-the.ACC not
- d. Ég lána_v **Maríu**_j ekki t_v t_j **bækurnar**.
I lend Maria.DAT not books-the.ACC

(from Collins & Thráinsson 1993:149 (33a), 154 (46a), 143 (20), 154 (46b))

(32) Danish

- a. Jeg låner_v ikke t_v **Maria** **bøgerne**.
I lend not Maria books-the
- b. *Jeg låner_v **dem**_i ikke t_v **Maria** t_i.
I lend them not Maria
- c. Jeg låner_v **hende**_j **dem**_i ikke t_v t_j t_i.
I lend her them not
- d. Jeg låner_v **hende**_j ikke t_v t_j **bøgerne**.
I lend her not books-the

The generalisation is formulated in terms of the direct object being unable to undergo object shift across the indirect object, rather than the accusative object being unable to undergo object shift across the dative object. The reason is that, as shown e.g. by Thráinsson (2001:153), the generalisation also holds for examples where both the direct and the indirect object are dative (for more Icelandic data with unexpected morphological cases, see (63), (64), and (65) below):⁷

⁶ The form of the objects in the Danish examples varies depending on whether or not the object in question has undergone object shift, given that only pronouns can undergo object shift and that they have to undergo it.

⁷ An example with the same word order as (33)b is acceptable, but with the opposite interpretation, namely, that the kidnapper never returned the parents to the children. In other words, it would have the structure of (33)d and (31)d.

(from Thráinsson 2001:153 (14))

¹ In Vikner (1989:142), the blocking effect of an indirect object in situ, (31)b, (32)b, and (33)b, is taken to be a relativised minimality effect, assuming that the indirect object is an A-position and object shift is A-movement. Collins and Thráinsson (1993:158) suggest an explanation within the Minimalist framework. The features of the head (AgrIO°) attracting the indirect object must be at least as strong as the features attracting the direct object (AgrO°), which means that if AgrO° has strong features (as is necessary to make the direct object move), AgrIO° must have strong features too, which will force the indirect object to move as well. Finally, Müller (2001:288-294) suggests an account for this effect (which he refers to as an order preservation effect, cf. 'shape preservation' in Williams 2003:15-23 or 'shape conservation' in Koenenman 2006) by means of an optimality-theory constraint called PARALLEL MOVEMENT, which is violated every time a c-command relationship between any two arguments is not the same at all levels (i.e., before and after the various movements). See also section 5.5 below.

(from Müller 1995:172, (173a))

(35) Danish

Hvad for en bog_i stillede alle t_i hen på reolen [uden at læse e_i først] ?
Which book put all onto bookcase-the without to read first
 'Which book did everyone put on the shelf without reading first?'

Parasitic gaps may occur in scrambling constructions like (36), but not if scrambling does not take place as in (37). This fact is often considered an indication that scrambling is an instantiation of A-bar-movement (cf., among others, Bennis and Hoekstra 1984:65; Müller 1995:172; and the chapter on *Mittelfeld Phenomena: Scrambling in Germanic*):

(36) German

... , dass alle **dieses Buch**_i [ohne e_i zu lesen] t_i
that all this book without to read
 ins Regal gestellt haben.
into-the bookcase put have

(37) German

* ... , dass alle [ohne e_i zu lesen] dieses Buch;
that all without to read this book
 ins Regal gestellt haben.
into-the bookcase put have

'... that everyone put this book on the shelf without reading (it) first'

((36) and (37) are from Müller 1995:173, (74a) & (86))

Object shift, on the other hand, does not trigger parasitic gaps, indicating that it is not an A-bar-movement (as first noted by Holmberg 1986:225):

(38) Danish

* Alle stillede_v **den**_i straks_{t_v t_i} hen på reolen [uden at læse e_i først].
All put it at once onto bookcase-the without to read first

The absence of object shift does not improve (38), see (39), whereas both (38) and (39) are well-formed without the bracketed clause introduced by *without*:

(39) Danish

* ... at alle straks stillede **den** hen på reolen [uden at læse e_i først].
that all at once put it onto bookcase-the without to read first

2.3 Which elements may undergo object shift?

From the standard instantiations of A-movement (passive, raising) and A-bar-movement (*wh*-movement), we know that A-movement is movement into a case-marked position, and that A-bar-movement may be movement out of a case-marked position. This distinction forms the basis for some of the arguments in favour of object shift being A-movement and scrambling being A-bar-movement.

It is possible to account for why PPs may undergo scrambling, (40)b, (41)b, but not object shift, (42)b, (43)b; (44)b, (45)b, if we assume that PPs may not receive case, cf. e.g., that they are at best marginal in the subject position of tensed sentences (for English, see e.g. Quirk et al. 1985:736 and Stowell 1981:268). Object shift is movement into a case-marked position, but scrambling is not:

(40) German

- a. Ich habe nicht **für das Buch** bezahlt.
I have not for the book paid
- b. Ich habe **für das Buch_i** nicht *t_i* bezahlt.
I have for the book not paid

(41) German

- a. Ich habe nicht **dafür** bezahlt.
I have not there-for paid
- b. Ich habe **dafür_i** nicht *t_i* bezahlt.
I have there-for not paid

(42) Icelandic

- a. Ég borgaði_v ekki *t_v* **fyrir bókina**.
I paid not for book-the
- b. *Ég borgaði_v **fyrir bókina_i** ekki *t_v t_i*.
I paid for book-the not

(43) Icelandic

- a. Ég borgaði_v ekki *t_v* **fyrir hana**.
I paid not for it
- b. *Ég borgaði_v **fyrir hana_i** ekki *t_v t_i*.
I paid for it not

(44) Danish

- a. Jeg betalte_v ikke *t_v* **for bogen**.
I paid not for book-the
- b. *Jeg betalte_v **for bogen_i** ikke *t_v t_i*.
I paid for book-the not

(45) Danish

- a. Jeg betalte_v ikke *t_v* **for den**.
I paid not for it
- b. *Jeg betalte_v **for den_i** ikke *t_v t_i*.
I paid for it not

((40)-(41) and (44)-(45) are from Vikner 1994b:492, (11)-(14))

There are many other types of constituent which fit into the same picture in so far as they are not normally taken to be assigned case and they may not undergo object shift. One such type of constituent is the predicative adjective phrase, as shown in (46)-(47), others are e.g. VPs. However, unlike the situation with PPs, there is no difference between scrambling and object shift here, e.g. predicative adjective phrases undergo neither scrambling (46)b, nor object shift (47)b, (48)b:

(46) German

- a. Peter ist nie **krank**.
Peter is never ill
- b. *Peter ist **krank_i** nie *t_i*.
Peter is ill never

(47) Icelandic

- a. Pétur er aldrei **veikur**.

Peter is never ill

- b. * Pétur er **veikur_i** aldrei t_i .

Peter is ill never

(48) Danish

- a. Peter er aldrig **syg**.

Peter is never ill

- b. * Peter er **syg_i** aldrig t_i .

Peter is ill never

2.4 What is the landing site of object shift?

2.4.1 Object shift is clausebound

At the outset, we said that object shift was a leftward movement of a DP from a position inside VP to a position outside VP but inside the same clause. The following examples illustrate that, as opposed to scrambling in Russian, (49), e.g. object shift may not move a DP out of a clause, (50)a:⁸

(49) Russian

Vy **posylku_i** videli [kak zapakovali t_i].

You parcel saw how (they) wrapped

'You saw how they wrapped the parcel'

(from Müller 1995:128, (71b))

(50) Icelandic

- a. * Ég veit **bókina_i** [af hverju þau seldu ekki t_i].

I know book-the why they sold not

- b. Ég veit [af hverju þau seldu **bókina_i** ekki t_i].

I know why they sold book-the not

- c. Ég veit [af hverju þau seldu ekki **bókina**].

I know why they sold not book-the

'I know why they did not sell the book'

As was illustrated in section 2.1.1, object shift moves a DP to a position which follows the subject and which in main clauses also follows the finite verb (in Icelandic it follows the finite verb also in embedded clauses). The position targeted by object shift furthermore precedes the negation and any (medial) sentential adverbial, both of which again precede all non-finite verbs (in Danish, Faroese, Norwegian, and Swedish embedded clauses, the negation and sentential adverbials also precede the finite verb).

⁸ The reason why the example of non-clausebound scrambling is from Russian is that German (and Dutch) scrambling actually is clausebound, and therefore completely parallel to the object shift data in (50):

(i) German

- a. * Ich weiß **dieses Buch_i** [warum sie nicht t_i verkaufen].

I know this book why they not sell

- b. Ich weiß [warum sie **dieses Buch_i** nicht t_i verkaufen].

I know why they this book not sell

- c. Ich weiß [warum sie nicht **dieses Buch** verkaufen].

I know why they not this book sell

'I know why they do not sell this book'

2.4.2 Is object shift movement to an adjoined position?

In the earliest treatment of object shift, Holmberg (1986:218, 170), the shifted object is taken to be adjoined to VP in Icelandic and to I-bar in Mainland Scandinavian (i.e., Danish, Norwegian, and Swedish). Holmberg (1986:170, 93) is forced to assume adjunction to I-bar in Mainland Scandinavian because of his assumption that the finite verb in embedded clauses occurs in I° in all of the Scandinavian languages. Following Pollock's (1989) suggestions that finite French verbs move to I° whereas finite English verbs remain in V°, Holmberg and Platzack (1988), among others, suggested that the same difference obtains between Icelandic and Mainland Scandinavian. One of the advantages of this view was that the landing site of object shift in Icelandic could now be taken to be the same as the landing site of object shift in Mainland Scandinavian, a view followed by almost all subsequent analyses (cf. also section 2.1.1). Consequently Vikner (1989, 1994b) takes object shift to be adjunction to (the highest) VP in all of the Scandinavian languages (as opposed to scrambling in e.g. German, which is taken also to allow adjunction to IP). Holmberg and Platzack (1995:142, 20) follow a very similar approach in that they take object shift to be adjunction to ActiveP, a functional projection immediately above (the highest) VP.

2.4.3 Is object shift movement to a specifier position?

Whereas most early analyses of object shift thus assume that the shifted object occurs in an adjoined position, many but far from all later analyses take the shifted object to occur in a specifier position, namely, the specifier position of some functional projection immediately above VP. Two of the earliest suggestions along these lines are Déprez (1989:226) and Johnson (1991), who consider object shift movement to [AgrOP, Spec] (Johnson 1991 first refers to the landing site of object shift as [μP, Spec], 1991:606-608, but later identifies [μP, Spec] with [AgrOP, Spec], 1991:628). This analysis is also found in e.g. Chomsky (1993:12-16), Bobaljik (1995:80) and Collins and Thráinsson (1996).

As Holmberg (1999:6-7, 14-15) points out, the exact position of [AgrOP, Spec] with respect to e.g. auxiliary verbs is crucial. Compare Déprez's (1989:113) analysis in (51)a with Bobaljik's (1995:83) in (51)b:

- (51) a. ... [AgrOP spec AgrO° [V_(aux)P spec V°(aux) [V_(main)P spec V°(main)]]]
 b. ... [V_(aux)P spec V°(aux) [AgrOP spec AgrO° [V_(main)P spec V°(main)]]]

Déprez (1989:113) situates AgrOP above all VPs in the same clause, whereas Bobaljik (1995:83) explicitly situates AgrOP immediately above the VP of the main verb and below the VP of the auxiliary (or the VPs of the auxiliaries). Given that a shifted object always precedes negation and (medial) sentential adverbs, these two analyses then make different predictions as to whether the auxiliary V° follows or precedes negation and (medial) sentential adverbs. The fact that all non-finite auxiliaries in Scandinavian as well as all finite auxiliaries in Mainland Scandinavian embedded clauses follow rather than precede the negation and (medial) sentential adverbs is only compatible with an analysis such as (51)a, where the potential landing site of object shift precedes all VPs.

In a reaction to this criticism, Bobaljik (2002:225)⁹ explicitly assumes both that negation (and presumably also sentential adverbials) always adjoin to the highest VP of the clause and that object shift is to the specifier position of an AgrOP, which is right above the VP of the verb that selects the shifting object. In other words, only when the highest VP is also the VP of the main verb (i.e., the verb that selects the shifting object), does the [AgrOP, Spec] position targeted by object shift precede the negation (and sentential adverbials). This makes the prediction that if it should be possible to have object shift in a clause where the finite verb and the object-selecting main verb are not the same verb (something which is normally excluded, cf. (9)b, (10)b, and (12)b above), the shifted object (which is in [AgrOP, Spec] right above the VP of the main verb) should follow, not precede, the negation (which is adjoined to the VP of the finite auxiliary verb). As Bobaljik (2002:235) himself notes ("it might leave as problematic the

⁹ Bobaljik's (2002) analysis is based on his definition of adjacency, where two elements may be adjacent even though elements in adjoined positions occur between them (Bobaljik 2002:210-221). When the main verb is finite, I° has to be adjacent to the main verb, and this blocks object shift in those cases where a shifted object would intervene between the two (Bobaljik 2002:221-224) e.g. in those embedded clauses where the finite verb occurs in V° (e.g. (16) above). When the main verb is a participle, it is Pple° that has to be adjacent to the main verb (Bobaljik 2002:225), and this blocks object shift in those cases where the overt shifted object would intervene between Pple° and the main verb.

respective order of the pronoun and negation”), this is precisely the wrong prediction for the central example of Holmberg (1999:7):

(52) Swedish

Kysst_x har_v jag **henne**_i inte [_{VP} t_v [_{VP} t_x t_i]], bara hållit henne i handen.
Kissed has I her not only held her in hand-the
 'Kissed her, I haven't, only held her hand'

(from Holmberg 1999:7, (11a))

The (shifted) object has to precede the negation, even though the sentence contains both a finite auxiliary and a non-finite main verb (which has been topicalised). For much more discussion of this and other examples of remnant VP topicalisation, see sections 5.2-5.5 below.

It would thus seem that Holmberg's (1999:6-7, 14-15) criticism of at least some [AgrOP, Spec] analyses is still highly relevant.

Even though Johnson (1991) and Chomsky (1993:12-16), do not explicitly say where an auxiliary VP would be placed in the structure, the above criticism applies to these analyses as well. This is because both Johnson (1991) and Chomsky (1993:12-16) require that all main verbs (even non-finite ones) move to AgrO°; for Johnson (1991) because non-finite main verbs, too, exhibit the positional effects he accounts for by assuming V°-to-AgrO° movement, and for Chomsky (1993:12-16) because all main verbs must move to AgrO° to make it possible for the object in all types of clauses to undergo overt or covert object shift to [AgrOP, Spec] to have its object case checked (see also section 4 below on equidistance). The point is that the main verb could not possibly move to AgrO° if an auxiliary V° would intervene between AgrO° and the main V°. On the other hand, as outlined above, the auxiliary V° must intervene between AgrO° and the main V° to produce the correct predictions for (52).

Similar to the [AgrOP, Spec] analyses are the analyses of object shift as movement to (or through) [TenseP, Spec], as in Bobaljik and Jonas (1996) or Bošković (2004), or as movement to the specifier position of an IP-internal TopicP, as in Jayaseelan (2001:71) or Josefsson (2001). However, as long as the position targeted by object shift is a position above even the highest VP of the clause, these analyses are not subject to Holmberg's (1999:6-7, 14-15) criticism discussed above. Nilsen (1997) and Cinque (1999:115), who assume the existence of a large number of functional projections inside IP but above VP, suggest that object shift may end in the specifier position of most if not all of these functional projections. These analyses are not subject to the criticisms voiced above as they assume that auxiliary verbs may be inserted in a large number of different functional heads, depending on the meaning of the auxiliary.

In some later discussions of object shift, the landing site of object shift is left open, e.g. in Holmberg (1999). Similarly, whereas Chomsky (1995c:360) suggests that object shift is movement to the outer of two specifier positions of vP, Chomsky (2001b:33) makes it clear that although object shift moves through this position, it does not end there (in Chomsky 2001b:33, two different movements, namely, Object Shift and Disl, correspond to what is normally called object shift).

2.4.4 Landing site between two adverbials

One of the reasons given by Holmberg and Platzack (1995:152) for analyzing object shift as movement to an adjoined position rather than movement to [AgrOP, Spec] are the adjacency effects discussed by Vikner (1994b:493-497). Here the data will first be discussed from the point of view of the adjunction analysis, and only afterwards will the specifier analysis be considered.

According to Stowell (1981:113), case-assignment under government requires the case assigner and the case assignee to be adjacent. If object shift is movement to a case-assigned position, its landing site would have to be adjacent to a case assigner. If this case assigner is I° (or rather the verb or verb trace inside I°), the landing site of object shift would have to be adjacent to the verb or verb trace in I°. Although adjacency to a trace (including adjacency to a verb trace in I°) is impossible to see, the fact that I° itself is adjacent to the subject in [IP, Spec] (assuming that adverbials or other elements cannot adjoin to intermediate projections like I-bar) means that when I° only contains a trace, adjacency to I° results in surface adjacency to the subject in [IP, Spec]. In other words, under these assumptions, an account can be made for why shifted objects (and also floating quantifiers referring to shifted objects) may not occur separated from the subject in [IP, Spec] or from the verb in I° by an adverbial (as Holmberg and Platzack 1995:182 note, this argumentation may be seen as support of the assumption that Mainland Scandinavian has an I°-position, even though it is never overtly filled by a verb). In scrambling, on the other hand, nothing prevents the scrambled element (or a floated quantifier referring to a scrambled element) from occurring between two adverbials.

In (53)c, (54)c, (55)c, and (56)c, the scrambled or object-shifted object has been adjoined to the left of two adverbials; in (53)b, (54)b,¹⁰ (55)b, and (56)b, the object has been adjoined between two adverbials (which prevents it from being adjacent to [IP, Spec] or I°); and in (53)a, (54)a, (55)a, and (56)a, no movement has taken place at all:

(53) German

Gestern hat_v Peter ...

Yesterday has Peter

- a. ... ohne Zweifel nicht **das Buch** gelesen t_v.
without doubt not the book read
- b. ... ohne Zweifel **das Buch_i** nicht t_i gelesen t_v.
without doubt the book not read
- c. ... **das Buch_i** ohne Zweifel nicht t_i gelesen t_v.
the book without doubt not read

'Yesterday Peter undoubtedly did not read this book'

(54) Icelandic

- a. Í gær las_v Pétur eflaust ekki t_v **bókina**.
Yesterday read Peter doubtlessly not book-the
- b. * Í gær las_v Pétur eflaust **bókina_i** ekki t_v t_i.
Yesterday read Peter doubtlessly book-the not
- c. Í gær las_v Pétur **bókina_i** eflaust ekki t_v t_i.
Yesterday read Peter book-the doubtlessly not

'Yesterday Peter undoubtedly did not read this book'

((53) and (54) are from Vikner 1994:493-494, (15)-(16))

Neither scrambling nor object shift (of a full DP) is obligatory, cf. (53)a and (54)a, though see section 5 on focus. The crucial difference is that whereas a scrambled object may land anywhere, (53)b,c, an object-shifted object may only land in a position adjacent to I°, (54)b,c. (Jónsson 1996:66 finds an example of the same type as (54)b to be only marginal rather than completely ungrammatical.)

In the other Scandinavian languages, object shift may seem to be obligatory, but this is because, as mentioned above, only pronominal objects undergo object shift, and pronominal object shift is obligatory (see section 3.4 below, and recall that Josefsson 2003:200-202 shows object shift of pronouns in Swedish to be optional rather than obligatory). That this is a difference between pronouns and full DP objects is illustrated by pronominal data from Icelandic, compare (56) to (54):

(55) Danish

- a. * I går læste_v Peter uden tvivl ikke t_v **den**.

¹⁰ It must be admitted that some Icelandic speakers find (54)b acceptable, cf. also that Jónsson (1996:66) finds an example of the same type marginal rather than completely ungrammatical. Nevertheless, Thráinsson (2001:162) gives the following judgment of a completely parallel example:

(i) Icelandic

- * Jón las_v eflaust **bókina_i** aldrei t_v t_i.
John read doubtlessly book-the never

It should perhaps be added that there seems to be general agreement among Icelandic speakers as to the unacceptability of the pronominal version of this kind of example, viz. (56)b.

- Yesterday read Peter without doubt not it*
- b. * I går læste_v Peter uden tvivl **den_i** ikke t_v t_i.
Yesterday read Peter without doubt it not
- c. I går læste_v Peter **den_i** uden tvivl ikke t_v t_i.
Yesterday read Peter it without doubt not
 'Yesterday Peter undoubtedly did not read it'

(56) Icelandic

- a. * Í gær las_v Pétur eflaust ekki t_v **hana**.
Yesterday read Peter doubtlessly not it
- b. * Í gær las_v Pétur eflaust **hana_i** ekki t_v t_i.
Yesterday read Peter doubtlessly it not
- c. Í gær las_v Pétur **hana_i** eflaust ekki t_v t_i.
Yesterday read Peter it doubtlessly not
 'Yesterday Peter undoubtedly did not read it'

((55) and (56) are from Vikner (1994:493-494, (17)-(18))

The only two possible object positions in sentences where object shift is allowed are thus the base position of the object and a position preceding all (medial) sentential adverbs and negation. In other words, the object has to be adjacent either to V° or to I°, as expected if it receives case from either V° (if object shift does not apply) or I° (when object shift has applied).

Let us now turn to similar evidence involving so-called floating quantifiers. According to Sportiche (1988), a floated quantifier (see the chapter on *Quantified Expressions and Quantitative Clitics*) may occur only in positions in which the quantified NP may occur, or through which the quantified NP may have moved. Giusti (1990) applies this analysis to scrambling and object shift, arguing that both these movements are ones that may leave floating quantifiers behind.

As shown by the following examples, the possible positions of floated quantifiers are the same as the possible positions of the object. In other words, any position is possible in scrambling (57), but only the position preceding the adverbials and the base position are possible in object shift (58):

(57) German

- a. Peter wird **die_i Bücher_i** ohne Zweifel nie **alle_i** t_i lesen.
Peter will the books without doubt never all read
- b. Peter wird **die_i Bücher_i** ohne Zweifel **alle_i** nie t_i lesen.
Peter will the books without doubt all never read
- c. Peter wird **die_i Bücher_i** **alle_i** ohne Zweifel nie t_i lesen.
Peter will the books all without doubt never read
 'Peter will undoubtedly never read all the books'

(58) Icelandic

- a. Pétur las_v **bækurnar_i** eflaust ekki **allar_i** t_v t_i.
Peter read books-the doubtlessly not all
- b. * Pétur las_v **bækurnar_i** eflaust **allar_i** ekki t_v t_i.
Peter read books-the doubtlessly all not
- c. Pétur las_v **allar** **bækurnar_i** eflaust ekki t_v t_i.
Peter read all books-the doubtlessly not
 'Peter undoubtedly never read all the books'

((57) and (58) are from Vikner (1994:496, (20), (21))

Admittedly, the ungrammaticality of (58)b is not directly explained by the adjacency requirement discussed above, as case is assigned to the NP *bækurnar* or *allar bækurnar*, which is adjacent to I° in all three cases in (58). One possible account for (58)b would be that it shows that the object cannot have moved through a position between the adverbials on its way to its surface position, maybe because such a

position would not be an A-position (making the movement an instance of ‘improper movement’, cf. e.g. Chomsky 1981:195, 199), or because there would be no need for object shift to go via this position.

Summing up so far, if object shift is movement to an adjoined position, the data in (53)–(57) may be explained by assuming case may be assigned to an adjoined position, provided adjacency is respected.

If, on the other hand, object shift is movement to [AgrOP, Spec], then the requirements that the shifted object precede both negation and sentential adverbials must stem from [AgrOP, Spec] preceding the position of negation and medial sentential adverbials. This again would have to mean either (a) that scrambling (in Continental West Germanic) and object shift (in Scandinavian) have different landing sites (i.e., they cannot both be movement to [AgrOP, Spec]) or (b) that negation and the sentential adverbials have different positions in the two types of language. To be more precise, if object shift and scrambling target the same position (as assumed e.g. by Bobaljik 2002:230–233), negation and sentential adverbials in Continental West Germanic must be possible both to the left and to the right of this target [AgrOP, Spec], whereas negation and sentential adverbials in Scandinavian have to be restricted to the right of the target [AgrOP, Spec].

Notice finally that adjacency as discussed here is very different from what Bobaljik (2002:210–221) calls adjacency in that two elements may be adjacent in Bobaljik’s sense even though an adverbial occurs between them.

2.5 Summary: object shift vs. scrambling

Throughout section 2, the properties of object shift in Scandinavian have been compared to the less restricted characteristics of scrambling in languages like Dutch and German (see (59)). Two additional differences between the Scandinavian languages were shown to follow from independent variation. First, only in Icelandic is object shift possible in embedded clauses, because only in Icelandic do all finite verbs move to I°, see examples (13) and (14)b. Second, only in Swedish is object shift actually blocked by a particle, because only in Swedish does the object never precede the particle before object shift, see examples (23) and (24).

(59)	Section	Property	Object shift in Scandinavian	Scrambling in German/Dutch/...
	2.1.1	It may take place independently of verb movement out of VP	No	Yes
	2.1.2	It may cross a preposition	No	Yes
		It may cross a particle	No	Yes
		It may cross an indirect object	No	Yes
	2.2	It allows a parasitic gap	No	Yes
	2.3	It moves (pronominal) DPs	Yes	Yes
		It moves PPs	No	Yes
		It moves predicative APs	No	No
	2.4.1	It may cross a clause boundary	No	No (Russian: yes)
	2.4.4	It may land between adverbials	No	Yes

One difference between the Scandinavian languages which does not follow from independent variation is that only in Icelandic do full DPs undergo object shift, see examples (4) and (5). In the other Scandinavian languages only pronominal DPs undergo object shift, see examples (6) and (7). This is further discussed in section 3.4 below.

Sections 2.4.2 and 2.4.3 discussed which kind of position is targeted by object shift (and scrambling), and noted that although there is no general agreement in the literature, there is perhaps a growing trend to assume the landing site to be a specifier position rather than an adjoined position.

3. Case and object shift

3.1 Traces of case assigners are optional case assigners

As mentioned in section 2.1.2, Holmberg (1986:176) was the first to suggest an analysis of object shift where case assignment by a trace is optional, as also assumed in Vikner (1994b:500) and Holmberg and Platzack (1995:166). This means that in structures where we would expect a DP to be assigned case by a V° , such case assignment is only obligatory if V° contains a verb. If V° does not contain a verb but only its trace, this V° assigns case optionally. In other words, if a verb has moved out of VP, it is possible for its object not to be assigned case by the verb trace, and therefore to move into a different position and be assigned case there. If an object is assigned case not by the trace of a verb, but by the verb itself (i.e., if the verb has not left VP), this case assignment is not optional but obligatory, and therefore the object is not free to move into a different position and be assigned case there. How is the shifted object assigned case, then, if not by V° ? In Holmberg (1986:208, 217), the shifted objects are not assigned case at all: Because shifted objects (in Swedish only pronouns, in Icelandic all DPs) have morphological case, they do not need to be assigned case syntactically. One problem for this hypothesis is that, as illustrated in the next section, full DP objects have morphological case in Faroese, and yet they may not undergo object shift.

3.2 The role of morphological case

Morphological case is realised on all DPs only in two of the Scandinavian languages – Faroese and Icelandic.

(60)	<i>the book</i>	Icelandic	Faroese	Danish	Swedish	Norwegian
	Nominative	<i>bókin</i>	<i>bókin</i>	<i>bogen</i>	<i>boken</i>	<i>boka/boken</i>
	Accusative	<i>bókina</i>	<i>bókina</i>	<i>bogen</i>	<i>boken</i>	<i>boka/boken</i>
	Dative	<i>bókinni</i>	<i>bókini</i>	<i>bogen</i>	<i>boken</i>	<i>boka/boken</i>

(from Vikner 1994:502, (34))

From the point of view of case morphology, Faroese thus patterns with Icelandic against the other Scandinavian languages, whereas as far as object shift is concerned, Faroese is more like the other Scandinavian languages, see (6) and (7), than like Icelandic, see (4) and (5):¹¹

(61) Faroese

- a. Jógván keypti_v ikki [_{VP} t_v **bókina**].
 Jógván bought *not* *book-the.ACC*
- b. *Jógván keypti_v **bókina**_i ikki [_{VP} t_v t_i].
 Jógván bought book-the.ACC not

(62) Faroese

- a. *Jógván keypti_v ikki [_{VP} t_v **hana**].
 Jógván bought *not* *it.ACC*
- b. Jógván keypti_v **hana**_i ikki [_{VP} t_v t_i].
 Jógván bought it.ACC not

((61) is from Barnes 1992:28, (2n), and (62) is from Vikner 1994:502, (36))

According to Sundquist (2002), a similar situation obtained in Middle Norwegian, in that morphological case was also found outside the pronominal system, and yet object shift was restricted to pronouns. In early modern English, too, we find only pronominal object shift and not object shift of full DPs (Roberts

¹¹ In a questionnaire-based study, Thráinsson (2013) claims that object shift of full DPs is an option in Faroese, based the percentage of speakers that reject full DP object shift being somewhat lower for Faroese than for Danish. However, what is probably most important here is that even though the percentage of speakers that reject full DP object shift is lower for Faroese than for Danish, it is always very high, substantially above 50% (ranging from 66% to 96% in the six relevant Faroese cases).

1995:274-276). From the point of view of case this is less surprising, as early modern English did not have morphological case outside the pronominal system. Object shift in early modern English is remarkable in the fact that it shows that object shift may also be found in a non-Scandinavian language, indeed in a non-V2 language. Another potential problem related to morphological case is that in Icelandic the direct object does not always have accusative case, but may have one of the other three cases: The object is genitive in (63), dative in (64), and even nominative in (65) (where the subject is dative; see Sigurðsson 1989:198-241; Taraldsen 1995):

(63) Icelandic

Í gær leitaði_v Pétur ...
Yesterday looked-for Peter.NOM

- a. ... sennilega ekki _{t_v} þessarar bókar.
probably not this book.GEN
- b. * ... sennilega þessarar bókar_i ekki _{t_v} t_i.
probably this book.GEN not
- c. ... þessarar bókar_i sennilega ekki _{t_v} t_i.
this book.GEN probably not
- 'Yesterday Peter undoubtedly did not look for this book'

(64) Icelandic

Í gær lýsti_v Pétur ...
Yesterday described Peter.NOM

- a. ... sennilega ekki _{t_v} þessari bók.
probably not this book.DAT
- b. * ... sennilega þessari bóka_i ekki _{t_v} t_i.
probably this book.DAT not
- c. ... þessari bóka_i sennilega ekki _{t_v} t_i.
this book.DAT probably not
- 'Yesterday Peter probably did not describe this book'

((63) and (64) are from Vikner (1994:512, note 2))

(65) Icelandic

Í dag þykir_v þér ...
Today thinks.3.SG you.SG.DAT

- a. ? ... sennilega ekki _{t_v} þessi bók skemmtileg.
probably not this book.NOM amusing.NOM
- b. * ... sennilega þessi bóka_i ekki _{t_v} t_i skemmtileg.
probably this book.NOM not amusing.NOM
- c. ... þessi bóka_i sennilega ekki _{t_v} t_i skemmtileg.
this book.NOM probably not amusing.NOM
- 'Today you probably do not find this book amusing'

The standard view on oblique case is that it is inherent or lexical case, which is assigned together with the thematic role (see Marantz 1984:81 or Andrews 1990 and references there). To analyze these facts in a way compatible both with this standard view and with the analysis that object shift is movement to a case-assigned position, inherent case (i.e., case which is assigned at D-structure) would have to be licensed at S-structure, and this licensing would have to take place under conditions identical to the ones under which structural case assignment takes place.

3.3 Case assignment from I°

Holmberg's (1986:208, 217) suggestion that shifted objects are not assigned case at all as they do not need case assignment because they have morphological case thus predicts that objects may shift if and only if they have morphological case. The ungrammaticality of full DP object shift in Faroese, (61)b, was a direct counterexample to this analysis.

In Vikner (1994b:500) and in Holmberg and Platzack (1995:152), the shifted object is assigned case from I°. Vikner (1994b:500) further suggests that a non-nominative case cannot be assigned by an X° which is already assigning nominative, e.g. C° in V2-languages and I° in non-V2-languages. Thus, object shift never occurs into a position preceding the verb, where C° is busy assigning nominative case (though see n. 12 on long object shift in Swedish). Also, object shift never occurs at all in non-V2 languages, where I° is busy assigning nominative case, although object shift in early modern English, mentioned in the previous section, is a problem for this claim because early modern English is not a V2-language. The fact that early modern English is a VO-language and that it does not allow object shift of full DPs also excludes scrambling as a possible analysis.

The formulation of Holmberg's generalisation in section 2.1.1 referred to the (obligatory) movement of the selecting verb, rather than to the (obligatory) movement of the case-assigning verb. The possibility of object shift in two particular contexts, perception verbs and causative verbs, however, indicate that case-assignment is the relevant notion rather than selection, which again lends further, if rather indirect, support to the idea that case assignment is the key to object shift. For reasons of exposition, this will only be illustrated with perception verbs. A perception verb like *see* may either select a DP or an embedded clause as its object, and if it selects an embedded clause, this may either be finite or non-finite. When *see* selects a non-finite embedded clause, as in (66)–(71), the subject of the embedded clause is not selected by *see* but by the verb (or the VP) of the embedded clause, *beat*. There is nevertheless a particular relation between *see* and the embedded subject: *see* is taken to assign case to the embedded subject, which is why this subject is accusative and not nominative, as witnessed by its form, which is *þá* 'them.MASC' rather than *þeir* 'they.MASC' in Icelandic (67)b, and *dem* 'them' rather than *de* 'they' in Danish (69)b.

(66) Icelandic

- a. Pétur sá_v áreiðanlega [_{VP} t_v [_{IP} **FH** vinna Hauka]].
Peter saw presumably FH beat Haukar
- b. Pétur sá_v **FH**_i áreiðanlega [_{VP} t_v [_{IP} t_i vinna Hauka]].
Peter saw FH presumably beat Haukar

(67) Icelandic

- a. *Pétur sá_v áreiðanlega [_{VP} t_v [_{IP} **þá** vinna Hauka]].
Peter saw presumably them beat Haukar
- b. Pétur sá_v **þá**_i áreiðanlega [_{VP} t_v [_{IP} t_i vinna Hauka]].
Peter saw them presumably beat Haukar

(68) Danish

- a. Peter så_v formentlig [_{VP} t_v [_{IP} **AGF** slå FC København]].
Peter saw presumably AGF beat FC Copenhagen
- b. *Peter så_v **AGF**_i formentlig [_{VP} t_v [_{IP} t_i slå FC København]].
Peter saw AGF presumably beat FC Copenhagen

(69) Danish

- a. *Peter så_v formentlig [_{VP} t_v [_{IP} **dem** slå FC København]].
Peter saw presumably them beat FC Copenhagen
- b. Peter så_v **dem**_i formentlig [_{VP} t_v [_{IP} t_i slå FC København]].
Peter saw them presumably beat FC Copenhagen

In spite of the relation between *see* and the embedded subject, *FH/þá/AGF/dem*, being one of case-assignment and not one of selection, the verb movement of *see* allows the embedded subject to undergo

object shift in the usual fashion, i.e., obligatorily if it is a pronoun (67) and (69), optionally if it is an Icelandic full DP (66), and not at all if it is a Danish full DP (68).

That (66)-(69) are cases of object shift, i.e., that the embedded subject is moving around an adverbial of the main clause in (66)b, (67)b, and (69)b, is supported by the fact that the adverbial in question, *presumably*, is a speaker-oriented adverbial which only occurs as a sentential adverbial in main clauses. This is shown by it being ill-formed to the right of the main clause participle, *seen*:

(70) Icelandic

- a. Pétur hefur_v **áreiðanlega** [_{VP} t_v [_{VP} séð [_{IP} FH vinna Hauka]]].
Peter has presumably seen FH beat Haukar
- b. * Pétur hefur séð **áreiðanlega** FH vinna Hauka.
Peter has seen presumably FH beat Haukar
- c. * Pétur hefur séð FH **áreiðanlega** vinna Hauka.
Peter has seen FH presumably beat Haukar

(71) Danish

- a. Peter har_v **formentlig** [_{VP} t_v [_{VP} set [_{IP} AGF slå FC København]]].
Peter has presumably seen AGF beat FC Copenhagen
- b. * Peter har set **formentlig** AGF slå FC København.
Peter has seen presumably AGF beat FC Copenhagen
- c. * Peter har set AGF **formentlig** slå FC København.
Peter has seen AGF presumably beat FC Copenhagen

Summarising sections 3.1, 3.2, and 3.3, it was shown how assuming case assignment by a verb trace to be optional was an attempt to account for Holmberg's generalisation. Object shift is possible only if the case-assigning verb leaves VP because only then is the case-assigned DP assigned case by a trace, which again means that only then is it possible for this DP not to be assigned case and therefore to move into a case position higher up in the clause.

3.4 Pronominal object shift as cliticisation

If case were crucial for object shift in the manner described in the previous section, we might expect that one of two situations would obtain in a given language: Either all objects may undergo object shift (provided all other conditions on object shift were fulfilled), or no objects may undergo object shift at all. There would be no reason to expect pronouns (i.e., pronominal DPs) to behave any differently from full DPs, given that all DPs are alike in requiring case. However, cross-linguistically, the two types of object often behave differently with respect to object shift.

In Icelandic, both pronominal objects and full DP objects may undergo object shift, see (4) and (5) above, whereas in the other Scandinavian languages (Danish, Faroese, Norwegian, and Swedish), only pronominal objects may undergo object shift, full DP objects may not, see (6), (7), (61) and (62).

Before discussing potential accounts of this difference, I shall give some further examples. 'Strong' pronouns (i.e., pronouns which are stressed, modified, or coordinated, cf. Holmberg 1986:209) differ from pronominals which are not stressed, modified, or coordinated. As seen in (5) and (7) above, normally, pronouns obligatorily undergo object shift (though only optionally in Swedish, see (8)). Strong pronouns, however, behave like full DPs in this respect, i.e., they may optionally undergo object shift in Icelandic, see (4), and they may not undergo object shift in Danish, see (6).

The strong pronouns in (72) and (74) are stressed versions of the unstressed pronouns in (5) and (7), i.e., Icelandic *hana* and Danish *den* 'it'. The strong pronouns in (73) and (75) are Icelandic *þessa hérna* and Danish *den her*, 'this here'. The result would have been the same with expressions such as Icelandic *þessa með rauðu kápuna* or Danish *den med det røde omslag* 'the one with the red cover'.

(72) Icelandic: strong pronouns may undergo object shift

- a. Af hverju las_v Pétur aldrei [_{VP} t_v **HANA**] ?
Why read Peter never it
- b. Af hverju las_v Pétur **HANA**_i aldrei [_{VP} t_v t_i] ?
Why read Peter it never

(73) Icelandic: full DPs may undergo object shift

- a. Af hverju las_v Pétur aldrei [_{VP} t_v **þessa hérna**] ?
Why read Peter never this here
- b. Af hverju las_v Pétur **þessa hérna**_i aldrei [_{VP} t_v t_i] ?
Why read Peter this here never

(74) Danish: strong pronouns do not undergo object shift

- a. Hvorfor læste_v Peter aldrig [_{VP} t_v **DEN**] ?
Why read Peter never it
- b. * Hvorfor læste_v Peter **DEN**_i aldrig [_{VP} t_v t_i] ?
Why read Peter it never

(75) Danish: full DPs do not undergo object shift

- a. Hvorfor læste_v Peter aldrig [_{VP} t_v **den her**] ?
Why read Peter never this here
- b. * Hvorfor læste_v Peter **den her** aldrig [_{VP} t_v t_i] ?
Why read Peter this here never

Let us now turn to some proposed accounts of the difference between pronominal object shift and full DP object shift. A number of analyses take pronominal object shift to be X⁰-movement along the lines of e.g. cliticisation in the Romance languages (Holmberg 1991a:167; Josefsson 1992, 1993; Déprez 1994:122; Bobaljik and Jonas 1996:207; Diesing 1996:77, 1997:415). The main advantage of such an approach is that the question of whether or not a language has object shift can now be turned into the question of whether or not a language has full DP object shift, and this can then plausibly be tied to whether or not I⁰ (or T⁰) has strong features. I⁰ (or T⁰) can be argued to have strong features in Icelandic (as reflected in the presence of V⁰-to-I⁰ movement), but weak features in the other Scandinavian languages (which lack V⁰-to-I⁰ movement). The main drawback, to be further discussed below, is that although it may become easier to account for whether or not a language has object shift of full DPs, it becomes much more difficult to account for whether or not a language has pronominal object shift, as the differences between pronominal object shift in Scandinavian and cliticisation in Romance become unexpected (e.g., why do the former but not the latter observe Holmberg's generalisation?).

As pointed out in Vikner (1994b:504-506) and Holmberg and Platzack (1995:154-156), assuming pronominal object shift to be X⁰-movement is problematic for at least two reasons. One is that the object-shifted pronoun behaves differently from a Romance clitic pronoun, in that object-shifted pronouns do not occur in C⁰ together with the finite verb, whereas Romance clitic pronouns do. If the object-shifted pronoun has incorporated into the verb, it should not only move along with the verb when the verb moves from V⁰ to I⁰ (which it arguably does; shifted objects occur adjacent to I⁰, see section 2.4.4), but it should also move along with the verb when the verb moves from I⁰ to C⁰. The latter is quite clearly not the case, (76)a:

(76) Danish

- a. * Hvorfor [_C læste- **den**_v] Peter [_I t_v] aldrig [_{VP} t_v t_i] ?
Why read it Peter never
- b. Hvorfor [_C læste_v] Peter [_I t_v- **den**_i] aldrig [_{VP} t_v t_i] ?
Why read Peter it never
 'Why did Peter never read it?'

Not only would (76)a incorrectly be expected to be grammatical, but (76)b would also, again incorrectly, be expected to be ungrammatical. Although it should not be possible for the pronoun to be left behind in I° when the verb moves on to C° (see Kayne 1991:649, who says a trace cannot be “a proper subpart of a X° constituent,” referring to Baker 1988a:73), this is exactly how (76)b would have to be analyzed if pronominal object shift were X° -movement: The trace of the verb which has moved to C° is a proper subpart of I° .

It is of course possible to revise the analyses of Kayne (1991:649) and Baker (1988a:73), and to allow some form of excorporation, as in Roberts (1991a:214-216). However, it is far from clear that this could be done in such a way as to rule out (76)a and rule in (76)b without doing the same to the Romance data. In French, for instance, ruling out (77)a and allowing (77)b would be problematic, as the French judgments are the exact mirror image of the Scandinavian ones; compare (77) and (76):¹²

(77) French

- a. Où $[C^\circ I^\circ \text{avait}_v]$ - il $[I^\circ t_v]$ $[VP t_v [VP \text{acheté } t_i]]$?
Where it- had he bought
- b. * Où $[C^\circ \text{avait}_v]$ - il $[I^\circ \text{le}_i t_v]$ $[VP t_v [VP \text{acheté } t_i]]$?
Where had he it bought
 'Where had he bought it?'

Josefsson (1993:21–22) says about the above difference that Scandinavian has weak pronouns, i.e., what she calls independent heads, whereas Romance has clitics, i.e., dependent heads. The crucial difference is that only independent heads are able to excorporate. However, the ability to excorporate is exactly the property that we are trying to account for, and so we arrive at a restatement of the problem above; if pronominal object shift is X° -movement along the lines of cliticisation in Romance, why do the two not behave alike? The other problem with the assumption that pronominal object shift is X° -movement is connected with the fact that Scandinavian pronouns (if they should turn out to be clitics) would be clitics on the right side of their incorporating heads, as opposed to Romance clitics, which are on the left; see (77)a.

If the Scandinavian pronoun were to incorporate into the verb already in the V° -position, we would expect a situation (e.g., right before verb movement to C°) in which finite tense endings would follow the compound head consisting of the verb and the incorporated pronominal object. This is clearly not the case; cf. (3)c with (78).

(78) Danish

- * ... $[I^\circ [T^\circ [V^\circ [v^\circ \text{læs-}]] \text{dem}]] -te \quad]]$...
read- them PAST

¹² To complicate matters even further, pronominal object shift in Swedish is different both from pronominal object shift in the other Scandinavian languages, (76), and from Romance clitic pronouns, (77), in that both options are possible. The shifted pronoun may occur either left of the subject, (i)a or right of the subject, (i)b:

(i) Swedish

- a. Därför ger_v **mig**_i $[IP \text{Tutanchamons hemska förbannelse ingen } ro_j [VP t_v t_i t_j]]$.
Therefore gives me Tutanchamon's terrible curse no rest
- b. Därför ger_v $[IP \text{Tutanchamons hemska förbannelse mig}_i \text{ingen } ro_j [VP t_v t_i t_j]]$.
Therefore gives Tutanchamon's terrible curse me no rest

((i)a is from Josefsson 1992:65, (14))

Example (i)a is commonly referred to as long object shift, and compared to normal or ‘short’ object shift, as in (i)b, long object shift is subject to some additional and rather elusive restrictions. According to Holmberg (1984:3), only weak reflexive pronouns or weak first or second person pronouns undergo long object shift; whereas Josefsson (1992:68) shows that all those pronouns that have different nominative and accusative forms undergo long object shift. Josefsson (1992:65–67) also discusses certain thematic restrictions on long object shift. Finally, Thráinsson (2001:154) points out that long object shift was also found in Danish and Norwegian in the nineteenth century.

(I am assuming here, along with Roberts 2001:122, that Baker's 1988a:13-15 mirror principle is relevant for the sequence of morphemes in complex words, even in a framework where such elements are checked in the relevant functional heads rather than base-generated there, as originally assumed by Baker 1988a.)

If, on the other hand, the Scandinavian pronoun were to incorporate into the verb at some point higher than V° (e.g., in T° or in I°), then it would have to be able to move at least one step as an XP since it would have to be able to move out of VP without incorporating into V° . If this were possible, however, then we would no longer have an account for Holmberg's generalisation, i.e., for why it is necessary for the verb to move out of VP even for pronominal object shift to be possible. There would in effect be no difference in this respect between an incorporation analysis of Scandinavian object shift and cliticisation in Romance, where the object clearly does not incorporate into V° ; cf. that the object is not incorporated into the main verb *acheté* 'bought' in (77)a.

It would thus seem that there are good reasons not to take pronominal object shift to be X° -movement along the lines of cliticisation in Romance. But then, what is it? And if pronominal object shift is no different from object shift of full DPs, we have no account of why four out of five Scandinavian languages have the former but not the latter. Later accounts (including the ones to be discussed in the rest of this chapter) have little to add to this discussion; although Holmberg (1999:22) and Chomsky (2001b:33) both assume that pronominal object shift is XP-movement as well, they do not attempt to account for why pronominal object shift is also found in at least four languages that do not have object shift of full DPs.

4. Equidistance and object shift

The so-called equidistance account (Chomsky 1993:15-19) is an attempt to derive Holmberg's generalisation. The idea is that the reason why object shift is possible only if the main verb leaves VP is that this verb movement is necessary to allow the object to move across [VP, Spec], which is the position where the subject is base-generated.

Chomsky (1993:15-19) thus solves two problems at the same time. One problem is to find a reason for Holmberg's generalisation, the other, to explain how object shift (as A-movement) may move across the base position of the subject in [VP, Spec] (which is an A-position), in violation of relativised minimality and/or the shortest movement condition. In other words, how can the object move from its base position, as in (79)a across [VP, Spec] into a higher specifier position, here [AgrOP, Spec], as in (79)b?

- (79) a. [VP Subject V° Object]
 b. [AgrOP **Object** AgrO $^\circ$ [VP Subject V° t_{obj}]]

Chomsky's (1993:18) suggestion is that if and only if the verb moves from V° to AgrO $^\circ$ do [VP, Spec] and [AgrOP, Spec] count as belonging to the same minimal domain. If [VP, Spec] and [AgrOP, Spec] belong to the same minimal domain, they are equidistant from the object position, which means that from the point of view of the shortest movement condition, the object is free to move into either [VP, Spec] or [AgrOP, Spec]. In other words, the object is free to move into [AgrOP, Spec] even though this means moving across the base position of the subject in [VP, Spec], as in the derivational step from (80)b to (80)c, as long as the verb has just moved from V° to AgrO $^\circ$, as in the step from (80)a to (80)b:

- (80) a. [VP Subject [V° Verb] Object]
 b. [AgrOP [AgrO $^\circ$ **Verb**] [VP Subject [V° t_{verb}] Object]]
 c. [AgrOP **Object** [AgrO $^\circ$ Verb] [VP Subject [V° t_{verb}] t_{obj}]]

If the verb would not move, [VP, Spec] and [AgrOP, Spec] would not belong to the same minimal domain and they would therefore not be equidistant, and so the object could not leave its base position (at least not by means of A-movement).¹³

¹³ As pointed out by Holmberg (1999:14) and Sells (2001:49), given that equidistance requires the main verb to undergo X° -movement to the next c-commanding head in order to make it possible for the shifted object to move past the trace of the subject, the combination of object shift and remnant VP-topicalisation discussed above as (52) and further below as (94)c/ (106)b/(112)a presents a serious challenge for an equidistance approach: Here the main verb moves as part of a topicalised VP, and thus there should be no equidistance between the object and the base position of the subject at any point.

According to Bobaljik and Jonas (1996:202), this scenario repeats itself when the subject moves out of its base position on its way to [AgrSP, Spec] (roughly equivalent to [IP, Spec]). The question is now how the subject may move across the object (or object trace) in [AgrOP, Spec] (which is an A-position). If we assume with Bobaljik and Jonas (1996:198) that AgrOP is the complement of T°, then if the verb moves from Agr° to T°, as in the step from (81)c to (81)d, then [AgrOP, Spec] and [TP, Spec] count as equidistant, and the subject may move across the object (or object trace) in [AgrOP, Spec], as in the step from (81)d to (81)e:

- (81) a. [VP Subject [V° Verb] Object]
 b. [AgrOP [AgrO° Verb] [VP Subject [V° t_{verb}] Object]]
 c. [AgrOP Object [AgrO° Verb] [VP Subject [V° t_{verb}] t_{obj}]]
 d. [TP [T° Verb] [AgrOP Object [AgrO° t_{verb}] [VP Subject [V° t_{verb}] t_{obj}]]]
 e. [TP Subject [T° Verb] [AgrOP Object [AgrO° t_{verb}] [VP t_{subj} [V° t_{verb}] t_{obj}]]]

Chomsky (1995c:349–355) eliminates Agr categories altogether and introduces the concept of multiple specifiers, so that in effect what was described earlier as [VP, Spec] and [AgrOP, Spec] are now considered to be two different specifiers of the same VP (or of the same V°). Chomsky (1995c:356–357) then goes on to revise the conditions on equidistance so that two specifiers of the same head are equidistant. This in turn means that equidistance no longer requires the verb to move from one head to the next higher one, and therefore the account of Holmberg's generalisation is lost,¹⁴ as noted by Chomsky (1995c:358) himself. The first step of object shift can now be a movement into the outer specifier of VP, and object shift is therefore able to cross the base position of the subject, which is the inner specifier of the same verb. As Chomsky (1995c:358) says, Holmberg's generalisation would have to be a property of the verb, so that it can have more than one specifier only if it is a trace. And Chomsky continues, "There is no obvious reason why this should be so."

5. Focus, interpretation and object shift

The two accounts discussed so far, the one linked to optional case assignment by a trace and the equidistance account, have at least three features in common:

- (82) (i) They assume that full DP object shift is optional and they therefore have nothing to say about which full DPs undergo object shift and which ones do not.
 (ii) They also both assume that pronominal object shift is obligatory.
 (iii) Finally, they both predict that non-DPs cannot possibly undergo object shift.

In section 5.1 we shall see that the first two assumptions do not hold, and in this section, we will see that the prediction that only DPs undergo object shift is not quite borne out either.

When the adverb *there* is unstressed and defocused, it may undergo object shift in Icelandic, (84), and it must do so in Danish, (86) (as observed in Mikkelsen 1911:653, Josefsson 1994:117; Haider et al. 1995:20; Thráinsson 2001:197, n. 10):

(83) Icelandic

- a. Býr_v Pétur ekki lengur t_v í Kaupmannahöfn ?
Lives Peter not longer in Copenhagen.DAT
 b. *Býr_v Pétur í Kaupmannahöfn_i ekki lengur t_v t_i ?
Lives Peter in Copenhagen.DAT not longer

(84) Icelandic

¹⁴ Even so, many analyses of object shift appealing to some form of equidistance have appeared, also after the publication of Chomsky (1995c), e.g. Bobaljik and Jonas (1996), Collins and Thráinsson (1996), Broekhuis (2000), and Hornstein, Nunes & Grohmann (2005:154).

- | | | | |
|----|---|---|---|
| a. | Býr _v Pétur | ekki lengur t _v þar | ? |
| | <i>Lives Peter</i> | <i>not longer there</i> | |
| b. | Býr _v Pétur þar _i | ekki lengur t _v t _i | ? |
| | <i>Lives Peter there</i> | <i>not longer</i> | |

(85) Danish

- | | | | |
|----|---|--|---|
| a. | Bor _v Peter | ikke længere t _v i København | ? |
| | <i>Lives Peter</i> | <i>not longer in Copenhagen</i> | |
| b. | * Bor _v Peter i København _i | ikke længere t _v t _i | ? |
| | <i>Lives Peter in Copenhagen</i> | <i>not longer</i> | |

(86) Danish

- | | | | |
|----|---|--|---|
| a. | ?? Bor _v Peter | ikke længere t _v der | ? |
| | <i>Lives Peter</i> | <i>not longer there</i> | |
| b. | Bor _v Peter der _i | ikke længere t _v t _i | ? |
| | <i>Lives Peter there</i> | <i>not longer</i> | |

These data might seem to support the view discussed in section 3.4, that pronominal object shift is cliticisation, because cliticisation in Romance also affects clitic adverbials, e.g. French *y* 'there'. However, like any other kind of object shift, object shift of Icelandic *þar* and of Danish *der* 'there' at subject to Holmberg's generalisation, as opposed to cliticisation of their Romance counterparts:

(87) French

- | | | |
|----|-----------------------------|--------------------|
| a. | Pierre n' y a | jamais vécu. |
| | <i>Pierre not there has</i> | <i>never lived</i> |

Danish

- | | | |
|----|--------------|------------------------------|
| b. | * Peter | har der aldrig boet. |
| | <i>Peter</i> | <i>has there never lived</i> |
| c. | Peter | har aldrig boet der. |
| | <i>Peter</i> | <i>has never lived there</i> |

The *there*-cases in (84) and (86) are actually the second time we have seen object shift applying to elements which could not possibly be objects. The first time was object shift with perception verbs (and causative verbs), as discussed in section 3.4 above, where the elements undergoing object shift were embedded subjects, not objects. A necessary criterion for object shift is thus that it is subject to Holmberg's generalisation, as opposed to most other kinds of syntactic movement.

As in section 3.4, the conclusion therefore remains that pronominal object shift is not a kind of cliticisation but a kind of object shift. The fact that non-DPs undergo object shift as well suggests that the key property is not case or equidistance, but something entirely different. In the following sections we shall see that the key property may be focus and interpretation.

5.1 The interpretation of object shift

From what has been said so far about full DP object shift in Icelandic, it might seem as if it is completely optional. This is not the case, however. As observed in Diesing and Jelinek (1995:150) and in Diesing (1996:79, 1997:418), the interpretation of an object-shifted object in Icelandic differs from that of a non-object-shifted one, and this difference parallels the difference in interpretation between scrambled and non-scrambled objects in e.g. German and Yiddish (cf. Diesing 1992b:129). Consider first a German example:

(88) German

- | | | |
|----|--------------|--------------------------------------|
| a. | ... weil ich | selten die kleinste Katze streichle. |
|----|--------------|--------------------------------------|

- because I* *rarely the smallest cat* *pet*
 b. ... weil ich **die kleinste Katze**_i selten t_i streichle.
because I the smallest cat rarely pet
 (from Diesing & Jelinek 1995:130, (9a), Diesing 1996:73 (17), and Diesing 1997:379, (14a))

Diesing and Jelinek (1995) and Diesing (1996, 1997) observe that the interpretation of (88)a is that whichever group of cats I meet, I rarely pet the one which is the smallest in that particular group. The interpretation of (88)b is that there is a cat which is smaller than all others, and that cat I rarely pet. In other words, the relative scope of *rarely* and *the smallest cat* correspond to their surface order, the one furthest left has wider scope. This is also the case in Icelandic:

(89) Icelandic

- a. Hann les sjaldan **lengstu bókina**.
He read rarely longest book-the
 b. Hann les **lengstu bókina**_i sjaldan t_i.
He read longest book-the rarely
 (from Diesing 1996:79, (32), and Diesing 1997:418, (82))

According to Diesing (1996, 1997), the interpretation of (89)a is that whichever group of books he is put in front of, he rarely reads the one which is the longest in that particular group. The interpretation of (89)b is that there is a book which is longer than all others, and that book, he rarely reads. Thus also here, the relative scope of *rarely* and *the longest book* correspond to their surface order, the one furthest left has wider scope. Diesing's claim is that these interpretation differences can be derived from the Mapping Hypothesis of Diesing (1992b:10, 1997:373); see also Diesing and Jelinek (1995:124). In other words, the differences follow from whether the object is inside the VP and thereby part of the 'nuclear scope (the domain of existential closure)' or outside VP but inside IP and thereby part of the 'Restriction (of an operator)'. The difference in interpretation between (89)a and (89)b thus supports an analysis where full DP object shift is not optional but, depending on which interpretation is the target, full DP object shift is either obligatory or impossible.¹⁵

¹⁵ If object shift is blocked (e.g., by the main verb being a participle), both the reading that is associated only with a shifted object in an object-shift construction and the reading associated only with a non-shifted object in an object shift construction are possible:

(i) Icelandic

- a. Í prófunum svarar hann **sjaldan** [_{DP} erfiðustu spurningunni].
In exams-the answers he rarely most-difficult question-the
 b. Í prófunum svarar hann [_{DP} erfiðustu spurningunni] **sjaldan**.
In exams-the answers he most-difficult question-the rarely
 c. Í prófunum hefur hann **sjaldan** svarað [_{DP} erfiðustu spurningunni].
In exams-the has he rarely answered [DP most-difficult question-the
 (from Vikner 2001a:325-326, (17), (18a))

The difference between (i)a and (i)b parallels the difference between (89)a and (89)b in the main text. The interpretation of (i)a is that regardless of which exam he is taking, he rarely answers whichever question happens to be the most difficult one in that particular exam. The interpretation of (i)b on the other hand, is that there is one particular question which is more difficult than all others (e.g., 'list all the irregular verbs in Icelandic') and which appears in most or all exams, and when he encounters this question, he rarely answers it.

In her minimalist analysis of (89)a and (89)b (and, by extension, of (i)a and (i)b), Diesing (1996:70, 1997:375-376) assumes the existence of a 'scoping constraint', which says that DPs should move to the position in the surface order that corresponds to their scope, and which therefore forces object shift in (89)b and (i)b and prevents object shift in (89)a and (i)a. Diesing takes these examples, (89)a,b and (i)a,b, to show that the scoping constraint must be a 'condition on convergence', to explain why the scoping constraint overrides 'procrastinate', an 'economy condition', which says do not move unless absolutely necessary.

Vikner (2001a:334) argues that while these assumptions give the correct predictions concerning (89)a,b and (i)a,b, they make an incorrect prediction concerning (i)c. The point is that in the reading of (i)c that corresponds to (i)b, the scoping constraint is overridden, *the most difficult question* has scope over *rarely* and yet does not

Diesing and Jelinek (1995:155) and Diesing (1997:413) also point out that claiming pronominal object shift to be obligatory is at best a gross oversimplification. The point is that there are pronouns which do not undergo object shift, namely, indefinite pronouns. They do not have wide scope, and therefore nothing forces them to leave their base position (both in languages with object shift, here Icelandic and Danish, and in languages with scrambling, here German):

(90) Icelandic

- a. Ég á ekki regnhlíf, áttu ekki **eina** ?
I have not umbrella, have-you not one
- b. *Ég á ekki regnhlíf, áttu **eina_i** ekki t_i ?
I have not umbrella, have-you one not

(91) Danish

- a. Jeg har ikke nogen paraply, har du ikke **en** ?
I have not any umbrella, have you not one
- b. *Jeg har ikke nogen paraply, har du **en_i** ikke t_i ?
I have not any umbrella, have you one not

(92) German

- a. Ich habe immer einen Regenschirm, warum hast Du nie **einen** ?
I have always an umbrella, why have you never one
- b. *Ich habe immer einen Regenschirm, warum hast Du **einen_i** nie t_i ?
I have always an umbrella, why have you one never

(from Vikner 1997a:11-12, (34)-(36), based on Diesing 1996:76, (24)-(25))

Actually, it can also be claimed that it is possible for definite pronouns not to undergo object shift. We have already discussed (72) and (74), where it was shown that stressed definite pronouns do not have to undergo object shift (and in languages where full DPs cannot undergo object shift, stressed definite pronouns cannot do it either). It is possible to reinterpret this kind of data to show that the interpretation depends on whether or not object shift takes place, and then the obligatory stress on definite pronouns that have not undergone object shift is a consequence of them being focused. The following is a further example from Danish:

(93) Danish

- En Dag saa hun Niccolo i Gaden ... Men han saa ikke hende.
One day saw she Niccolo in street-the But he saw not her

(from *Ekko* by Karen Blixen, with the original orthography, cited in Togeby 2003:169)

As pointed out by Togeby (2003:169), (93) requires that both the subject *han* 'he' and the object *hende* 'her' are stressed. In other words, (93) corresponds to English ... *but HE did not see HER*, where the focus is on *he* and *she* having switched roles, from 'seer' to 'seen' and vice versa. It would not have been

precede it. In other words, (i)c shows that Holmberg's generalisation overrides the scoping constraint, and (i)b shows that the scoping constraint overrides procrastinate. The problem is that within minimalism, for the scoping constraint to override procrastinate, it would (as Diesing 1997:422 says) have to be a condition on convergence, but that in turn would mean that it could not itself be overridden by anything; on the contrary, a violation of a condition on convergence must lead to a crash and this would incorrectly predict (i)c to be unambiguous. On the other hand, as Vikner (2001a) shows, an analysis within optimality theory would not run into this problem. In OT, it would be perfectly possible to have a particular constraint both override one constraint and itself be overridden by another.

Thráinsson (2001:193) points to a basic problem common to the accounts of Diesing (1996, 1997), Vikner (2001a), and Chomsky (2001b). In structures where a DP is not prevented from object shift by Holmberg's generalisation but nevertheless does not undergo object shift, see e.g. (89)a and (i)a, these accounts assume the DP to have only one interpretation, namely, the narrow scope/unfocused/weak reading. Although speakers agree that this reading is possible and preferred, it is not quite clear that the other one, the wide scope/focused/strong reading (i.e., the one that is the only reading in (89)b and (i)b), is completely excluded for all speakers; cf. de Hoop (1992:137-139).

ungrammatical for Karen Blixen to have written . . . *Men han saa hende ikke*, but this would not have the interpretation with focus on the role switching, it would simply correspond to English . . . *but he did not see her*, where the focus is on the entire VP.

This section has shown that depending on interpretation and focus, object shift of full DPs and object shift of pronouns may or may not take place.

5.2 Objects marked [–focus] must be licensed by being adjacent to elements marked [+focus]

Here we review the analysis proposed in Holmberg (1999). Even though focus and interpretation (which were dealt with in the previous section) are central to Holmberg's (1999) analysis, they will only come in at the end of the discussion.

Holmberg (1999:6) points out that Chomsky's (1993:15-19) equidistance account (as presented in section 4 above) only accounts for those cases of Holmberg's generalisation where the main verb leaves VP by moving into the next higher head position (i.e., the head which is the sister of the VP in question). The reason is that only by means of such a head movement do [VP, Spec] and [AgrOP, Spec] count as equidistant. If the verb were to leave VP in a different fashion, the equidistance account would predict object shift to be impossible, as [VP, Spec] and [AgrOP, Spec] would not be part of the same minimal domain and therefore not count as equidistant. Holmberg (1999) argues that this prediction is not borne out, and the example that shows this is (52) above, the Danish version¹⁶ of which is given here (94)c. The non-finite main verb *kysset* 'kissed' has left its VP by means not of head movement but of topicalisation, and yet object shift is well-formed:

(94) Danish

- a. * Kysset_x har_v jeg ikke [VP t_x [VP t_x **hende**]], ...
Kissed has I not her

¹⁶ Many speakers of (at least) Danish and Icelandic do not find (94)c/(i)c completely acceptable, but it would seem that there is general agreement that (94)c/(i)c is considerably less unacceptable than (94)a,b/(i)a,b:

(i) Icelandic

- a. * Kysst_x hef_v ég ekki [VP t_x [VP t_x **hana**]], ...
Kissed has I not her
 b. * Kysst_x hef_v ég ekki [VP t_v **hana**_i [VP t_x t_i]], ...
Kissed has I not her
 c. ? Kysst_x hef_v ég **hana**_i ekki [VP t_v [VP t_x t_i]], ...
Kissed has I her not

... bara haldið í höndina á henni.
only held in hand-the on her

'Kissed her, I haven't, only held her hand'

Engels & Vikner (2014:98, n. 1) list the following two Danish examples of (94)c which were found on the web:

(ii) Danish

- a. * Tja, helt stoppe kan man **det** nok ikke, ...
Well, completely stop can one it probably not
 'Well, completely stop it, that probably cannot be done.'
 b. * ... men helt udelukke kan man **det** da ikke, ...
but completely exclude can one it indeed not
 '... but completely exclude it, that cannot be done.'

- b. * Kysset_x har_v jeg ikke [_{VP} t_v **hende_i** [_{VP} t_x t_i]], ...
Kissed has I not her
- c. Kysset_x har_v jeg **hende_i** ikke [_{VP} t_v [_{VP} t_x t_i]], ...
Kissed has I her not

... bare holdt hende i hånden.
only held her in hand-the

'Kissed her, I haven't, only held her hand'

((94)c is the Danish version of the Swedish (52) above, from Holmberg 1999:7, (11a))

Holmberg (1999) then goes on to discuss other data where an element blocks object shift only if this element is not a trace. One such element is the particle in Swedish. Object shift is not possible across an unmoved particle, (95)b (see also (24)c above), but it is possible across the trace of a particle even in Swedish, (95)d:

(95) Swedish

Ja ja, jag ska mata din katt, men ...
All right, I shall feed your cat, but

- a. ... jag_k släpper_v t_k inte t_v in **den**.
I let not in it
- b. * ... jag_k släpper_v t_k **den_i** inte t_v in t_i.
I let it not in
- c. ... IN_j släpper_v jag inte t_v t_j **den**.
in let I not it
- d. ... IN_j släpper_v jag **den_i** inte t_v t_j t_i.
in let I it not

'All right, I'll feed your cat, but I won't let it in'

((95)d is from Holmberg 1999:17, (44b))

The assumption made in section 3.1, that traces of case assigners are optional case assigners, partially accounts both for object shift being possible across the trace of a particle in Swedish even though overt particles block object shift. It also partially accounts for object shift being possible across the trace of a non-finite main verb even though overt non-finite main verbs block object shift. In both case, the account is only partial in so far as what is predicted is that case does not have to be assigned to the base position of the object, because the (potential) case assigner is a trace, but what is not accounted for is how the shifted objects are assigned case, as the case assigners have not moved through I^o, for instance. As for the equidistance account discussed in section 4, it is also unclear whether it could account either for object shift being possible across the trace of a particle in Swedish or for object shift being possible across the trace of a non-finite main verb.

Another element that blocks object shift only if it is not a trace is the indirect object. Compare (31)–(33) above, which show that indirect objects block object shift of the direct object, (31)b, (32)b, (33)b, unless the two objects undergo object shift together, (31)c, (32)c, (33)c. Holmberg (1999) gives two Swedish examples where the indirect object has undergone A-bar-movement to [CP, Spec]:

(96) Swedish

- a. Vem_j gav_v du (t_j) **den_i** inte t_v t_j t_i?
Who gave you it not ?
 'Who did you not give it?'
- b. Henne_j visar_v jag (t_j) **den_i** helst inte t_v t_j t_i.
Her show I it rather not
 'To her, I would rather not show it'

(from Holmberg 1999:17, (43a,b))

However, in both of these examples, both the indirect and the direct object are pronouns. This means that the possibility cannot be excluded that the two objects could have undergone object shift together, and the indirect object, *hvem* 'who' / *henne* 'her' could then have undergone A-bar-movement from the position of the bracketed trace (t_j) to [CP, Spec] after object shift had taken place. This does not mean, though, that Holmberg does not have a point; it merely means that the two examples cited above do not support this point in an optimal way. A better example might be (97)b, because the indirect object that has undergone *wh*-movement to [CP, Spec], *Maria*, is a full DP which presumably could not have undergone object shift first, cf. (6) above:

(97) Danish

- a. **Maria_j** fortalte_v du forhåbentlig ikke $t_v t_j$ **noget**.
Maria told you hopefully not anything
 'I hope you did not tell MARIA anything'
- b. **Maria_j** fortalte_v du **det_i** forhåbentlig ikke $t_v t_j t_i$.
Maria told you it hopefully not
 'I hope you did not tell MARIA'

It is clear that the direct object could not have moved across the full DP indirect object, *Maria* if the latter had not undergone *wh*-movement, (98)b:

(98) Danish

- a. ?? Du fortalte_v forhåbentlig ikke t_v **Maria det**.
You told hopefully not Maria it
- b. * Du fortalte_v **det_i** forhåbentlig ikke t_v **Maria** t_i .
You told it hopefully not Maria
- c. * Du fortalte_v **Maria_j det_i** forhåbentlig ikke $t_v t_j t_i$.
You told Maria it hopefully not
- d. * Du fortalte_v **Maria_j** forhåbentlig ikke $t_v t_j$ **det**.
You told Maria hopefully not it

The same picture appears when A-movement of the indirect object occurs e.g. when the finite main verb is passivised in Icelandic. In (99), the indirect object *þér* 'you.DAT' has moved out of VP, and the direct object *þvílíkt tækifæri* 'such a chance' can therefore undergo object shift, (99)b:

(99) Icelandic

- a. *Þér_j* gafst_v oft $t_v t_j$ **þvílíkt tækifæri**.
You.DAT was-given often such chance
- b. *Þér_j* gafst_v **þvílíkt tækifæri_i** oft $t_v t_j t_i$.
You.DAT was-given such chance often
 'You were often given such a chance'

In (100), the indirect object *Maríu* 'Maria.DAT' has not moved out of VP. Therefore the direct object *þvílíkt tækifæri* 'such a chance' cannot undergo object shift, (100)b:

(100) Icelandic

- a. *Pétur* gaf_v oft t_v *Maríu* **þvílíkt tækifæri**.
Peter gave often Maria.DAT such chance

- b. * Pétur gaf_v þvílíkt tækifæri_i oft t_v Maríu t_i.
Peter gave such chance often Maria.DAT
 'Peter often gave Mary such a chance'

That object shift of a direct object is possible across the trace of an indirect object but not across an overt indirect object is not expected under any of the approaches discussed so far. Insofar as any of the above approaches would predict an (overt) indirect object to block object shift, the same would be expected of the trace of an indirect object.

In order to account both for the data captured by the accounts discussed earlier and for the additional data discussed here, Holmberg (1999:25-28) suggests that shifted objects are all marked [–focus] and that they must be licensed by being c-commanded by a category (an X^o or an XP) with the feature [+focus]. For more discussion of the shifted objects not being in focus, see section 5.1 above, which showed that objects which are focused do not undergo object shift. The reason why objects never object shift across (overt) verbs, prepositions, and (Swedish) particles is that these are inherently marked [+focus], and therefore they can license objects marked [–focus], and there would be no reason and thus no justification for object shift to go any further.

Adverbials, on the other hand, are not marked [+focus], and they can therefore not license objects marked [–focus]. Furthermore, if an element not marked [+focus] intervenes between the licensing [+focus] element and the [–focus] element that must be licensed, this licensing is blocked. These two assumptions, that an adverbial cannot itself license a [–focus] object and that an adverbial blocks such licensing if it intervenes between a licensing category and a [–focus] object, therefore force shifted objects to precede adverbials.¹⁷

In his article about phases, Chomsky (2001b:34) proposes an alternative analysis to the above, suggesting that the crucial difference concerning Holmberg's generalisation is whether or not the DP in question is properly inside the VP of the main verb, i.e., whether or not the DP is the leftmost overt element in the VP. If the DP is not the leftmost overt element in the VP, it may have either the interpretation *Int* or *Int'* (see e.g. example (i)c in n. 15, where object shift could not possibly have taken place). *Int'* roughly corresponds to Holmberg's (1999) [+focus], i.e., the interpretation assigned to a DP which remains in situ in an object shift context, cf. the discussion of (89)a above. *Int*, on the other hand, corresponds to Holmberg's (1999) [–focus], i.e., the interpretation assigned to a DP which has undergone object shift; cf. the discussion of (89)b above.

If the DP actually is the leftmost overt element in the VP, however, it may only have the interpretation *Int'* (Chomsky 2001b:34). If a [–focus] DP finds itself with *Int'*, which is an interpretation that is incompatible with its form, the sentence is deviant if the DP stays where it is, but a way out of the problem is for it to move to [v*P, Spec], where it will obtain the right interpretation *Int*, due to v*'s EPP feature (the result of this is a structure with object shift, see (89)b above and (i)b in n. 15). On the other hand, if a [+focus] object finds itself with *Int'*, there is no problem, as this is not incompatible with its form. It might move to, [v*P, Spec], but then it will be deviant, as here it will get the wrong interpretation *Int*, due to v*'s EPP feature (the result of this is a structure without object shift even though there could have been object shift, see e.g. (89)a above or (i)a in n. 15). In other words, Chomsky's (2001b) phase-based account rests on distinguishing whether something is the leftmost overt element in VP or not.¹⁸

5.3 Remnant VP-topicalisation as V^o-topicalisation

Section 5.3-5.5 will focus on a crucial part of the discussion in the sections 5.1 and 5.2, namely the analysis of cases of object shift in which a topicalised constituent contains a potentially blocking element (e.g. the main verb or a verb particle) but this topicalised constituent does not contain the defocused object.

¹⁷ As pointed out by Holmberg (1999:15) and Josefsson (2001:92, 2003:204), this account would incorrectly predict long object shift (i.e., object shift to a position left of the subject) to be impossible. See (i)a in n. 12 for a grammatical example of long object shift.

¹⁸ Svenonius (2001) suggests a different account of Holmberg's generalisation, also based on Chomsky's (2001b) phases. If a VP contains an overt verb, it is sent off to spell out and discourse-related movements (which include object shift) are impossible. If, on the other hand, the verb has left the VP, then the VP is not sent off to spell out on its own, but has to wait until it can be sent to spell out as part of a larger XP. In this case, discourse-related movements are allowed within this XP, and so object shift is possible.

The informal formulation of Holmberg's generalisation given in section 2.1.1 above (that the object may move only if verb movement has taken place) only addresses the blocking effect of a verb that has remained in situ, and says very little about the data discussed in the previous section, viz. the blocking effects of other elements, e.g. verb particles and indirect objects. Consider therefore the following more precise formulation of Holmberg's generalisation from Holmberg (1997:208, (20)), where "within VP" means that object shift may only be blocked by elements "properly inside" VP (i.e. not adverbials or other elements adjoined to VP):

(101) **Holmberg's generalisation**

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

Holmberg (1997, 1999) suggests that Holmberg's generalisation is a derivational condition, not a representational one; in other words, that it may not be violated at any point in the course of a derivation. At first glance, this would seem to be supported by the fact that object shift of an infinitival clause subject is possible as long as there is no intervening non-adverbial material, as illustrated in (102). A violation of Holmberg's generalisation as in (102)c cannot be repaired by subsequent operations as in (102)d that place the blocking element to the left of the shifted object.

(102) Swedish

- a. Jag såg_v **henne**_i inte [_{VP} t_v [_{IP} t_i arbeta]].
I saw her not work
- b. Jag har inte [_{VP} sett [_{IP} **henne** arbeta]].
I have not seen her work
- c. * Jag har **henne**_i [_{VP} sett [_{IP} t_i arbeta]].
I have her not seen work
- d. * [_{VP} Sett [_{IP} t_i arbeta]]_j har jag **henne**_i inte t_j
Seen work have I her not

((102)a,c,d are from Holmberg 1997:206, (14), (15))

Holmberg therefore concludes that the derivation of the grammatical examples (52)/(94)c above cannot involve object shift prior to remnant VP-topicalisation since that would violate Holmberg's generalisation in a parallel fashion to (102)d, as shown in (103). Rather, they must be derived by V°-topicalisation, with subsequent object shift; see (104).

(103) Deriving (52)/(94)c/(106)b as remnant VP-topicalisation

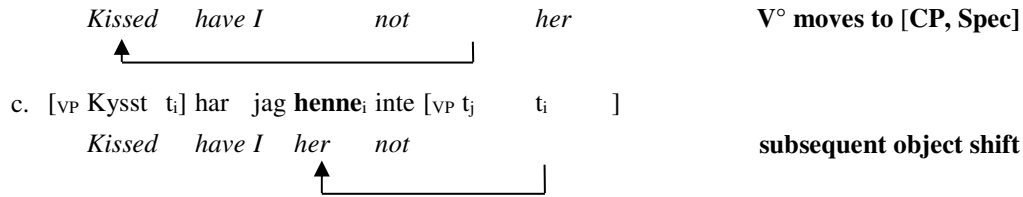
- a. Jag har jag inte [_{VP} kysst **henne**]
I have I not kissed her
- b. Jag har jag **henne**_i inte [_{VP} kysst t_i]
I have I her not kissed
- c. [_{VP} Kysst t_i] har jag **henne**_i inte t_j
Kissed have I her not

**object shift across a verb,
against H's generalisation!!**

**VP moves to [CP, Spec]
(remnant VP-topicalisation)**

(104) Deriving (52)/(94)c/(106)b as V°-topicalisation

- a. Jag har jag inte [_{VP} kysst **henne**]
I have I not kissed her
- b. [_{V°} Kysst_j] har jag inte [_{VP} t_j **henne**]



Note that the V°-topicalisation analysis is controversial from a theoretical point of view. First, it involves movement of an X° to an XP-position: The verb is placed in a specifier position. Second, it does not respect strict cyclicity as required by the Extension Condition (Chomsky 1995c:191): The non-finite verb is moved to [CP, Spec] before movement of the object to a lower position takes place. (This second objection may not be so problematic under the assumption that object shift is adjunction rather than substitution, and thus is not subject to the Extension Condition, or under the assumption that object shift is a PF phenomenon as assumed in Holmberg 1999, which would mean that it only takes place after spell out in the phonological component, i.e. at a point where the Extension Condition does not apply.)

Moreover, there is empirical evidence against the V°-topicalisation analysis. While object shift is usually optional in Swedish, it is obligatory if the verb occurs in topic position. See the contrast between (105) and (106).

(105) Swedish

- a. Jag kysste_v inte [_{VP} t_v **henne**].
I kissed not her
- b. Jag kysste_v **henne**_i inte [_{VP} t_v t_i].
I kissed her not
 'I didn't kiss her'

(106) Swedish

- a. * Kysst_x har_v jag inte [_{VP} t_v [_{VP} t_x **henne**]], ...
Kissed have I not her
- b. Kysst_x har_v jag **henne**_i inte [_{VP} t_v [_{VP} t_x t_i]], ...
Kissed have I her not
 'Kissed her, I haven't, ...'

((106)a is from Erteschik-Shir 2001:59, (18)c,
 (106)b=(52) is from Holmberg 1999:7, (11a))

This is unexpected under the V°-topicalisation analysis, where V°-topicalisation is in principle independent of object shift, and so if object shift is optional in (105), it should also be optional in (106). In contrast, the impossibility of (106)a would follow under the remnant VP-topicalisation analysis, as the optionality (±object shift) in (105) would correspond to a choice between object shift, i.e. (106)b, and no object shift, i.e. topicalisation of a VP that includes both the verb and the object.

In addition, if V°-topicalisation were possible, the sentences in (107)b and (108)b would be expected to be acceptable, contrary to fact. A verb cannot be topicalised on its own if it would leave behind a particle or PP-complement:

Danish

- (107) a. Jeg har ikke smidt den ud.
I have not thrown it out
- b. * Smidt_v har jeg **den**_i ikke t_v t_i ud.
Thrown have I it not out
- (108) a. Jeg har ikke stillet det på bordet.
I have not put it on table-the
- b. * Stillet_v har jeg **det**_i ikke t_v t_i på bordet.
Put have I it not on table-the

(from Engels & Vikner 2013a:196, (13), (14))

Moreover, Fox & Pesetsky (2005a) present data which show that remnant VP-topicalisation is actually possible in Scandinavian, as admitted in Holmberg (2005:148). These data as well as Fox & Pesetsky's analysis of them are the topic of the following section.

5.4 Holmberg's generalisation as the result of cyclic linearisation

As Fox & Pesetsky (2005a) observe, remnant VP-topicalisation is possible in Swedish under certain conditions: In double object constructions, topicalisation of a non-finite main verb may pied-pipe the indirect object, stranding the direct object in shifted position, (109)a. By contrast, stranding of an indirect object pronoun on its own is not possible, (109)b. Note also that (109)a must involve remnant VP-topicalisation, it cannot be the result of one movement of the verb *gett* and another movement of the indirect object *henne*: The Scandinavian languages are V2 languages, permitting only one constituent to the left of the finite verb in main clauses.

(109) Swedish

- a. ? [_{VP} Gett henne t_i] har jag **den_i** inte.
 Given her have I it not
- b. * [_{VP} Gett t_i den] har jag **henne_i** inte.
 Given it have I her not

(from Fox & Pesetsky 2005a:25, (30))

Fox & Pesetsky (2005a) suggest that the mapping between syntax and phonology, i.e. spell-out, takes place at a number of points during the course of derivation (including at VP and at CP), whereby the material in the spell-out domain D is linearised. The crucial property of spell-out is that it may only add information about the linearisation 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, which is how order preservation effects are derived.

To Fox & Pesetsky (2005a), the fact that object shift observes Holmberg's generalisation is a consequence of their cyclic linearisation. At the spell-out domain VP, the ordering statement V < O ("verb precedes object") is established, (110)b. At CP, spell-out adds information about the linearisation of the new material, (110)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 object shift, maintaining their relative order.

(110) Danish

- a. Jag kyssede_v **hende_i** ikke [_{VP} t_v t_i].
 I kissed her not
- b. Spell out VP: [_{VP} V Obj]
 Ordering: **V < Obj**
- c. Spell out CP: [_{CP} Subj V [_{IP} t_{Subj} Obj Adv [_{VP} t_v t_{Obj}]]]
 Ordering: **Subj < V** V < Obj
 V < Obj
 Obj < Adv

Note that the adverbial is merged outside the VP spell-out domain. Its position relative to the object (and the main verb) is thus not fixed until spell-out of CP, predicting that object shift can cross an adverb.

Object shift across a verb *in situ* gives rise to contradictory ordering statements (marked in grey in (111)). The ordering statements produced at the spell-out of CP, (111)c, contradict the statement V < Obj established at the spell-out of VP, (111)b:

(111) Danish

- a. * Jag har **hende_i** ikke [_{VP} kysset t_i].
I have her not kissed
- b. Spell out VP: [_{VP} V Obj]
 Ordering: **V < Obj**
- c. Spell out CP: [_{CP} Subj Aux [_{IP} t_{Subj} Obj Adv [_{VP} t_{Aux} [_{VP} V t_{Obj}]]]]
 Ordering: **Subj < Aux** **V < Obj**
Aux < Obj
Obj < Adv
Adv < V

In this way, Fox & Pesetsky (2005a) derive Holmberg's generalisation from ordering contradictions: Object shift cannot take place if it results in ordering statements at the spell-out of CP that contradict the ordering statements established at the spell-out of VP.

Notice that order preservation does not necessarily require that the main verb undergoes V°-to-I°-to-C° movement in all object shift cases. Consistent ordering statements can also be obtained when object shift applies across a non-finite verb *in situ* if subsequently remnant VP-topicalisation takes place, as in (52)/(94)c/(106)b above, repeated here as (112)a:

(112) Danish

- a. Kysset_x har_v jeg **hende_i** ikke [_{VP} t_v [_{VP} t_x t_i]], ...
Kissed have I her not
- b. Spell out VP: [_{VP} V Obj]
 Ordering: **V < Obj**
- c. Spell out CP: [_{CP} Subj Aux [_{IP} t_{Subj} Obj Adv [_{VP} t_{Aux} [_{VP} V t_{Obj}]]]]
 Ordering: **V < Aux** **V < Obj**
Aux < Subj
Subj < Obj
Obj < Adv

Correspondingly, the asymmetry between stranding of an indirect object and stranding of a direct object by remnant VP-topicalisation illustrated in (109) above is expected by order preservation. Stranding of an indirect object, but not stranding of a direct object gives rise to contradictory ordering statements at the various spell out domains: At VP, 'indirect object < direct object' is established, which is consistent with the spell out of CP if direct object is stranded under remnant VP-topicalisation as in (109)a but not if indirect object is stranded as in (109)b.

Note that various instances of A-movement and A-bar-movement operations, such as Scandinavian Negative Shift (see Christensen 2005, Engels 2011, 2012), *wh*-movement, topicalisation, passivisation, and subject raising do not obey Holmberg's generalisation.

(113) Danish

- a. Måske har de **ingenting_i** spist t_i hele dagen. Scandinavian
Maybe have they nothing eaten all day Negative Shift
 'Maybe they haven't eaten anything all day'
- b. **Hvor meget_i** har de spist t_i i dag? *wh*-movement
How much have they eaten today

- c. **Kagen_i** vil vi spise t_i i aften. topicalisation
Cake-the will we eat tonight
- d. Måske bliver **kagen_i** spist t_i i aften. passivisation
Maybe is cake-the eat tonight
 'Maybe the cake will be eaten tonight'
- e. Nu ser **de_i** ud til t_i at falde i søvn. subject raising
Now looks they out to to fall asleep
 'Now they seem to be falling asleep'

Fox & Pesetsky (2005a) predict that these movement operations proceed successive cyclically: The moved constituents in (113) must have moved to the edge of VP prior to linearisation of the VP domain to prevent ordering contradictions at the spell out of CP. This is illustrated in (114) for the Negative Shift in (113)a:

(114) Danish

- a. Måske har_v de **ingenting_i** [VP spist t_i hele dagen].
Maybe have they nothing eaten all day
- b. Spell out VP: [VP Obj [VP V t_{Obj}]]
 Ordering: **Obj < V**
- c. Spell out CP: [CP Adv Aux [IP Subj t_{Aux} [NegP Obj [AuxP t_{Aux} [VP t_{Obj} V t_{Obj}]]]]]
 Ordering: **Adv < Aux** **Obj < V**
 Aux < Subj
 Subj < Obj
 Obj < V

Hence, the crucial difference between the various movement operations in (113) on one hand and object shift on the other is that the former may go via the edge of VP while object shift cannot. Fox & Pesetsky (2005b:245) propose that the movement through the edge of VP might be semantically motivated: Phrases with a feature [+negative], [+wh], [+topic] or [+focus] cannot be interpreted in argument position and thus must undergo movement:

It is possible that movement to the edge of VP is motivated by this semantic factor, and that there is no independent feature of v that could motivate such movement. In the case of [negative] phrases, it is the semantics that motivates the movement, and in the case of object shift there is no motivation.
 Fox & Pesetsky (2005b:245).

However, the ability to move across a verb *in situ* may be subject to cross-linguistic variation. For instance, Negative Shift across a verb *in situ* is prohibited in present-day colloquial Norwegian, (115)a, but possible in the other Scandinavian varieties, cf. e.g. (113)a, and see e.g. Faarlund et al. (1997:712) and the corpus data reported in Engels (2012:114). In other words, although movement of a negative object through the edge of VP is obligatory in Danish, it is not possible in Norwegian; the semantic factor apparently does not apply in this language. Note that *in situ* occurrence of a negative phrase is not permitted under a sentential negation reading either, (115)b; instead, the *ikke...noen*-variant ('not...any') must be used, (115)c.

(115) Norwegian

- a. * De har **ingenting_i** spist t_i hele dagen.
They have nothing eaten all day
- b. * De har spist **ingenting** hele dagen.
They have eaten nothing all day

- c. De har ikke spist **noen ting** hele dagen.
They have not eaten any thing all day

In addition, if movement via the edge of VP was motivated by the feature [+negative], such movement would be expected to be obligatory. However, this could not possibly be the case, given that string-vacuous Negative Shift is possible in all Scandinavian varieties, cf. (116) which is grammatical both in Norwegian and in Danish (and which has same spelling in the two languages). The fact that *in situ* occurrence of a negative object is prohibited, (115)b, suggests that string-vacuous Negative Shift takes place in (116). The derivation of (116) would in fact have to be parallel to the one in (110) above, i.e. the object could not have gone through the edge of VP, since this would lead to an ordering contradiction.

(116) Norwegian & Danish

- a. De spiste **ingenting** hele dagen.
They ate nothing all day

Fox & Pesetsky (2005b:245) also consider the option of covert movement through the edge of VP, but if covert movement was possible, it would additionally be expected that a negative object may occur *in situ*, contrary to fact; see (115)b.

Note further that Fox & Pesetsky (2005a,b) make an incorrect prediction concerning remnant VP-topicalisation in constructions with an auxiliary *in situ* (see also the discussion in Engels & Vikner 2013a). Fox & Pesetsky (2005a,b) 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 object shift across an auxiliary is possible, (117)a = (118)c. This is because it is consistent with the ordering statements previously established, none of which mention the auxiliary at all. (See also the examples in (118) and (119) below.)

(117) Danish

- a. * [_{VP} Kysse t_i] har jeg **hende_i** aldrig villet.
Kiss have I her never wanted
- b. Spell out VP: [_{VP} V Q]
 Ordering: **V < Obj**
- c. Spell out CP: [_{CP} [_{VP} V t_O] Aux2 [_{IP} S t_{Aux} [_{AuxP2} Q [_{AuxP2} Adv [_{AuxP2} t_{Aux} [_{AuxP1} Aux1 t_{VP}]]]]]]]]]
 Ordering: **V < Aux2** V < Obj
Aux2 < Subj
Subj < Obj
Obj < Adv
Adv < Aux1

Fox & Pesetsky (2005b:252) even go so far as to draw a tree structure of the problematic structure, but then they claim, following Holmberg (2005:151) that their prediction cannot be checked because VP-topicalisation is impossible across an auxiliary *in situ*, regardless of whether or not object shift out of the VP has taken place first. However, as shown in (118)/(119), this is not correct: VP-topicalisation is actually possible across an auxiliary *in situ*, but remnant VP-topicalisation is not; the shifted object can neither precede nor follow the auxiliary *in situ*.

(118) Danish

- a. [_{VP} Kysse hende] har_v jeg aldrig villet.
Kiss her have I never wanted
- b. * [_{VP} Kysse t_i] har jeg aldrig villet **hende_i**.
- c. * [_{VP} Kysse t_i] har jeg **hende_i** aldrig villet.

(119) Swedish

- a. [VP Kyssa henne] har_v jag aldrig velat.
Kiss her have I never wanted
- b. ?? [VP Kyssa t_i] har jag aldrig velat **henne_i**.
- c. * [VP Kyssa t_i] har jag **henne_i** aldrig velat.

In order to account for the data in (118)/(119) which are not accounted for given the formulation of the analysis in Fox & Pesetsky (2005a,b), another assumption could be added to the analysis, viz. that auxiliary phrases also constitute spell-out domains (see also Bobaljik 2005): Then VP-topicalisation would have to proceed via the edge of the AuxP of *villet/velat* and via the edge of the AuxP of *har* at points where object shift could not possibly already have applied (given that object shift targets a position to the left of the VP-internal position of the finite verb). In other words, remnant VP-topicalisation would correctly be expected to be ungrammatical; see the conflicting ordering statements marked in grey in (120). Movement of the entire VP, still including the object, via these two edge positions predicts that the object precedes both auxiliaries as in the case of topicalisation of the entire VP, (118)a/(119)a. As illustrated in (120), object shift and subsequent V^o-to-I^o-to-C^o movement of the finite auxiliary across the shifted object is thus correctly ruled out by ordering contradictions.

(120) Danish

- a. * [VP Kysse t_i] har jeg **hende_i** aldrig villet.
Kiss have I her never wanted
- b. Spell out VP: [VP V Q]
 Ordering: **V < Obj**
- c. Spell out AuxP1: [AuxP1 [VP V Q] [AuxP1 Aux1 t_{VP}]]
 Ordering: **V < Obj** V < Obj
Obj < Aux1
- d. Spell out AuxP2: [AuxP2 [VP V Q] [AuxP2 Aux2 [AuxP2 t_{VP} [AuxP1 Aux1 t_{VP}]]]]
 Ordering: **V < Obj** V < Obj V < Obj
Obj < Aux2 Obj < Aux1
Aux2 < Aux1
- e. Spell out CP: [CP [VP V t_O] Aux2 [IP S t [AuxP2 Q [AuxP2 Adv [AuxP2 t_{VP} [AuxP2 t [AuxP2 t_{VP} [AuxP1 Aux1 t_{VP}]]]]]]]
 Ordering: **V < Aux2** V < Obj V < Obj V < Obj
Aux2 < Subj **Obj < Aux2** Obj < Aux1
Subj < Obj Aux2 < Aux1
Obj < Adv
Adv < Aux1

However, with the additional assumption that auxiliary phrases also constitute spell-out domains, the derivation given in (112) of the remnant VP-topicalisation in the grammatical example in (52)/(94)c/(106)b above, repeated here as (121), would no longer be possible:

(121) Swedish

- Kysst_x har_v jag **henne_i** inte [VP t_v [VP t_x t_i]], ...
Kissed has I her not
- ... bara hållit henne i handen.
only held her in hand-the

'Kissed her, I haven't, only held her hand'

(from Holmberg 1999:7, (11a))

Also here, (remnant) VP-topicalisation would have to move via the edge of the AuxP of *har* at a point where object shift could not possibly already have applied. Stranding of the object in object shift position during VP-topicalisation as in (121) would thus incorrectly be predicted to be ungrammatical as the finite auxiliary would have to undergo V° -to- I° -to- C° movement across the shifted object, giving rise to ordering contradictions.

The only way to derive (121) with the additional assumption that AuxPs also constitute spell-out domains, would be to follow Holmberg (1997, 1999) and take it to be a case of V° -topicalisation, but that in turn would incorrectly predict not only (121) but also (118)c/(119)c as well as (107)b/(108)b above to be grammatical.

5.5 Order preservation as a violable constraint

As an alternative to the analyses discussed above, Holmberg (1997, 1999) and Fox & Pesetsky (2005a,b), an optimality-theoretic approach to object shift is proposed in Engels & Vikner (2006, 2013a,b, 2014), i.e. an analysis in terms of interaction of violable constraints.¹⁹ The three main constraints are STAY (economy of movement, i.e. move as little as possible), SHIFT (i.e. move any [-focus] constituent out of the VP), and ORDER PRESERVATION (keep the original order between constituents).

The idea of preservation of linear order goes back to Müller (2001:288-294), Sells (2001:178)²⁰, and Williams (2003:15-23), and the constraint ORDER PRESERVATION restricts object shift so that it applies only when the verb has moved out of the VP (i.e. Holmberg's generalisation, section 2.1.1 above). Only when the verb leaves VP does object shift not reverse the original order between the main verb and the shifted object. Similarly, object shift crossing an indirect object, a particle or a preposition would reverse the original order between these elements and the shifted object (section 2.1.2 above), and object shift under these circumstances is therefore also dispreferred by ORDER PRESERVATION.

Also the asymmetry between the indirect and the direct object under remnant VP-topicalisation in (109) (repeated here as (122)), which was the main motivation for the analysis of Fox & Pesetsky (2005a), can be accounted for by means of ORDER PRESERVATION:

(122) Swedish

- a. ? [_{VP} Gett henne t_i] har jag **den_i** inte.
 Given her have I it not
- b. * [_{VP} Gett t_i den] har jag **henne_i** inte.
 Given it have I her not

(from Fox & Pesetsky 2005a:25, (30))

The crucial difference between (122)a and (122)b is that in (122)a, where the direct object has undergone object shift out of the VP before the remnant VP is topicalised, the original order between the two objects (indirect precedes direct) is not reversed, whereas the original order between the two objects is reversed in

¹⁹ In addition to Sells (2001), cf. n. 20 below, and Vogel (2006), cf. section 6 below, preceding Optimality Theory analyses also include Broekhuis (2008), where the two constraints RELATIVISED MINIMALITY and HEADS PRECEDE THEIR COMPLEMENTS together have an effect very similar to ORDER PRESERVATION. For details of the problems such an analysis might have with an asymmetry like (122) above, see Engels & Vikner (2014:40).

²⁰ Sells (2001) actually derives order preservation (rather than postulating it as a constraint) in an analysis in which object shift does not involve syntactic movement (see also Börjars et al. 2003, Andréasson 2007, 2010). Both word orders, with and without object shift, are base-generated and subject to the same set of alignment constraints. Sells (2001:54) furthermore takes the position of the shifted object to be adjoined to I° , which means that pronominal object shift receives a very different analysis from the full DP object shift found as found in Icelandic, cf. the discussion in section 3.4 above. Furthermore, in Engels & Vikner (2014:42-44), it is claimed that the analysis in Sells (2001) could not account for various of the remnant VP-topicalisation cases discussed above, in particular (122).

(122)b, where the direct object occurs further left than the indirect one. This means that (122)a will incur less violations of ORDER PRESERVATION than (122)b.

Another asymmetry, not mentioned above, can be accounted for in a similar way. Consider again the combination of object shift and remnant VP-topicalisation discussed above as (52)/(94)c/(106)b/(112)a, of which a slightly different version is given in (123)a. The difference between (123)a and (123)b,c is that the remnant VP is topicalised out of the main clause in (123)a but out of an embedded clause in (123)b,c:

(123) Danish

- a. [?] [_{VP} Set _{t_i}] har jeg **ham_i** faktisk ikke, ...
 Seen has I him not

... men jeg har da talt i telefon med ham.

but I have at-least spoken on phone with him

'I haven't actually seen him, but I have indeed talked to him on the phone'

- b. * [_{VP} Set _{t_i}] tror jeg ikke at hun har **ham_i**, ...
 Seen believe I not that she has him

- c. * [_{VP} Set _{t_i}] tror jeg ikke at hun **ham_i** har, ...
 Seen believe I not that she him has

... men hun har måske nok talt i telefon med ham.

but she has maybe well spoken on phone with him

'Seen him, I don't think that she has, but she may very well have talked to him on the phone'

(adapted from Engels & Vikner 2013a:209, (44))

In (123)b, the object has actually not left VP completely (all Danish finite verbs, including finite auxiliaries, remain inside the VP in non-V2 contexts, as Danish does not have V°-to-I° movement), and a crucial violation of SHIFT is incurred. In (123)c, the object has been moved outside all VPs, but now the original order between the finite auxiliary *har* 'has' and the shifted object has been reversed, which causes a crucial violation of ORDER PRESERVATION. Given that (123)b,c involve object shift in combination with an auxiliary which has not left the VP, rather parallel to (118)/(119), the analysis in Fox & Pesetsky (2005b:252) would have exactly the same problems as it had with (118)/(119), cf. the discussion above.

Section 5 was concerned with the interaction between object shift and focus and interpretation. Section 5.1 clearly showed that focus and interpretation had to be taken into account, as object shift never applies to focussed elements. Section 5.2 discussed two analyses of this: Holmberg's (1999:25-28) analysis that shifted objects are all marked [-focus] and have to be licensed by being c-commanded by a [+focus] category, and Chomsky's (2001b) *Int* vs. *Int'* analysis. Section 5.3-5.5 took up a crucial part of the discussion in the sections 5.1 and 5.2, namely the analysis of cases of object shift in which a topicalised constituent contains a potentially blocking element (e.g. the main verb or a verb particle) but this topicalised constituent does not contain the defocused object. Topicalisation thus removes a block to object shift, and this allowed the teasing apart of opposite forces: One that fuels movement out of focus (causing object shift) and one that avoids movement and retains the original ordering (counteracting object shift).

6. Prosody and object shift

This section will briefly discuss some analyses in which phonetic and prosodic properties play a crucial role, but it will not touch on analyses that contain only more peripheral references to phonology, e.g. Chomsky's (2001b:34, (58)) reference to phonological borders or Josefsson's (2010:13) observation that disyllabic object pronouns are somewhat more resistant to object shift than monosyllabic ones.

Vogel's (2006) Optimality Theory analysis of OS combines syntactic constraints with phonological ones, with the latter having a central status, e.g. ALIGN-PHONOLOGICAL-PHRASE, which says that the right edge of a phonological phrase should be aligned with the right edge of a prosodic word. As a right-peripheral unstressed pronoun does not constitute a prosodic word, the version of the sentence where the unstressed pronouns has moved away from the right edge of the clause is therefore favoured, as in (7)

above. However, if the unshifted object pronoun is not at the right edge of the clause (e.g. if the base position of the potentially shifted object is followed by something else, as in (32)a above), it is a completely different constraint that causes object shift, namely one that prefers the medial adverbial to be adjacent to the element to the right of the pronoun (thus pushing the pronoun away from the expected position between these two elements).

Another prosodically based analysis to object shift is Erteschik-Shir (2005a,b). This analysis takes adverbials as a starting point, i.e. the one type of constituent that object shift would seem to be able to move across. Adverbials are here not seen as "merged at the left VP edge [... but] instead [...], adjuncts are assumed to be merged on a separate plane" (Erteschik-Shir 2005a:57-58). This has the effect that sentential adverbials (including negation) may occur left of IP, left of VP, or right of VP. This is of course subject to other constraints, and one such constraint is that both weak adverbials and weak pronouns must prosodically incorporate e.g. into a verb. This would still allow for both verb-pronoun-adverbial and verb-adverbial-pronoun orders, even though object shift always result in the latter. Erteschik-Shir (2007:150): In the verb-adverbial-pronoun order, "the adverb incorporates into the verb and the pronoun is no longer able to incorporate as required". In the verb-pronoun-adverbial order, "however, the pronoun incorporates first. The verb-pronoun sequence, probably due to the phonological weakness of the incorporated pronoun, can still serve as a host for incorporation, allowing the adverb to incorporate." (This obligatory prosodic incorporation is perhaps not all that far from Holmberg's (1997, 1999) idea (discussed in section 5.2) that an object marked [-focus] has to be licensed by being adjacent to a categories marked [+focus].)

There is however one set of exceptions to this. In Swedish and the south-eastern dialects of Danish (cf. (8) above and n. 3) where object shift is not obligatory, Erteschik-Shir (2005a:70) assumes that the resulting verb-adverbial-pronoun order is allowed by the weak pronoun being prosodically incorporated into the adverbial, an option that requires the possibility of a special pitch accent which is not available e.g. in standard Danish. The reason why this gives rise to optional object shift (rather than prevent object shift) is linked to the above assumptions concerning adverbial licensing where the adverbial may be realised in different positions, and it contrasts with the situation where a weak pronoun incorporates into e.g. a preposition, a particle or an indirect object, as these elements do not have the positional flexibility that adverbials have.²¹

For Vogel (2006), an object pronoun may remain in situ in an object shift context only if it is stressed, as then it will count as a prosodic word. For Erteschik-Shir (2005a,b), a pronoun can occur in a verb-adverbial-pronoun order only if it does not have to undergo prosodic incorporation, i.e. if it has its own stress (disregarding the above-mentioned special tonal pitch properties of Swedish and south-eastern Danish which allow this order even with weak pronouns). Against both these analyses, Mikkelsen (2011:241) argues that it is focus rather than stress that matters for object shift. In specificational copular clauses like (124), the pronoun is invariably focused, and it cannot undergo object shift, even though it is unstressed:

(124) Danish

Den hurtigste spiller på holdet er uden tvivl Morten og ...
the fastest player on team-the is without doubt Morten and

- a. ... den højeste er faktisk også **ham**.
the tallest is actually also him

- b. * ... *den højeste er **ham**_i faktisk også t_i.

(from Mikkelsen 2011:241-42, (20)a,b)

To Mikkelsen (2011), such data suggest that the triggering factor is information structure rather than prosody.

Also in the last analysis to be mentioned here, Hosono (2013), prosodic considerations are essential. There it is argued that unstressed objects cause a tonal downstep which also affects the following elements, and which therefore triggers a focal effect on the element preceding the unstressed object. If an unstressed object thus were to follow e.g. a negation, this would cause a focal effect on the negation, and so if negation is not intended to be in focus, the unstressed object has to move, and then the tonal downstep that the shifted object causes will carry on to the negation that follows it, preventing a focal effect on the negation (Hosono 2013:151). The elements that block object shift (prepositions, particles or indirect objects) are elements that need a focal accent and which would be prevented from getting one if

²¹ For arguments against the way this analysis is applied to Icelandic and Faroese in Erteschik-Shir (2005a:77-80), see Thráinsson (2013:168-170).

object shift would take place, and this is why object shift is blocked. In other words, object shift is only possible when it crosses elements that do not need focal accent.

This also makes a difference with respect to the argument based on (124) above, which would not be a counterexample: The impossible (124) is impossible because it would prevent any kind of focal effect on *også* 'too', which however has to be in focus.

Hosono (2013:152) further argues that the later in the clause the pitch peak normally occurs in a continental Scandinavian language or dialect, the less likely the language or dialect is to have (obligatory) object shift, and she mentions Älvdalsmålet, which has a late pitch peak and which does not seem to have object shift.

7. Conclusion

As set out in section 1, this chapter took 'object shift' to only refer to the kind of object shift typically found in the Scandinavian languages (following the original use of the term in Holmberg 1986:165), to the exclusion of e.g. scrambling as found in Afrikaans, Dutch, Frisian, German, and Yiddish.

Section 2 reviewed a number of properties and restrictions that apply to object shift but not to scrambling: E.g. that the verb has to leave the VP, section 2.1.1; that prepositions, particles, and indirect objects block object shift, section 2.1.2; that object shift does not license parasitic gaps, section 2.2; and that only DPs (or almost only DPs) undergo object shift, section 2.3. Finally, the potential landing sites were discussed in section 2.4.

The difference between Icelandic object shift, which applies to all DPs, and object shift in the other Scandinavian languages, which only applies to pronouns, was discussed in section 3.4.

The bulk of the chapter discussed the various suggestions as to key factors in the analysis of object shift and the restrictions it underlies: Case in section 3, equidistance in section 4, focus/interpretation in section 5, and prosody in section 6.

See also:

Mittelfeld Phenomena: Scrambling in Germanic; Clitic Climbing; Clitic Clusters; Clitic Doubling; Quantified Expressions and Quantitative Clitics; Embedded Root Phenomena

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