# The Pros and Cons of Agreement in Scandinavian Impersonals

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#### 0. Introduction

The construction (1) is well formed in all the mainland Scandinavian languages (represented here by Swedish), but the corresponding construction (2) is ill formed in Icelandic, for any choice of values for person, number, definiteness, etc.

- (1) Det blev givet pojken presenter. (Swedish)
- (2) \* Það voru gefnar stráknum gjafir. (Icelandic) it was/were given the-boy presents

In Icelandic one of the arguments of the passive double object construction must be moved to specIP for the construction to be well formed.

- (3) a. Stráknum voru gefnar gjafir(nar). the-boy were given (the-) gifts
  - b. Gjafir(nar) voru gefnar stráknum. (the) gifts were given the-boy

This is somewhat surprising in view of the fact that Icelandic is known for being rather permissive as regards impersonal constructions, even more so than the mainland Scandinavian languages (henceforth abbreviated MSc). All the Scandinavian languages have impersonal passives of transitive verbs, where the argument in the predicate may follow or, with the exception of Norwegian, precede the participle (I shall comment on the agreement pattern later).<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> An argument may precede the participle in a Norwegian impersonal passive if the argument is negated, as in *Det ble ingen bøker skrevet*, lit. "It was no books written." But this is a different construction altogether: see Christensen (1991). I have no explanation of the absence of (4b) in Norwegian. It does not seem to correlate with agreement properties of the participle, nor with choice of auxiliary, nor any other property which would distinguish Norwegian from Danish and Swedish. As noted by Hedlund (1992: 80) there are Swedish speakers who accept (4b) but not (4a). Not surprisingly they also do not accept (1).

- (4) a. Det blev [skrivet <u>tre böcker</u>]. (Swe) it was written three books
  - b. Det blev [tre böcker skrivna].
- (5) a. Það voru [skrifaðar <u>þrjár bækur</u>]. (Ice) it were written three books
  - b. Það voru [þrjár bækur skrifaðar].

All the Scandinavian languages have impersonal ergatives where the argument follows the verb, but only Icelandic and Faroese allow impersonal ergatives where the argument precedes the verb in VP.

- (6) a. Det har tydligen kommit <u>några lingvister</u> hit. (Swe) it has apparently come some linguists here "Apparently some linguists have arrived."
  - b. \* Det har tydligen några lingvister kommit hit.
- (7) a. Það hafa greinilega komið <u>einhverjir málfræðingar</u> hingað. (Ice) it have apparently come some linguists here
  - b. Það hafa greinilega einhverjir málfræðingar komið hingað.

Moreover, only Icelandic and Faroese have an impersonal transitive construction, i.e. a construction where the subject of a transitive verb remains inside the predicate.<sup>2</sup>

- (8) \* Det har troligen många studenter läst denna bok. (Swe)
- (9) Það hafa sennilega margir stúdentar lesið þessa bók. (Ice) it has/have probably many students read this book

According to Holmberg and Platzack (to appear), Christensen (1991), and Vikner (to appear) the difference between insular Scandinavian (Icelandic and Faroese) and MSc with regard to (6)-(9) is a consequence of a difference in the status of subject-verb agreement (AgrS, henceforth simply Agr) between the two sets of languages: MSc has no Agr at all, or alternatively it has Agr of the weakest possible kind, that is a completely empty Agr, there being no subject-verb agreement morphology in MSc. Icelandic and Faroese, on the other hand, have "strong Agr."

While adopting the idea that strong Agr is crucially involved in licensing the predicate-internal subject in (7b) and (9) I will implement this idea in a partly new way. Concerning (2) I will argue that, somewhat paradoxically, in this case strong Agr has the effect of forcing movement of an argument out of the predicate. That is to say, strong Agr is crucially involved in ruling out (2). Correspondingly, the absence of strong Agr is a prerequisite for allowing (1) in MSc.

In Holmberg and Platzack (to appear) (henceforth H&P) we present a theory of the intricate interplay of agreement and case inflection with other grammatical properties in the Scandinavian and other languages. The present paper is another demonstration of the effects of subject-verb agreement on word order, and another piece of evidence that the role of inflection in syntax cannot be generalized as "more inflections entail more freedom of word order." Instead, the presence of rich inflection in a language may have the effect of increasing freedom of word order in one domain while restricting it in another domain.

### 1. Expletives, Agr, and pro

As first shown by Platzack (1983), the Icelandic expletive  $pa\delta$ , as in (1), is not an expletive subject but an expletive topic, base-generated in specCP.<sup>3</sup> The MSc expletive der/det, on the other hand, is an expletive subject. This is shown by the contrast between (10a,b):

(10) a. Har \*(det) kommit några lingvister? (Swe)
b. Hafa (\*það) komið einhverjir málfræðingar? (Ice)
has/have (it) come any linguists
"Have any linguists arrived?"

In this construction the expletive is unambiguously in specIP, preceded by a verb fronted to C. The Icelandic expletive Paò is excluded from this position (see Platzack (1983, 1987), Hornstein (1991)). I assume the structure of (11a) is (11b) (omitting irrelevant details).

(11) a. Það hafa komið einhverjir málfræðingar. it have come some linguists

 $<sup>^2</sup>$  In addition all the Scandinavian languages have passives of intransitive verbs. See Vikner (to appear) for an overview and a theory of impersonal constructions in Scandinavian. Vikner's theory is partly different from the one advocated in the present paper.

<sup>&</sup>lt;sup>3</sup> See, however, Hornstein (1991), who argues that  $pa\delta$  is base-generated in spec(IP) but obligatorily cliticized to the left of C in the syntax.

b. [CP Það [C' hafa; [IP pro; [I' Ii [VP komið [einhverjir málfræðingar]; ]]]]]

The empty expletive subject it is licensed by Agr in I with which it is coindexed. The plural agreement shows that Agr, hence expletive pro, is coindexed also with the post-verbal argument. MSc, lacking Agr-features in I, does not allow expletive pro. The structure of (12a) is (12b):

(12) a. Det har kommit några lingvister. it has come some linguists

b.  $[CP \det_i [C' \operatorname{har}_j [IP e_i [I' I_j [VP \operatorname{kommit} [\operatorname{några lingvister}]_i]]]]]$ 

In this construction the EC in specIP is an A-trace, licensed by virtue of antecedent-government by the expletive in specCP. In the embedded counterpart to (12a) (embedded for instance under "I wonder whether") the expletive will be in specIP. In line with Christensen and Taraldsen (1989) and H&P (but contra Hoekstra (1990)) I assume the expletive is also coindexed with the post-verbal argument.<sup>4</sup>

I will make the following theoretical assumptions:

- (A) every head projects a specifier and a complement position;
- (B) if a and b are in a spec-head relation or head-complement relation, then either a or b or both must be visible, where a category is visible iff it has phonetic features or if it is member of a chain with phonetic features.

Deviating minimally from H&P I assume MSc has Agr in I, but empty Agr. Consequently specIP must be phonetically realized in MSc. It follows that MSc does not allow a structure like (11): specIP cannot be *pro* (see Christensen (1991)). In Icelandic Agr has phonetic features. Consequently specIP can be

The generalization is: Whenever there is an expletive in specIP and an argument in VP, the argument must be indefinite. When there is not an expletive in specIP there is no definiteness effect, regardless of other properties of the construction, whether it is passive, ergative or whatever.

pro, as in (11), where pro is licensed by virtue of spec-head agreement with I containing Agr. I will adopt Chomsky's (1993) term "strong Agr" for the kind of Agr which Icelandic has, and "weak Agr" for MSc Agr. Correspondingly I will refer to the Icelandic expletive as a "weak expletive" and the MSc expletive as a "strong expletive." Empty Agr is always weak, but we may want to allow for the possibility of non-empty but weak Agr. Correspondingly an empty expletive is always weak, but we may want to allow for the possibility of a non-empty weak expletive. This is one reason why (B) is formulated in terms of visibility rather than strength.<sup>5</sup>

Nothing I have said so far prevents a non-empty expletive from occurring in specIP in Icelandic. But as shown by (10b) this is excluded. I suggest, tentatively, that this follows from the following principle:

(C) If two functional categories  $\alpha$  and  $\beta$  are in a spec-head relation, then  $\alpha$  and  $\beta$  cannot both be strong.

Since Agr is strong in Icelandic, the expletive cannot also be strong.<sup>6</sup> Obviously the empirical content of the principle depends on how strength is defined. I suggest that strength is related to case. H&P assume that strong Agr is inherently nominative. A strong expletive is, plausibly, one which can be assigned case (usually nominative, but in ECM constructions the case can be structural accusative). This presupposes a theory of case and strength where, for instance, Icelandic referential subject pronouns are not strong, since they

<sup>&</sup>lt;sup>4</sup> Furthermore I assume that the definiteness effect is a result of coindexation of the expletive and a VP-internal argument, with expletive replacement (i.e. movement of the coindexed argument to the position of the expletive) in LF. That this much-criticized hypothesis is basically correct is shown by the contrast between (i) and (ii):

<sup>(</sup>i) Det blev givet Johan presenter/\*presenterna. it was given Johan presents/the-presents

<sup>(</sup>ii) Johan blev given presenter/presenterna.
Johan was given presents/the-presents

<sup>&</sup>lt;sup>5</sup> English and French Agr is weak, shown by the fact that they require a visible expletive, yet it is nonempty in the sense that there is visible agreement morphology. On the other hand, within a lexicalist theory of inflections (as in Chomsky (1993) and H&P) the existence of agreement morphology on the verb or auxiliary does not necessarily entail that the category Agr is visible. The English expletive there is a possible case of a visible but weak expletive. Its weakness shows in that it does not control agreement: There are/\*is three books on the table. If so, English is evidence that weak Agr can cooccur with a weak expletive. Overtly nominal expletives like det, it, and French il are presumably always strong (especially if strength is related to case, see text below). Locative expletives are perhaps typically weak. However, there is no absolute correlation between form and strength, since the Danish and Norwegian expletive der must be assumed to be strong (as shown, for instance by the fact that they allow the impersonal double object construction), although it is formally identical with a locative proform. See also Christensen and Taraldsen(1989).

<sup>&</sup>lt;sup>6</sup> Principle (C) does not exclude the possibility of a weak but visible expletive in Icelandic. The absence of such an expletive would be an accidental gap in the lexicon.

may cooccur with Agr.<sup>7</sup>

Following H&P and Holmberg (1992) I assume the so-called EPP follows from predication theory. A clause must have a subject external to the predicate because a category is a predicate only if it contains an open position (a predicate variable) which is A-bound from outside. This is expressed in (13):

(13) A category  $\alpha$  is a predicate iff  $\alpha$  contains an empty argument position which is A-bound by category  $\beta$  situated outside  $\alpha$ .

That is to say, for predication to be possible in a clause, say a verbal clause, an argument must be A-moved out of VP. In personal sentences this requirement is met by means of movement of an argument from inside VP to specIP in overt syntax, where Relativized Minimality ensures that the argument which is moved is always the highest one (hence always the agent in ordinary transitive constructions). In impersonal ergative and passive constructions it is satisfied by A-movement in LF (the predication condition (13) applies in LF), i.e. expletive replacement (see Chomsky (1986, 1991)). Expletive replacement presupposes that the expletive is coindexed with the argument in VP (and that the argument in VP is indefinite; see footnote 4). Now in MSc the expletive, being strong, can head an A-chain, i.e. it can be coindexed directly with an Aposition inside the predicate. But the Icelandic expletive, being weak, cannot head an A-chain. Instead the coindexation of the expletive with an argument in VP is achieved indirectly, by means of agreement and a head-chain: I containing Agr agrees with (= is coindexed with) pro in specIP, and the head V agrees with (= is coindexed with) an argument in VP. Finally I and V are linked by a head-chain, and consequently the expletive in specIP is coindexed with an argument in VP by what I will call an indirect A-chain, permitting expletive replacement. This is illustrated in (14). In (14a) there is a direct A-

chain from the strong expletive in specIP to the post-verbal NP. There is no agreement with the post-verbal NP. In (14b) there is an indirect A-chain linking the weak expletive in specIP and the post-verbal NP. This presupposes that the head chain agrees with the post-verbal argument.<sup>8</sup>

(14) a. [Ip det<sub>i</sub> I blev [VP e<sub>i</sub> [V skrivet/\*skrivna böcker<sub>i</sub>]
b. Það [Ip pro<sub>i</sub> [I voru]<sub>i</sub> [VP e [V skrifaðar<sub>i</sub> bækur<sub>i</sub>]]
it was/were written books

The status of the EC in specVP will be discussed below. I assume a simple analysis of the predicate in verbal/participial sentences: it consists of a head with a specifier and a complement position, so the subject of a regular transitive verb is specVP in D-structure. I will refer to it as "VP" whether it is headed by a verb proper or by a participle.<sup>9</sup>

#### 2. Preverbal NP in VP: ergatives and transitives

Consider the constructions (6)-(9), showing that MSc does not permit a preverbal argument in impersonal ergative or transitive constructions. This is explained if a strong expletive like the MSc one not only can, but must bind an EC in specVP. In other words, if a strong expletive is necessarily basegenerated in specVP, being moved to specIP leaving an A-trace in specVP, it follows that there cannot be a lexical argument in specVP. Schematically, a strong expletive construction must have the form (15):

 $<sup>^7</sup>$  I suggest that the construction with  $pa\delta$  in specIP is excluded for the same reason as (i), discussed in Kayne (1983a), (ii), discussed in Fiva (1985), and generally constructions with overt subject pronouns in pro drop languages of the Spanish/Italian type, where overt subject pronouns are not just optional but excluded except if they are tonic, normally bearing contrastive stress.

<sup>(</sup>i) \* Il est-il la? (cf. Pierre est-il la?, Cela est-il faux?)

<sup>(</sup>iii) \* han sin bil (cf. Per sin bil "Per's car," ?HAN sin bil "HIS car") (Norwegian) he refl car

<sup>(</sup>iii) \* Yo vengo. (yo unstressed)

The idea is that clitics and weak pronouns are "strong" in the sense of having strong case, while tonic pronouns have weak case (see Holmberg (1993)). Therefore (i)-(iii) are ruled out except if the specifier pronoun is tonic.

<sup>&</sup>lt;sup>8</sup> Since there is no subject-verb agreement in MSc there can never be (overt) agreement between I and an argument in VP. However, Swedish and some varieties of Norwegian show number and gender agreement on the participle. In these varieties of MSc the participle does not agree with a post-verbal argument, as in (14), but does agree with a pre-verbal argument.

<sup>&</sup>lt;sup>9</sup> That is to say, I do not include a predicate-internal Agr in participial predicates, as in Kayne (1989a) and many subsequent works, but see text below on double object passives. Consideration of a wider array of data will probably require a more complex VP-structure, even in the simplest cases of active transitive and intransitive constructions as well as in participial constructions: see H&P. I believe the present theory can be reformulated in such a format without loss of generalization.

<sup>10</sup> The present theory of expletives is compatible with a theory like the one presented in Hoekstra (1990), in which the MSc expletive in passives and ergatives functions like an external argument to the point of making passive and ergative verbs into assigners of structural accusative. I believe Hoekstra is wrong, though, and that the correct generalization is that the post-verbal argument has the same case as the expletive, i.e. usually nominative, as a prerequisite for expletive replacement.

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(15)  $\det_i \dots [\mathbf{VP} \, \mathbf{e}_i \, \mathbf{V}']$ 

For instance (6b) has the structure (16), and consequently does not meet (15):

(16) det ... [VP några lingvister<sub>i</sub> [V, kommit  $e_i$  hit ]]

There is no corresponding requirement in Icelandic, where specIP is linked to an A-position inside VP via an indirect chain. Consequently specVP can be lexically filled, either by movement as in the case of the impersonal ergative or by base-generation, as in the case of the impersonal transitive.

How is the configuration (15) satisfied in (4b), repeated here?

(4) b. Det blev tre böcker skrivna. it was three books written

I assume the expletive is base-generated in the spec of the passive copula bli, and that this satisfies (15).

(17)  $\det_{i} ... [VP e_{i} [V'] blev [VP tre böcker_{i} [V'] skrivna e_{i}]]]]$ 

Expletive replacement requires that i = j in (17). Possibly this is achieved via an indirect A-chain, crucially involving participle agreement. I leave this question open, though.

Hypothesis (17) is supported by the fact that the synthetic passive does not allow a pre-verbal argument (see Hedlund (1992) on differences between the periphrastic and the synthetic passive).

- (18) a. Det har skrivits tre böcker. it has written+PASS three books
  - b. \* Det har tre böcker skrivits.

Apparently the strong expletive cannot be base-generated in the spec of ha 'have', or in fact any other auxiliary verb except bli. That is to say, only bli behaves like a lexical V in this respect.

In conclusion, a strong expletive is incompatible with a pre-verbal argument in impersonal ergatives and incompatible with impersonal transitives altogether. A precondition for having a strong expletive is that Agr is weak. Consequently

the weakness of Agr in MSc is crucially involved in prohibiting impersonal transitives and impersonal ergatives with a pre-verbal argument.

# 3. Preverbal NP in VP: double object passives

The structure of (5a,b), repeated here is roughly (19a,b):

- (5) a. Það voru skrifaðar þrjár bækur.
  - b. Það voru þrjár bækur skrifaðar.
- (19) a. Það voru [VP e [V, skrifaðar þrjár bækur]]
  - b. Það voru [VP þrjár bækur; [V' skrifaðar e; ]]

It will be shown in the next section that the pre-verbal argument is actually not in the spec of the participle but in the spec of the copula. For the moment this does not matter. The structure of (2) is roughly (20):

(20) Það voru [VP e [V, gefnar Jóni bækur]]

Under assumption (A) above there must be a spec-position projected by the verb in (19) as well as in (20). In (19b) the position is filled, by movement of the complement of the verb, but in (19a) it is empty. In (20) it is empty. I hypothesize that (20) is out since the EC in specVP is illicit. In other words, (20) violates the ECP. The question is, how come the EC in specVP is licit in (19a) but not in (20)?

I assume (19a) avoids violating the ECP since the object raises to specVP in LF. That is to say, the object can raise to specVP in overt syntax or in LF. Since the ECP applies at LF, (19a) does not violate it. In (20) none of the arguments can raise to specVP for the following reasons:

(a) The direct object (DO), i.e. the theme, cannot raise to specVP because this would violate Relativized Minimality (Rizzi (1990)). I assume a version of Larson's (1988b) analysis of the double object construction. The structure is schematically (21), the same structure for active as well as passive (participial) VP.

(21)  $[VP NP1 [V, give_i [VP NP2 [V, e_i NP3]]]]$ 

The VP has two "shells," and the verb moves from the lower head position to the higher head position within VP. In a passive VP NP1 is empty in overt

syntax, and must be filled by A-movement in LF. But NP3, the DO, cannot move to NP1, across NP2, the indirect object (IO) situated in the lower specVP, without violating Relativized Minimality (see Vikner (1989) and H&P).<sup>11</sup>

(b) The IO cannot raise to specVP because it cannot agree with (participial) V. Assume that agreement is obligatory between NP1 and the raised verb. This can be expressed by taking the head to which the verb raises in double object constructions to be a functional category encoding agreement, so that highest VP in (21) could more aptly be called "AgrP." I shall go on calling it "VP," though. If so, an NP which cannot agree with the raised verb is not welcome in NP1. Consequently (20) cannot avoid violating the ECP.

Why can participial V not agree with the IO, but only with the DO? I have to admit that I do not have any very good explanation of this crucial fact. It is important to note, however, that the reason is not simply that the IO has oblique lexical case while the DO has structural case. This is shown by the following two facts:

- (a) In (22a) the post-verbal argument has lexical (dative) case. In (22b) the dative argument occurs in pre-verbal position.
  - (22) a. Það var skílað þrém bókum. it was returned three books(DAT)
    - b. Það var þrém bókum skílað. it was three books(DAT) returned

Thus we may safely assume that the pre-verbal EC in (22a) is licensed by movement of the dative argument to specVP in LF (by the principle which says that any movement which is licit in overt syntax is licit in LF, although not vice versa). If agreement between V and the argument is a prerequisite for movement of the argument to specVP, then we have to say that there is covert agreement between the dative argument and the verb in (22). Following Sigurosson (1993) I will say that the agreement relation is in this case

phonetically realized as a morphological case. 12

- (b) In (23) the IO has structural case (namely structural accusative) while the DO has lexical case. Nevertheless the construction is ill formed, again by assumption because it violates the ECP. The structure is shown in (23c) (see H&P on Icelandic double object constructions).
  - (23) a. Hann rændi Jón miklum peningum. he robbed Jon(ACC) (of) much money(DAT)
    - b. \* Pað var rænt Jón/einhvern miklum peningum. it was robbed Jon/somebody(ACC) much money
    - c. Það var [VP e ]V, rænt Jón/einhvern miklum peningum]
    - d. \* Það var Jón/einhvern rænt miklum peningum.

(23d) shows that the IO cannot move to specVP in overt syntax. If I am right, (23b) shows that it cannot do so in LF either.

I conclude that the reason why the head chain in (20) agrees with the DO and not the IO is not simply that the IO oblique case. I suggest that the reason is that the IO has a special kind of case, namely a semantic case, which is not lexically checked ("assigned") by V the way the case of the DO is, that is by virtue of syntactic subcategorization, but rather is licensed by the semantic properties of the verb (formalized, say, as a lexical conceptual structure, roughly as in Speas (1990)). 13

Now consider MSc, where as mentioned the impersonal double object construction is well formed (although it is often quite marginal). In terms of the present theory this entails that the EC in specVP in (24) is licit.

(24) Det blev  $[\mathbf{VP} \ \mathbf{e} \ [\mathbf{V'} \ \mathbf{givet} \ \mathbf{pojken} \ \mathbf{b\"{o}cker}]].$ 

it was given the-boy books

<sup>11</sup> This is how Vikner (1989) rules out DO passives (\*?The book was given John) in those languages which do not permit them, including Danish and English: the DO cannot be A-moved across the IO without violating Relativized Minimality.

<sup>12</sup> That is to say, agreement is taken to be an abstract relation which may be phonetically realized on the head (as agreement proper) or an the dependent, as morphological case. I am simplifying Sigurŏsson's theory to suit my purposes.

<sup>&</sup>lt;sup>13</sup> This accords the view advocated in Emonds (1991b) and supported by H&P, according to which lexical heads have a syntactic strict subcategorization which is not derived from the semantics of the head. It does not accord with the hypothesis, put forth in H&P, according to which the case of the IO is lexically checked by the verb in Icelandic but not in MSc.

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As in Icelandic the DO cannot raise to specVP without violating Relativized Minimality. We might consider the hypothesis that the IO can be raised to specVP in LF, satisfying the ECP, perhaps as a consequence of lack of lexical case in MSc. But (23) indicated that lexical vs. structural case was not the decisive factor. Note also that the participle does not agree with the IO, but has the neuter form which agrees with the expletive but not with the common gender IO.<sup>14</sup> Instead, as expected given the discussion in the previous section, I propose that the EC in specVP is licensed by virtue of being antecedent-governed by the strong expletive in specIP. A weak expletive, as in Icelandic, cannot head an A-chain, hence cannot antecedent-govern an EC in specVP.

Since the reason why Icelandic has an empty, hence weak, expletive subject pronoun and not an overt, hence potentially strong one, is that Icelandic has strong Agr, we may conclude that strong Agr blocks a possibility of licensing the impersonal double object construction in Icelandic, a possibility which is open to MSc, since in the absence of strong Agr MSc can have a strong expletive.

# 4. Impersonal passives with several auxiliaries

The present theory offers a new explanation of another difference between Icelandic and MSc concerning impersonal constructions. As discussed by Vikner (to appear), in impersonal passives with more than one auxiliary a sharp difference emerges between Icelandic and MSc concerning the position of a pre-verbal argument: while in MSc the pre-verbal argument must immediately precede the main verb, in Icelandic the pre-verbal argument must precede all but the highest auxiliary (the examples in (25) are from Sigurosson (1991)).

- (25) a. Það mundi (sennilega) þrem bátum hafa verið bjargað. (Icelandic) there would probably three boats have been rescued
  - b. \*Pað mundi (sennilega) hafa þrem bátum verið bjargað.

In this case I assume the IO moves via highest specVP. Note also the lack of a definiteness effect. This follows if indefiniteness is a precondition for expletive replacement. Here none is needed, hence there is no definiteness effect. See below section 6 on personal IO passives in Icelandic.

(Swe)

- c. \* Það mundi (sennilega) hafa verið þrem bátum bjargað.
- d. Það mundi (sennilega) hafa verið bjargað þrem bátum.
- (26) a. \* Det skulle (antagligen) tre båtar ha blivit bärgade. (Swedish) there would probably three boats have been rescued
  - b. \* Det skulle (antagligen) ha tre båtar blivit bärgade.
  - c. Det skulle (antagligen) ha blivit tre båtar bärgade.
  - d. Det skulle (antagligen) ha blivit bärgat tre båtar.

The position of the sentence adverb rules out the possibility that the argument is in specIP in (25a): a sentence adverb does not normally precede specIP in Icelandic. Instead the argument is (presumably) in the highest VP-specifier position, adjacent to I (although I is vacated in (25) due to V2). Sigurŏsson (1991), Vikner (to appear) and H&P all assume that the reason why the preverbal argument has to move all the way the highest VP-specifier position in Icelandic is that, for some reason, an argument must be governed by a "strong governor." The other auxiliaries in Icelandic do not count as "strong" in the right sense, but lexical verbs do, which accounts for why the argument may always occur in post-verbal position, as in (25d). In MSc I is not a strong governor (lacking visible Agr), and neither are other auxiliaries, except the copula. Therefore only (26c) and (26d) are well formed. <sup>16</sup>

Consider the structure of the relevant part of (25c) (prior to V2 and omitting the sentence adverb, to make the exposition clearer):

(27) Það [ $_{\rm I}$  mundi] [ $_{\rm VP}$  e [ $_{\rm V'}$  hafa [ $_{\rm VP}$  e [ $_{\rm V'}$  verið [ $_{\rm VP}$  þrem bátum [ $_{\rm V'}$  bjargað ]]]]]]

This structure is ruled out in Icelandic but the corresponding structure is well formed in MSc. Following the argument above concerning the impersonal double object construction, I propose that the reason why (27) is ill formed in Icelandic is that it contains two ECs which violate the ECP. The only way it can be saved is by moving the argument up into the highest VP-spec position whence it can head a chain including the other spec-positions. The

<sup>&</sup>lt;sup>14</sup> In a personal IO passive the participle agrees with the IO.

<sup>(</sup>i) Pojken blev given/\*givet böcker(na). the-boy was given(COM)/given(NEUT) (the-) books

<sup>15</sup> The exact formulation of the condition varies in the three works mentioned.

<sup>16</sup> This means that the structure of (5b) is more precisely (i):

<sup>(</sup>i) Það voru; [VP þrjár bækur; [VP, e; [VP e; [V, skrifaðar e; ]]]]

The pre-participial argument is in the spec of the trace of the copula.

corresponding structure in MSc is licit, since MSc has a strong expletive which can head a chain including all the spec-positions down the tree. We can exclude (26a,b) by recourse to Chomsky's (1993) procrastination principle: In MSc there is nothing forcing movement of the argument from the lowest VP in overt syntax, and consequently movement in overt syntax is not allowed.

Some new questions arise within this theory of (25)-(26). In particular we have to explain why (25d) is not also ruled out by the ECP. Assuming it satisfies the ECP by virtue of A-movement in LF, we have to explain why such LF-movement is possible in (25d) but not in (25b,c).<sup>17</sup> If this problem can be solved in an interesting way, the present theory offers a not unattractive alternative to the Vikner-Sigurðsson hypothesis, which also rests on some more or less ad hoc auxiliary hypotheses, concerning the need for strong government etc.

# 5. Some additional double object constructions

One of many questions which has not yet been taken up is, what is the structure of (28) = (3a)?

(28) Stráknum voru gefnar gjafir(nar). the boy(DAT) were given(PL) (the) gifts

The crucial difference, presumably, between (25a,b) is that t is in a theta-position in (25a) but not in (25b). The following is a suggestion in the spirit of Chomsky's (1991, 1993) notion of "legitimate LF-element": The trace in specVP is not a legitimate LF-element, as it is neither in a theta-position nor in a case-position. Note that the trace in specVP is not even necessarily an agreement position in Icelandic, if, as argued by Sigurŏsson (1993) agreement can be licensed by a head-complement relation as well as (in other cases) a spec-head relation. If so, then the post-verbal trace in (ia,b) satisfies the agreement requirements of the (participial) verb, and the trace in specVP is not required for this purpose. (Since the verb in (25) assigns oblique case there is no (overt) agreement with the argument in any case, but an example like (5a,b) shows that verb agreement is not affected by the position of the argument, in Icelandic.) Now if the trace in specVP is not a legitimate LF-element it should be deleted in LF. This is unproblematic in (ia), but in (ib), where the trace is in the S-structure position of the argument, it cannot be deleted. This amounts to another way of saying that (25c) is ill formed because the argument in specVP it is not locally licensed by a theta, case, or agreement relation. In contrast, the argument in specVP in the corresponding Swedish example (26c) is locally licensed by agreement: the verb agrees with the argument in specVP in (26c) but not with a post-verbal argument in (26d).

The simplest assumption possible, within the general framework assumed, is that the structure is (29):

(29) [IP Stráknum; voru [VP  $e_i$  [V' gefnar gjafir(nar)]]].

That is to say, the predicate is a bare, one-layer VP, with no movement of the verb corresponding to the movement assumed in the active double object construction or in the impersonal double object construction where the verb precedes both arguments (see (21)). The predicate condition (13) is satisfied in (29) by movement of the IO to specIP. Why, then, is (30) not good:<sup>18</sup>

- (30) a. \* Það voru stráknum gefnar gjafir. it were the-boy given gifts
  - b. Pað  $[IP pro_i [I voru]_i [VP stráknum_i [V] gefnar_i gjafir_i]]]$

The problem here, I assume, is that the predicate condition (13) cannot be satisfied. As discussed in section 2, an indirect A-chain is created linking specIP with an argument in VP, which in the case of a double object construction is always the DO. This can be done in (30), but the DO cannot move to specIP in LF without violating Relativized Minimality. The IO, on the other hand, cannot move to specIP because it has the wrong index. This presupposes that coindexing of strong Agr and the weak expletive is automatic. The IO can move to specIP in overt syntax, as in (29), in which case Agr is not coindexed with specIP, <sup>19</sup> but the IO cannot move to specIP in LF. <sup>20</sup>

See Hedlund (1992) on the properties of this construction. Plausibly the IO is here an adjunct to VP, moved there by an operation akin to Object Shift (see Holmberg (1993a)), which accords with the fact that most speakers allow it only when the IO is a weak pronoun. Note that it is not a case of Object Shift proper, since the IO may be adjoined to the lowest VP, to the right of a nonfinite copula:

(ii) Det har aldrig blivit honom givet böcker. it has never been him given books

<sup>&</sup>lt;sup>17</sup> Schematically, (ia) is a well formed LF representation but (ib) is not, where t is in the S-structure (hence PF) position of the moved argument (and "AuxP" is a VP headed by an auxiliary verb).

<sup>(</sup>i) a.  $[AuxP NP_i [Aux' Aux [VP e_i [V' V t_i]]]]$ b.  $[AuxP NP_i [Aux' Aux [VP t_i [V' V e_i]]]]$ 

<sup>18</sup> The word order in (30) is possible in Swedish (but no other MSc language), particularly if the IO is a pronoun.

<sup>(</sup>i) Det blev honom givet böcker. it was him given books

<sup>19</sup> According to H&P Agr (i.e. AgrS) has inherent nominative case. Therefore it can only be coindexed with nominative categories.

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Now interestingly (31) is marginally acceptable, and clearly better than (30):

(31) ?? Það voru einhverjar bækur gefnar Jóni. it were some books given Jon

I assume that this construction is permitted as an instance of the inverted double object construction. (32) is an example of an active inverted double object construction:

(32) Jón gaf bókina einhverju bókasafni. Jon gave the book (to) some library

As discussed by H&P the construction requires focus on the IO (see also Ottóson (1991)). H&P, following Falk (1990) and Holmberg (1991), argue (contra Ottóson (1991)) that the predicate of the inverted double object construction has the structure (33), prior to subject movement to specIP.

(33)  $[VP Jón [V, gaf_i [VP bókina [V, e_i einhverju bókasafni]]]]$ 

That is to say, it has the same structure as the English and MSc give NP to NP construction (following Larson (1988b)), except that the preposition is substituted by dative case and focus.

I propose that (31) has the structure (34):

(34) Það [ $_{IP}$  pro $_{i}$  [ $_{I}$  voru] $_{i}$  [ $_{VP}$  einhverjar bækur $_{i}$  [ $_{V}$ , gefnar $_{i}$  Jóni ]]]

In this construction Relativized Minimality does not prevent LF-movement of the DO in specVP to specIP, via the indirect A-chain, satisfying predication. The fact that the construction is worse if the IO is a pronoun supports the hypothesis that it is modeled on the inverted double object construction, which, as mentioned, requires focus on the IO.

(35) ?\* Það voru einhverja bækur gefnar honum. it were given some books him

I suggest that one of the reasons why (31) is marginal is that there is a conflict between the definiteness effect, which requires that the DO should be

indefinite, hence the natural focus of the construction, and the requirement that the post-verbal IO in the inverted construction should be focus.

#### 6. Other languages

We make the prediction that an SVO language which has a weak expletive should not allow the impersonal double object construction, while an SVO language which has a strong expletive should do so, provided other conditions are met. A diagnostic property of a weak expletive is that the verb agrees with the VP-internal argument. To test the prediction we need a language which is SVO, has the double object construction, and has impersonal passives. It must be an SVO language, since the claim is that the impersonal double object construction is ruled out in Icelandic because the verb preceding the two objects has an illicit empty specifier. For instance German apparently allows an impersonal double object construction in spite of its weak expletive (*Es wurden dem Jungen zu viele Bücher gegeben*) but this is of no consequence since German is SOV, and hence (presumably) has no empty specifier position in the impersonal double object construction. The Romance languages do not have the double object construction, and therefore do not provide a reliable test.<sup>21</sup> English does not allow impersonal passives at all.

One language which does meet all the conditions is Faroese. Since the Faroese expletive is weak, we predict that Faroese should not allow the double object impersonal. Although there is some uncertainty about the data, the prediction appears to be confirmed: The construction exemplified by (36) is unacceptable.<sup>22</sup>

This is also predicted (see discussion around (34)), although matters are complicated by the fact that Faroese does not allow inversion in the active double object construction. It could be noted that the word order in (i) is acceptable for some Swedish speakers, too. This indicates either that inversion can occur in passives even if it is unacceptable in actives, or that there is another source for (i) and (31). The prefixes \*? for (36) and ?? for (i) represent my interpretation of the reactions of the four persons on whom Eivind Weyhe tested these constructions. The uncertainty may be due simply to the marginality and high degree of formality which is characteristic of the impersonal double object construction

<sup>20</sup> This would be a case where a movement which is possible in overt syntax is impossible in LF.

<sup>&</sup>lt;sup>21</sup> If a French dative clitic construction such as (i) (thanks to Karl Johan Danell for the example) is derived from a double object construction basically like (17), then it confirms the prediction.

<sup>(</sup>i) Il lui a été paradoxalement permis de renouer avec son identité.

<sup>22</sup> Some speakers preferred (i) to (36), while others rejected both of them.

<sup>(</sup>i) ?? Tað blivu triggjar bøkur givnar Jógvani. It were three books given Jogvan

(36) \*? Taŏ blivu givnar henni tríggjar bækur. (Faroese) It were given her three books

Another language on which the prediction can be tested is Yiddish: It is (arguably) SVO, it has the double object construction, and it has impersonal passives. The prediction holds for written Yiddish, though not so unequivocally for colloquial Yiddish. Written Yiddish has a weak expletive, so we predict that the impersonal double object construction should be out. In colloquial Yiddish it is apparently common not to have agreement with a post-verbal argument in impersonals (see Prince (1981)), so by this criterion the expletive is not weak. If so, we predict that the impersonal double object construction might be better in colloquial than in written Yiddish. However, according to David Braun (p.c.) the construction corresponding to (1)-(2) is bad in Yiddish with or without agreement with a post-verbal argument.

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probably in any language. On the other hand it may also be a reflection of the "intermediate" status which the expletive has in Faroese when compared with Icelandic and mainland Scandinavian: see Barnes (1986).