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.

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, forthcoming), using the analysis of floated quantifiers in Sportiche (1988).

(1) Ge. Gestern las Ulri [VP am [VP ohne Zweifel [VP nicht [VP s t]]]] [I x t]

Yesterday read Uli it without doubt not

(2) Ge. Gestern las Ulri [VP alle [VP nicht [VP s alle t]]] [I x 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 x t] [VP dem [VP uden tvivl [VP ikke [VP s t]]]]

Yesterday read Ole it without doubt not

(4) Da. I går læste Ole [I x t] [VP dem [VP uden tvivl [VP ikke [VP s t]]]]

Yesterday read Ole it without doubt not

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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, but rather something close to A'-movement, even if it differs from more familiar cases of A'-movement, such as subject raising and topicalisation. As for object shift, Holmberg (1988) 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′.

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

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.

2.3 Scrambling and object shift are not necessarily distinguished from each other.

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.

(4) Da. I går læste Ole [t2 t] [VP, de[man [VP, ikke [VP, t t alle]])

Yesterday read Ole them not all

(5) Da. a. Ik ontrøm ug de direktør morgen over de zaak in Paris t t I meet the manager tomorrow about this matter in Paris
b. Ik ontrøm morgen de direktør over de zaak in Paris t t
(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

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./Ge. (cf. e.g. Holmberg & Platzack (1988)) (assuming that nominative is assigned from C′).
(14) Da. a. Det var gott at han ikke købte den
   It was good that he not bought it
b. *Det var gott at han den ikke købte
   It was good that he not bought it

In Da. 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 Da., but not in Da.

(15) Ic. a. *Det var gott at han købte den
   It was good that he bought not the
b. Det var gott at han købte den
   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 head of the VP chain, (Holmberg (1986:176)).

(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)).

(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 left-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.

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 I₁, and adjacency between assigner and assignee is required. As the scrambled object does not need case, it does not need to be adjacent to I₁, as seen in (21). (22) shows that it may even scramble to a position between the negation and the VP.

(20) Da. a. Peter har [VP, formentlig [VP, ladet [VP₂ det [V₂ stavåuage 1]]]]
   Peter has presumably let it vacuum-clean
b. Peter let [VP, det [VP₂, formentlig [VP₂, t [V₂ stavåuage 1]]]]
   Peter let it presumably vacuum-clean

As the shifted object in object shift constructions needs case, it must be next to I₁, and therefore it only occurs to the left of the VP-adjointed adverbs 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 I₁.

"Case-checking" is possible, in (ii) 'real' case-assignment is.

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 I₁, to me it would get case from the trace of the auxiliary verb in I₁. (13b) is then ruled out by the object getting two cases, from V and from (a verb trace in) I₁.

* The underlying intuition is that it is more 'difficult' for V to assign case from a position inside I₁ than from its own position:

(i) [I₁, V₁ ... NP ... ]
(ii) [V₂, V₂ ... NP ... ]

In (i) only 'case-checking' is possible, in (ii) 'real' case-assignment is.
(23) Da. a. Peter læste dem uden tvivl ikke t t Peter read i t without doubt not
b. *Peter læste uden tvivl dem ikke t t
c. *Peter læste uden tvivl ikke t dem

(24) Da. a. [† Helt tænkelig] fundt Peter det nu ikke t t Completely stupid found Peter it however not
b. *[† Helt tænkelig] fundt 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
grammatical, 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 ekk t t
   He read it doubtlessly not
b. *Hann las eflaust hana ekki t t
c. *Hann las eflaust ekk t hana

(26) Ic. a. Hann las bokina eflaust ekki t t
   He read book-the doubtlessly not
b. *Hann las eflaust bokina ekki t t
   *Hann las eflaust ekk t bokina

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 prononomial objects occur 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 geleesen
   Peter has them without doubt not read
b. *Peter hat ohne Zweifel sie nicht t geleesen
   *Peter has ohne Zweifel nicht sie t geleesen

I will now turn to another way of illustrating the above-mentioned dif-
fERENCE 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 fol-
lowing Ge./Ic. difference. The Ge. quantifier alle may occur in the inter-
mediate position in (28b), whereas the intermediate position is not a possible
one for the Ic. quantifier alle, (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 bekumar eflaust ekki t t
   He read all books-the doubtlessly not
b. *Hann las bekumar eflaust alle ekki t t
c. *Hann las bekumar eflaust ekk t allar t

2.4 PPs may also scramble, but they cannot object-shift.
Scrambling is not movement to a case-assigned position, but object shift is.
PPs 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 das Buch bezahlt
   I have not for the book paid
b. Ich habe das Buch nicht 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. Bennie & Hoenkstra (1985:85ff.))

(33) Ge. ... daß er sie [ohne PR] ohne kenngelernt zu haben] t einladen wollte
   ... that he them without met to have invite wanted to
   (i.e. that he wanted to invite her without having met her)
   (ex. from Vikner and 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 er på forhånd
   He invited them not without knowing beforehand

(35) Da. (')Hvor mange gæster har han inviteret t uden at kende er 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 δP and the indirect object moves into δP-spec.

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

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 φ cannot (antecedent-)govern an element δ,
if another element Ψ intervenes (i.e. Ψ c-commands δ but not φ), and
if Ψ is of the same kind as φ and δ (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. 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, φ, where it is no longer c-commanded by the indirect object, Ψ, the indirect object will then be an intervening NP, preventing the moved direct object, φ, from antecedent-governing its trace, δ. This is why it


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 δP. With the binding theory of Chomsky (1986), an anaphor only has to be bound within its CFC and 5P would not be a CFC, as the external thematic role is not assigned within 5P. 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.6

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 left-movement. As discussed in connection with (18)-
(20) above, when the external argument of the verb embedded under left 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 Martin
d. 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 left cannot assign case (cf. also Vikner (1987)), and therefore the indirect object, Martin, must move into a position where it receives case from left. 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.

6 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):

(1) Da. Dej s Av den, formentlig tj. alle, tv t. ”TV; gør after
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 this 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 OP. (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): 9.

(40) Da. a. ... at Sofie blev vist bogen
  b. * ... at bogen blev vist Sofie

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

(41) Da. a. Hvad viste du Sofie
  b. Hvem viste du bogen

Here even the direct object may leave OP, 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 OP, and then the indirect object will not receive any case (it is no longer adjacent to $V'$) 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 I*).

6 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
  b. *Peter viste Marie Jo bogen (# Holmberg (1986:206, ex. (142b))
  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
  b. Peter viste Marie 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 je

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
  b. Peter viste Marie Jo den
c. *Peter viste Marie Jo den
  d. *Peter viste Marie jo den
  e. *Peter viste den Jo Marie
f. *Peter viste den Marie je

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
  b. *Peter viste hende Jo den (# Holmberg (1986:206, ex. (142b))
c. Peter viste hende Jo den
d. *Peter viste Jo hende den
e. *Peter viste Jo hende je
f. *Peter viste hende Jo

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 I*, 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 OP because of relativised minimality would mean that neither should be good: the direct object is both forced to leave OP (it is a pronoun), and prevented from leaving OP. I suggest that the OP 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. *Petur syndi oft Mariu bôkina
    Petur showed often Mariu book-the
b. *Petur syndi Mariu oft bôkina
c. *Petur syndi Mariu bôkina oft
d. *Petur syndi oft bôkina Mariu
e. *Petur syndi oft bôkina Mariu oft
f. *Petur syndi bôkina 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 IP is object-shifted, as discussed in connection with (45c).

(48) Ic. a. ??Petur syndi oft henni bôkina
    Petur showed often her book-the
b. *Petur syndi henni oft bôkina
c. *Petur syndi henni bôkina oft
d. *Petur syndi oft bôkina henni
e. *Petur syndi oft bôkina henni
f. *Petur syndi bôkina henni 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 Wyngaard (1988). Scrambling would then not be able to pass IP-spec, which is an A-movement. On the other hand, the evidence that scrambling in Du. and WF. is not A-movement remains (scrambling moves an IP 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. Hammar (1988; forthcoming ch. 5) and Vinkem (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. *Petur syndi oft Mariu hana
    Petur showed often Mariu her
b. *Petur syndi Mariu oft hana
    Petur syndi Mariu oft hana
      c. *Petur syndi Mariu hana oft
     d. *Petur syndi oft hana Mariu
     e. *Petur syndi oft hana Mariu
     f. *Petur syndi 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. *Petur syndi oft henni hana
    Petur showed often her her
b. *Petur syndi oft henni hana
    Petur syndi oft henni hana
      c. *Petur syndi henni hana oft
     d. *Petur syndi oft henni henni
     e. *Petur syndi oft henni henni
     f. *Petur syndi henni henni 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).

2.4 Two previous analyses: Holmberg (1986) and Vinkem (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" or "I"), 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.

With respect to the data concerning lat., assuming an analysis where the verb embedded under lat. 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 (45f).
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 Siguðsson (1989:347)).

(51) Da. *Börn blev last i t
Back-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 last-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 hotell[et (ánhose Martin)]
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 (38), 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, left-moving and passivisation, while also explaining why A'-movement has completely different properties.

References


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