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OBJECT SHIFT AND DOUBLE OBJECTS IN DANISH.

1. Introduction.

In this paper, I will first discuss object shift in Danish and compare it to scrambling in German, relying heavily on Holmberg (1986), and paying special attention to the A-/A'-movement distinction. Second, I will propose an analysis of double object constructions, to account for the behaviour of these constructions when they are subject to object shift and to other kinds of movement.¹

I will use the term "scrambling" for the movement found in German and Dutch, and the term "object shift" for the movement found in Scandinavian. As I will argue below, these two are different processes, although they are related.

(German) scrambling is illustrated in (1) and (2). In both the object is base-generated immediately left of the verb from which it receives a thematic role, and from there it moves to the left of the VP-adjoined adverbials. As the examples are main clauses, the verb itself has moved to C°. (2) furthermore illustrates that scrambling may separate an object from its quantifier, as suggested by Giusti (1989, forthc.), using the analysis of floated quantifiers in Sportiche (1988).

- (1) Ge. Gestern las Uli [VP es [VP ohne Zweifel [VP nicht [VP t t]]]] [I° t]
Yesterday read Uli it without doubt not
- (2) Ge. Gestern las Uli [VP sie [VP nicht [VP t alle t]]] [I° t]
Yesterday read Uli them not all

(Scandinavian) object shift is illustrated in (3) and (4). Also here the object moves from its base-generated position next to the verb to a position left of the VP-adjoined adverbials, and also here a quantifier may be left behind in the process. Again the verb itself has moved to C°, as the examples are main clauses.

- (3) Da. I går læste Ole [I° t] [VP den [VP uden tvivl [VP ikke [VP t t]]]]
Yesterday read Ole it without doubt not

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- (4) Da. I går læste Ole [_I t] [_{VP} dem [_{VP} ikke [_{VP} t t alle]]]
- Yesterday read Ole them not all

2. A-movement or not?

Most of the discussion in the literature has been about whether scrambling and object shift are instances of A-movement or of A'-movement. As for scrambling, no real consensus has been reached, though most linguists now seem to agree that it is not A-movement,² but rather something close to A'-movement, even if it differs from more familiar cases of A'-movement, such as *wh*-movement and topicalisation. As for object shift, Holmberg (1986) suggested that it is A-movement, and which is what will be argued for below.

The arguments in 2.1-2.5 are built on the two facts that A-movement (cf. passivisation and raising) goes from a caseless position into a case-assigned one, and that it cannot give rise to parasitic gaps.

2.1 Scrambling moves all NPs, object shift only moves NPs with m-case.

Scrambling is not movement to a case-assigned position, whereas object shift is. The assumption is that NPs with morphological case (m-case) may be licensed or case marked by the verb (or verb trace) in I°, whereas NPs without m-case cannot be licensed by the verb (or verb trace) in I°.³

Scrambling moves any (definite) NP in Du., (5), and Ge., (6), but object shift only moves some NPs in Scandinavian.

- (5) Du. a. Ik ontmoet de directeur morgen over die zaak in Paris t t
I meet the manager tomorrow about this matter in Paris
 b. Ik ontmoet morgen de directeur over die zaak in Paris t t
 c. Ik ontmoet morgen over die zaak de directeur in Paris t t
 (ex. adapted from Vanden Wyngaerd (1988:1))
- (6) Ge. a. Ich treffe den Direktor morgen wegen dieser Sache in Paris t t
I meet the manager tomorrow because of this matter in Paris
 b. Ich treffe morgen den Direktor wegen dieser Sache in Paris t t
 c. Ich treffe morgen wegen dieser Sache den Direktor in Paris t t

² With some exceptions, e.g. Vanden Wyngaerd (1988).

³ In Holmberg (1986:216), it is assumed that the NP which undergoes object shift does not have to be assigned case at all. The NP is assumed to have inherent case, and this is reflected by its m-case. In section 2.3, arguments against this analysis are presented.

Holmberg (1989:19) proposes that the object-shifted NP receives case from I°, as "structural case is assigned by functional categories". So for Holmberg (1989), case from I° is not dependent on the verb having moved (through) I°, whereas under the present analysis it is. Though this difference has no consequences for the data discussed in this paper, I disagree with Holmberg's suggestion. I find it counterintuitive to have case assigned by a category as devoid of content as I° is in Da./Sw. (cf. e.g. Holmberg & Platzack (1988)) (assuming that nominative is assigned from C°).

Full NPs move in Icelandic, (7), as all NPs have m-case in Ic. In Da. only pronouns move, (8) and (9), as only pronouns have m-case. This observation is due to Holmberg (1986:225). (The fact that pronouns have to move, cf. (9a), will be discussed below in connection with (27)).

- (7) Ic. a. Hvers vegna lásu stúdentarnir ekki greinina
Why read students-the not article-the
 b. Hvers vegna lásu stúdentarnir greinina ekki t
Why read students-the article-the not
 (ex. adapted from Holmberg (1986:166))
- (8) Da. a. Hvorfor læste studenterne ikke artiklen
Why read students-the not article-the
 b. *Hvorfor læste studenterne artiklen ikke t
Why read students-the article-the not
- (9) Da. a. *Hvorfor læste studenterne ikke den
Why read students-the not it
 b. Hvorfor læste studenterne den ikke t
Why read students-the it not

2.2 Scrambling does not require verb movement first, but object shift does.

Scrambling is movement out of a case-assigned position, but object shift is movement out of a non-case-assigned position. I assume, following Holmberg (1986:225), that only if the verb itself has moved may the object position be left caseless, whereas if the verb does not move, the object position always receives case.

- (10) Du. a. Ik zal de directeur morgen over die zaak in Paris t ontmoeten
I shall the manager tomorrow about this matter in Paris meet
 b. Ik zal morgen de directeur over die zaak in Paris t ontmoeten
 c. Ik zal morgen over die zaak de directeur in Paris t ontmoeten
- (11) Ge. a. Ich werde den Direktor morgen wegen dieser Sache in Paris t treffen
I will the manager tomorrow because of this matter in Paris meet
 b. Ich werde morgen den Direktor wegen dieser Sache in Paris t treffen
 c. Ich werde morgen wegen dieser Sache den Direktor in Paris t treffen

Scrambling does not require the verb to have moved, (10) and (11), but object shift does. Thus the following attempts at object shift are impossible, as there is still a verb inside VP in modal constructions (i.e. the infinitive in (12) and in (10) and (11)), in compound tenses (i.e. the participle in (13)), and in embedded clauses (i.e. the finite verb in (14)):

- (12) Da. a. Hvorfor skal studenterne ikke læse den
Why shall students-the not read it
 b. *Hvorfor skal studenterne den ikke læse t
Why shall students-the it not read
- (13) Da. a. Hvorfor har studenterne ikke læst den
Why have students-the not read it
 b. *Hvorfor har studenterne den ikke læst t
Why have students-the it not read

- (14) Da. a. Det var godt at han ikke købte den
It was good that he not bought it
 b. *Det var godt at han den ikke købte t
It was good that he it not bought

In Ic. there are independent reasons to assume that the verb leaves VP in embedded clauses (in non-compound tenses), and one of them is that it precedes the negation in (15), whereas the verb follows the negation in Da. in (14), cf. Holmberg & Platzack (1988). As should be expected, object shift is possible in embedded clause in Ic., but not in Da.

- (15) Ic. a. það var gott að hann keypti ekki bókina
It was good that he bought not book-the
 b. það var gott að hann keypti bókina ekki
It was good that he bought book-the not
 (ex. from Holmberg (1986:217))

Summing up: The kind of case (i.e. any case vs. only m-case) depends on whether the case assigning verb (or verb trace) is the foot of the verb chain:⁴

- (16) a. the D-str. verb position licenses both m-case and non-m-case (2.1)
 b. other verb positions license only m-case

The obligatoriness of case-assignment depends on whether the case assigning verb (or verb trace) is the head of the verb chain, (Holmberg (1986:176)):⁵

- (17) a. an overt verb assigns case obligatorily (section 2.2)
 b. a verb trace assigns case optionally

This analysis of object shift receives support from data where object shift is 'fed' by what I will call *let*-movement. In Vikner (1987), I discussed a construction where the external argument of the verb embedded under *let* is not lexically realised. My suggestion was that in Da. the embedded verb has lost its case-assigning properties, whereas this is not the case in Swedish. Thus (18) and (19) are grammatical in Sw. but not in Da., because the object in (18) and the passive morphology in (19) must be assigned case.

⁴ The underlying intuition is that it is more 'difficult' for V° to assign case from a position inside I° than from its own position:

- (i) [_I [_I V°] ... NP ...] (ii) [_V V° ... NP ...]

In (i) only 'case-checking' is possible, in (ii) 'real' case-assignment is.

⁵ Both Holmberg (1989), cf. note 3, and the present analysis have to make this distinction, in order to prevent object shift across e.g. a participle, (13b). To Holmberg (1989), the shifted object would get case from I°, to me it would get case from the trace of the auxiliary verb in I°. (13b) is then ruled out by the object getting two cases, from V° and from (a verb trace in) I°.

- (18) a. Da. *Peter lod [_{VP} stövsuge täppet]
 b. Sw. Peter lät [_{VP} dammsuga mattan]
Peter let vacuum-clean carpet-the
 (19) a. Da. *Peter lod [_{VP} täppet [_V stövsuges t]]
 b. Sw. Peter lät [_{VP} mattan [_V dammsugas t]]
Peter let carpet-the vacuum-cleaned-be

In Da. the object has to move in order to get case. It may move to the specifier position of the lower VP, where it receives case from *let*, resulting in (20a) (this is *let*-movement). In (20b) we see that it may be moved again by object shift, as expected if the NP bears m-case and receives case from V°. The case motivation for object shift and the case motivation for *let*-movement thus both receive further support from this interaction, as they give exactly the right prediction.

- (20) Da. a. Peter har [_{VP1} formentlig [_{VP1} ladet [_{VP2} det [_{V2} stövsuge t]]]]
Peter has presumably let it vacuum-clean
 b. Peter lod [_{VP1} det [_{VP1} formentlig [_{VP1} t [_{VP2} t [_{V2} stövsuge t]]]]]]
Peter let it presumably vacuum-clean

2.3 Scrambling may end in pre- or post-adverbial position, object shift only in pre-adverbial position.

Scrambling is not movement to case-assigned position, but object shift is. Case is assigned from I°, and adjacency between assigner and assignee is required.

As the scrambled object does not need case, it does not need to be adjacent to I°, as seen in (21). In (22), which is from Webelhuth & den Besten (1987), Marianne scrambles out of the VP before the VP moves into CP-spec. (22b) shows that it may even scramble to a position between the negation and the VP.

- (21) Ge. a. Peter hat das Buch ohne Zweifel nicht t gelesen
Peter has the book without doubt not read
 b. Peter hat ohne Zweifel das Buch nicht t gelesen
 c. Peter hat ohne Zweifel nicht das Buch gelesen
 (22) Ge. a. [t Das Buch zurückgegeben] hat er Marianne nicht t
The book back-given has he Marianne not
 b. [t Das Buch zurückgegeben] hat er nicht Marianne t

As the shifted object in object shift constructions needs case, it must be next to I°, and therefore it only occurs to the left of the VP-adjoined adverbials in (23). (24) shows that the object may object-shift out of a constituent, here an adjectival small clause, before this moves into CP-spec, but also in this case object shift has to end up adjacent to I°.

- (23) Da. a. Peter læste den uden tvivl ikke t t
 Peter read it without doubt not
 b. *Peter læste uden tvivl den ikke t t
 c. *Peter læste uden tvivl ikke t den
- (24) Da. a. [t Helt tåbeligt] fandt Peter det nu ikke t t
 Completely stupid found Peter it however not
 b. *[t Helt tåbeligt] fandt Peter nu ikke det t t

If we now turn to Ic., we see that the facts are completely parallel to the Da. (23). If the object is a pronoun, it must shift, hence (23c)/(25c) is ungrammatical, and if it shifts, it must be adjacent to I°, hence (23b)/(25b) is ungrammatical, whereas (23a)/(25a) is well-formed. If the object on the other hand is a full NP, it does not have to shift, and therefore the version where it is left in situ is grammatical, (26c). Nevertheless, if the (full NP) object shifts (which is impossible in Da., as full NPs do not bear m-case), it must move to a case-assigned position, i.e. it must be adjacent to I°, hence (26b) is ungrammatical, whereas (26a) is well-formed:

- (25) Ic. a. Hann las hana eflaust ekki t t
 He read it doubtlessly not
 b. *Hann las eflaust hana ekki t t
 c. *Hann las eflaust ekki t hana
- (26) Ic. a. Hann las bókina eflaust ekki t t
 He read book-the doubtlessly not
 b. *Hann las eflaust bókina ekki t t
 c. Hann las eflaust ekki t bókina

The fact that pronouns must undergo object shift, whereas this is optional for full NPs as objects, is probably a separate requirement. This requirement would be that pronominal objects occurs as early (as far left) as possible in the sentence (cf. Holmberg (1986:228ff)). If we consider the Ge. version of (23)/(25), i.e. with a pronominal object, we see that also here the pronoun is ungrammatical if left in situ, (27c) and that in the intermediate position, (27b), it is also not very acceptable. In neither case is there any lack of case, cf. that the full NP is grammatical in both positions, (21b,c).

- (27) Ge. a. Peter hat sie ohne Zweifel nicht t gelesen
 Peter has them without doubt not read
 b. ??Peter hat ohne Zweifel sie nicht t gelesen
 c. *Peter hat ohne Zweifel nicht sie t gelesen

I will now turn to another way of illustrating the above-mentioned difference between scrambling and object shift, i.e. that object shift is movement to a case-assigned position, and therefore the shifted object must be adjacent to I°, whereas scrambling is not movement to a case-assigned position, and the scrambled object does not have to be adjacent to anything. If we assume the analysis of floated quantifiers of Sportiche (1988), i.e. that a floated quantifier may only occur in positions in which the quantified NP may occur (or through which the quantified NP may have moved), then we can explain the following Ge./Ic. difference. The Ge. quantifier alle can occur in the inter-

mediate position in (28b), whereas the intermediate position is not a possible one for the Ic. quantifier allar, (29b), because the quantified NP may not occur here, as case cannot be assigned to this position:

- (28) Ge. a. Er wird die Bücher alle ohne Zweifel nicht t lesen
 He will the books all no doubt not read
 b. Er wird die Bücher ohne Zweifel alle nicht t lesen
 c. Er wird die Bücher ohne Zweifel nicht alle t lesen
- (29) Ic. a. Hann las allar bókum eflaust ekki t t
 He read all books-the doubtlessly not
 b. *Hann las bókum eflaust allar ekki t t
 c. Hann las bókum eflaust ekki t allar t

2.4 FPs may also scramble, but they cannot object-shift.

Scrambling is not movement to a case-assigned position, but object shift is. FPs may not receive case, and can thus be moved by scrambling, as in (30), but not by object shift, as in (31), not even if the complement of P is a pronoun, as in (32):

- (30) Ge. a. Ich habe nicht für das Buch bezahlt
 I have not for the book paid
 b. Ich habe für das Buch nicht t bezahlt
- (31) Da. a. Jeg betalte ikke t for bogen
 I paid not for book-the
 b. *Jeg betalte for bogen ikke t t
- (32) Da. a. Jeg betalte ikke t for den
 I paid not for it
 b. *Jeg betalte for den ikke t t

2.5. Scrambling licenses parasitic gaps, object shift does not.

Scrambling is not A-movement, therefore parasitic gaps may occur, as seen in (33): (cf. e.g. Bennis & Hoekstra (1985:65ff.))

- (33) Ge. ...daß er sie [ohne PRO e kennengelernt zu haben] t einladen wollte
 ... that he them without met to have invite wanted-to
 (= ... that he wanted to invite her without having met her)
 (ex. from Vikner & Sprouse (1988:11))

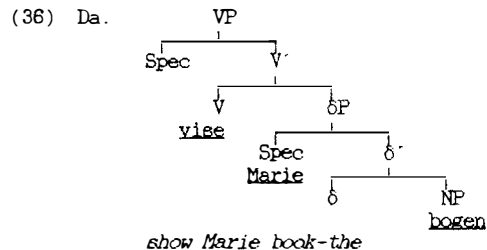
Object shift is movement from a caseless to a case-assigned position, i.e. it is an instance of A-movement, and therefore it does not trigger parasitic gaps, as seen in (34) (as noted by Holmberg (1986:225)). That parasitic gaps do occur under A'-movement in Danish can be seen in (35).

- (34) Da. *Han inviterede dem ikke t t uden at kende e på forhånd
 He invited them not without knowing beforehand
- (35) Da. (?)Hvor mange gæster har han inviteret t uden at kende e på forhånd
 How many guests has he invited without knowing beforehand

3. Double Object Constructions.

3.1 The structure of double object constructions.

I propose that double object constructions have an underlying structure like (36). It almost corresponds to the structure that Larson (1988:353) posits for this construction, except that Larson derives his structure from an underlying one where the direct object is the specifier and the indirect object the complement of δ . Then the direct object is 'demoted' to an adjunct of δ P and the indirect object moves into δ P-spec.



I will follow Larson (1988:343) in assuming that δ actually is a trace of the verb. Given the assumptions made in section 2.2, following Holmberg (1986:225), case-assignment from δ is always optional. This means that an NP which receives case from δ may also occur in other case-marked positions.

I will furthermore assume Rizzi's relativised minimality approach, as set out in (37).

- (37) Relativised minimality (Rizzi (1987, forthcoming)):
 An element α cannot (antecedent-)govern an element β
 if another element Ω intervenes (i.e. Ω c-commands β but not α), and
 if Ω is of the same kind as α and β (same kind: A-, A'-, or X°-element)

We can now account for why the direct object cannot move past the indirect object in object shift and in the other cases discussed below.⁶ This is precluded by relativised minimality in the following way: the indirect object is in an A-position and it c-commands the direct object. If the direct object moves to a position, α , where it is no longer c-commanded by the indirect object, Ω , the indirect object will then be an intervening NP, preventing the moved direct object, α , from antecedent-governing its trace, β .⁷ This is why it

⁶ As for why antecedent government is necessary (and why theta-government is not relevant) in A-movement of an argument, but not in A'-movement of an argument, cf. Chomsky (1986:77), Rizzi (forthcoming:section 3.5).

⁷ Maybe the same effect could have been achieved with the SSC, if the indirect object is considered a SUBJECT in the Chomsky (1981) version of binding theory. The trace of the direct object could not be bound from a position not c-commanded by the closest SUBJECT, i.e. from outside δ P. With the binding theory of Chomsky (1986), an anaphor only has to be bound within its CFC and δ P would not be a CFC, as the external thematic role is not assigned within δ P. The CFC is thus at least VP (or IP, depending on whether subjects are base-generated in VP-spec or IP-spec), and thus movement of the direct object across

was important in section 2 to show that object shift is A-movement.⁸

I will now discuss the data, starting with various other kinds of movements in section 3.2, before returning to object shift in 3.3, and before discussing in 3.4 the alternative analyses of double object constructions proposed in Holmberg (1986) and in Vikner (1987).

3.2 Double object constructions and various kinds of movement.

First, let us consider *let*-movement. As discussed in connection with (18)-(20) above, when the external argument of the verb embedded under *let* is left out, the object moves to the specifier position of the embedded VP in Da.

- (38) Da. Jeg lod Peter anbefale Martin hotellet
I let Peter recommend Martin hotel-the
 (=I let Peter recommend the hotel to Martin)

If the embedded verb is one that has two objects, as in (38), the absence of the external argument of the embedded VP yields 6 logical possibilities:

- (39) Da. a. *Jeg lod anbefale Martin hotellet
 b. Jeg lod Martin anbefale hotellet
 c. Jeg lod Martin hotellet anbefale
 d. *Jeg lod anbefale hotellet Martin
 e. *Jeg lod hotellet anbefale Martin
 f. *Jeg lod hotellet Martin anbefale
 (all mean "I let someone recommend the hotel to Martin")

As assumed above, when its external argument is missing, the verb embedded under *let* cannot assign case (cf. also Vikner (1987)), and therefore the indirect object, *Martin*, must move into a position where it receives case from *let*. Thus (39a,d,e) are ungrammatical, as *Martin* does not precede *anbefale*. I am assuming here that δ does not lose its case-assigning properties, even though the embedded verb does (i.e. even in (39) case may but does not have to be assigned by δ , cf. sections 3.1 and 2.2).

the indirect object to a VP-adjoined position is not ruled out.

⁸ The assumption that object shift is A-movement gives rise to a serious problem, if we maintain both Rizzi's (forthc.) relativised minimality and Sportiche's (1988) VP-internal subjects: The shifted object moves across the base-generated position of the subject (which presumably is an A-position), and the subject moves across the shifted object (which is an A-element):

- (i) Da. Dej såv den; formentlig t_j alle; tv t_i i går aftes
They saw it presumably all on TV last night

This is only possible under relativised minimality if neither the position of the shifted object, nor the base-generated position of the subject, are specifier positions (this will exclude them from the class of typical potential antecedent A-governors). However, even if thus technically possible, it seems to go against the basic intuition of relativised minimality.

(39b) is movement of the indirect object alone, and (39c) is movement of δP . (39f) on the other hand requires the direct object to move past the indirect object (and so do (39d,e)), which is impossible, because of relativised minimality, as discussed in the previous section (see also the discussion of (42) below).

Passive is illustrated in (40). Only the indirect object may be passivised, (40a), as the direct object may not move past the indirect object, again due to relativised minimality, (40b)⁸:

- (40) Da. a. ... at Sofie blev vist bogen
 ... that Sofie was shown book-the
 b. *... at bogen blev vist Sofie
 ... that book-the was shown Sofie

Finally an example of a different kind of movement, A'-movement:

- (41) Da. a. Hvad viste du Sofie
 What showed you Sofie
 b. Hvem viste du bogen
 Who showed you book-the

Here even the direct object may leave δP , as this is A'-movement and the indirect object, which is an A-position, does not interfere.

3.3. Double object constructions and object shift.

Let us now turn to object shift. There are 24 logical possibilities: 6 possible orders of adverbial, indirect object, and direct object, multiplied by 4 combinations of whether one, or the other, or none, or even both, of the two objects are a pronoun.

Whereas the requirements to do with the pronominal nature of the object vary with the examples, the requirements concerning relativised minimality (cf. section 3.1) and the adjacency condition on case-assignment are constant for all of (42)-(50): If double object constructions have the underlying structure in (36), relativised minimality will rule out all (d)-, (e)-, and (f)-examples in (42)-(50), as the direct object cannot move past the indirect one. Furthermore, all the (d)-examples are also ruled out because either the direct object is adjoined to δP , and then the indirect object will not receive any case (it is no longer adjacent to V⁰) or the direct object is adjoined to VP and then it will not receive any case itself (it is not c-commanded by and adjacent to any case-assigner). All the (f)-examples may also be ruled out as the indirect object does not receive any case (it is not adjacent to I⁰).

⁸ The equivalent of (40b) is in fact possible in (dialects of) English, Norwegian, and Swedish. Furthermore, (39e) is also possible in No. These facts are not accounted for under the present analysis.

- (42) Da. a. Peter viste jo Marie bogen
 Peter showed indeed Marie book-the
 b. *Peter viste Marie jo bogen (≠ Holmberg (1986:212, ex. (162a))
 c. *Peter viste Marie bogen jo
 d. *Peter viste jo bogen Marie
 e. *Peter viste bogen jo Marie
 f. *Peter viste bogen Marie jo

In (42) both objects are full NPs, and the only possibility is (42a): Neither object can object-shift, (42b,c,e,f) (they do not have morphological case), and due to relativised minimality, the direct object cannot move past the indirect object in (42d,e,f).

- (43) Da. a. ??Peter viste jo hende bogen
 Peter showed indeed her book-the
 b. Peter viste hende jo bogen
 c. *Peter viste hende bogen jo
 d. *Peter viste jo bogen hende
 e. *Peter viste bogen jo hende
 f. *Peter viste bogen hende jo

In (43) the indirect object is a pronoun, and the only possibility is (43b): the indirect object must object-shift to the left of the adverbial, (43a,d,e), and the direct object cannot object-shift, (43c,e,f).

- (44) Da. a. ??Peter viste jo Marie den
 Peter showed indeed Marie it
 b. *Peter viste Marie jo den
 c. ??Peter viste Marie den jo
 d. *Peter viste jo den Marie
 e. *Peter viste den jo Marie
 f. *Peter viste den Marie jo

In (44) the direct object is a pronoun, and there is no grammatical permutation: the direct object must object-shift to the left of the adverbial, (44a,b,d), and the indirect object cannot object-shift, (44b,c,f). Relativised minimality rules out (44d,e,f).

- (45) Da. a. *Peter viste jo hende den
 Peter showed indeed her it
 b. *Peter viste hende jo den (≠ Holmberg (1986:206, ex. (142b))
 c. Peter viste hende den jo
 d. *Peter viste jo den hende
 e. *Peter viste den jo hende
 f. *Peter viste den hende jo (≠ Holmberg (1986:207, ex. (145))

In (45) both objects are pronouns, and the only possibility is (45c): Both objects must object-shift, (45a,b,d,e), leaving us with (45c,f). One might expect both to be ungrammatical because it is not possible for both objects to be adjacent to I⁰, or expect them both to be good, because absolute adjacency is not necessary. However, only (45c) is good. Assuming that the direct object cannot leave δP because of relativised minimality would mean that neither should be good: the direct object is both forced to leave δP (it is a pronoun), and prevented from leaving δP . I suggest that the δP itself is object-shifted,

as this would allow only the base-generated order indirect object-direct object.

Summing up, there are three different requirements operating here, and each of the ungrammatical sentences above is ruled out by at least one of them:

- (46) a. full NPs may not object-shift (they do not have morphological case),
 b. pronominal NPs must object-shift, and
 c. the direct object may not move past the indirect object.

Support for this analysis may be found in Ic., where (46a) does not apply: full NPs may object-shift, because they have morphological case, as discussed in section 2.1 above. The Ic. facts may be exhaustively accounted for in terms of the interaction between (46b) and (46c).¹⁰

- (47) Ic. a. Pétur sýndi oft Mariu bókina
 Pétur showed often Mariu book-the
 b. Pétur sýndi Mariu oft bókina
 c. Pétur sýndi Mariu bókina oft
 d. *Pétur sýndi oft bókina Mariu
 e. *Pétur sýndi bókina oft Mariu
 f. *Pétur sýndi bókina Mariu oft

In (47) both objects are full NPs, and thus the requirement that pronouns must object-shift is not applicable. This leaves only the prohibition against the direct object moving past the indirect object, because of relativised minimality, which rules out (47d,e,f). The analysis of (47c) (and also of (48c), (49c), and (50c) below) is that the entire δP is object-shifted, as discussed in connection with (45c).

- (48) Ic. a. ??Pétur sýndi oft henní bókina
 Pétur showed often her book-the
 b. Pétur sýndi henní oft bókina
 c. Pétur sýndi henní bókina oft
 d. *Pétur sýndi oft bókina henní
 e. *Pétur sýndi bókina oft henní
 f. *Pétur sýndi bókina henní oft

¹⁰ Given that scrambling is not A-movement (cf. section 2), it is rather surprising that the facts of Dutch and West Flemish may also be accounted for in this way, as it would indicate that scrambling is A-movement at least in double object constructions in these languages: The Du. and WF. versions of (47)-(50) have the same grammaticality judgments as Ic. (except that both Du. and WF. allow (49f)/(50f), and WF. allows (47f)/(48f)). In this Du. and WF. differ radically from Ge.

It is interesting that another difference Du./WF. versus Ge., that only in Ge. is it possible to scramble full NPs to IP, would also be accounted for if Du./WF. (but not Ge.) scrambling were A-movement, as suggested by e.g. Vanden Wyngaerd (1988). Scrambling would then not be able to pass IP-spec, which is an A-position. On the other hand, the evidence that scrambling in Du. and WF. is not A-movement remains (scrambling moves an NP out of a case-assigned position, it does not require adjacency, it may apply to PPs, and it may trigger parasitic gaps, cf. section 2.2-2.5). For further discussion of these data, cf. Haegeman (1986, forthcoming:ch. 5) and Vikner (in prep.).

In (48) the indirect object is a pronoun, which must object-shift to the left of the adverbial, (48a,d,e). Relativised minimality rules out (48d,e,f).

- (49) Ic. a. *Pétur sýndi oft Mariu hana
 Pétur showed often Mariu it
 b. *Pétur sýndi Mariu oft hana
 c. Pétur sýndi Mariu hana oft
 d. *Pétur sýndi oft hana Mariu
 e. ?Pétur sýndi hana oft Mariu
 f. *Pétur sýndi hana Mariu oft

In (49) the direct object is a pronoun, so it must object-shift to the left of the adverbial, (49a,b,d). Relativised minimality rules out (49d,e,f).

- (50) Ic. a. *Pétur sýndi oft henní hana
 Pétur showed often her it
 b. *Pétur sýndi henní oft hana
 c. Pétur sýndi henní hana oft
 d. *Pétur sýndi oft hana henní
 e. *Pétur sýndi hana oft henní
 f. *Pétur sýndi hana henní oft

In (50) both objects are pronouns, and the only possibility is (50c): Both objects must object-shift, (50a,b,d,e), and the direct object cannot pass the indirect object, (50d,e,f).

3.4 Two previous analyses: Holmberg (1986) and Vikner (1987).

Holmberg (1986:181, 206) suggests, following Kayne (1984:195ff.), that the direct object receives case from the verb, and the indirect object receives case from an empty preposition which is licensed by the verb. The case-assignment properties of the empty preposition depends on the case-assignment properties of the verb (the empty preposition is only able to assign case to the indirect object if the verb assigns case to the direct object). If the direct object object-shifts, the verb is not assigning any case, and therefore the empty preposition cannot assign case to the indirect object either, explaining why all (e)-examples are ungrammatical. If we furthermore assume that the empty preposition has to be adjacent to the case assigner (V^0 or I^0), we can also explain why the direct object cannot precede the indirect object, both in the cases where neither object-shifts, as in the (d)-examples, and in the cases where both object-shift, as in the (f)-examples. This leaves the empty preposition analyses with no problems as far as object shift is concerned.¹¹

With respect to the data concerning *let*, assuming an analysis where the verb embedded under *let* has lost its case-assignment properties, it seems to me that an empty preposition analysis would predict that neither object could remain in situ, as both are dependent on the verb being able to assign case. In fact,

¹¹ It should be mentioned that the Sw. data discussed by Holmberg do not quite correspond to the Da. data in (42)-(45): my judgments for Da. disagree with Holmberg's for Sw. in at least three cases: (42b) and (45b,f).

even without assuming any loss of case-assignment properties, these data would seem to be very difficult to account for in an empty preposition analysis, because of the differences between the situation of a single object and the one of an indirect object: In single object constructions the obligatory movement applies to the object (which receives case from the verb), whereas in double object constructions the obligatory movement applies to the indirect object (which does not receive case from the verb but from the empty preposition) but not (cf. (39b)) to the direct object (which does receive case from the verb).

Furthermore, as also noted by Holmberg himself (1986:213), a PP with an overt preposition cannot object-shift, cf. (31b) and (32b) above. This may be taken as an indication that when the indirect object object-shifts, it leaves the empty preposition behind. But this is not very attractive, given that overt prepositions cannot be stranded by A-movement in Da. (this argument was originally made for Ic. by Sigurðsson (1989:347)):

- (51) Da. **Bogen* blev læst i t
Book-the was read in

In Vikner (1987), the assumption was that the indirect object receives case from the verb, and the direct object has inherent case. The direct object should thus be able to occur anywhere, subject to other requirements, such as not preventing adjacency between a case assigner and an assignee. Though this accounts for the *let*-data when the external agent of the embedded verb is absent (i.e. (39)), it runs into problems with the cases where the embedded external argument is present, as in (38). The problem is that it predicts that the following should be grammatical:

- (52) Da. **Jeg lod Peter t hotellet* [anbefale Martin t]
I let Peter hotel-the recommend Martin

Here the direct object does not interfere with any structural case-assignment.

With respect to the object shift data (which were not discussed in Vikner (1987)), the predictions are almost completely wrong, as e.g. (42d,e)-(55d,e) would be predicted to be grammatical, which they are not (The direct object should be able to adjoin to VP, even though this is not a case-assigned position, as long as no other requirements are violated).

4. Conclusion

In section 2 it was argued that object shift is A-movement, as opposed to scrambling, which is not A-movement. In section 3, this analysis was then used to explain the interaction between object shift and double object constructions.

By assuming an underlying structure for double object constructions like the one shown in (36), and combining it with the constraints on movement/government of the relativised minimality-framework, it was possible to account for all three kinds of A-movements discussed: object shift, *let*-movement and passivisation, while also explaining why A'-movement has completely different properties.

References

- Belletti, Adriana (1988): "The Case of Unaccusatives" in *Linguistic Inquiry*, vol. 19(1), pp. 1-34.
- Bennis, Hans & Teun Hoekstra (1985): "Gaps and Parasitic Gaps" in *The Linguistic Review*, vol. 4, pp. 29-87.
- Chomsky, Noam (1981): *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam (1986): *Barriers*. Cambridge, Mass.: MIT Press.
- Giusti, Giuliana (1989): "Floating Quantifiers, Scrambling, and Configurationality". Ms, University of Venice.
- Giusti, Giuliana (forthcoming): "The Syntax of Floating *Alles* in German" in Werner Abraham & Eric Reuland (eds.): *Germanic Syntax Workshop*. Linguistik Aktuell. Amsterdam: John Benjamins.
- Haegeman, Liliane (1986): "The Double Object Construction in West Flemish" in *The Linguistic Review*, vol. 5, pp. 281-300.
- Haegeman, Liliane (forthcoming): *Generative syntax: Theory and Description. A Case Study from West Flemish*. Cambridge: University Press.
- Holmberg, Anders (1986): *Word Order and Syntactic Features in the Scandinavian Languages and English*. Stockholm: Department of General Linguistics, University of Stockholm.
- Holmberg, Anders (1989): "What is Wrong with SOV Word Order in SVO Languages?". Ms, University of Uppsala.
- Holmberg, Anders & Christer Platzack (1988): "On The role of Inflection in Scandinavian Syntax" in *Working Papers in Scandinavian Syntax*, vol. 42, pp. 25-42.
- Kayne, Richard (1984): *Connectedness and Binary Branching*. Dordrecht: Foris.
- Larson, Richard (1988): "On the Double Object Construction" in *Linguistic Inquiry*, vol. 19(3), pp. 335-391.
- Rizzi, Luigi (1987): "Relativized Minimality". Ms, University of Geneva.
- Rizzi, Luigi (forthcoming): *Relativized Minimality*. Cambridge, Mass.: MIT Press.
- Safir, Kenneth (1985): *Syntactic Chains*. Cambridge: University Press.
- Sigurðsson, Halldór Armann (1989): "Verbal Syntax and Case in Icelandic". Ph.D., University of Lund.
- Sportiche, Dominique (1988): "A Theory of Floating Quantifiers and Its Corollaries for Constituent Structure" in *Linguistic Inquiry*, vol. 19(3), pp. 425-449.
- Vanden Wyngaerd, Guido (1988): "Object Shift as an A-movement Rule". Ms, UFSAL, forthcoming in *MIT Working Papers in Linguistics*.
- Webelhuth, Gert & Hans den Besten (1987): "Remnant Topicalization and the Constituent Structure of VP in the Germanic SOV Languages". Talk at GLOW 10, 1987, University of Venice.
- Vikner, Sten (1987): "Case Assignment Differences between Danish and Swedish". in Robert Allan & Michael Barnes (eds.): *Proceedings of the Seventh Conference of Scandinavian Studies in Great Britain*, pp. 262-281. London: University College London.
- Vikner, Sten (in prep.): Ph.D., University of Geneva.
- Vikner, Sten & Rex A. Sprouse (1988): "*Have/Be* Selection as an A-Chain Membership Requirement". *Working Papers in Scandinavian Syntax*, no. 38.

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