ON ICELANDIC WORD ORDER ONCE MORE

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1. INTRODUCTION

Germanic word order has been an extremely popular and fruitful research topic in the past few years. There are a number of working papers, articles, dissertations, and monographs that deal with Germanic word order, in general, or with particular aspects of it. Much of the discussion is summarized in Haider and Prinzhorn's introduction to their book on Germanic verb-second phenomena (Haider and Prinzhorn, 1986) and in the papers and references cited in that book. Platzack's (1985) excellent survey paper is also a good starting point for those who want to become acquainted with basic issues and recent analyses.

It is well known that Germanic languages other than English exhibit the socalled verb-second or V2 phenomenon. The basic difference between English, on the one hand, and the V2 languages, on the other, can be seen by comparing English sentences such as (1a-b) with their Icelandic counterparts in (2):

- (1) a. I have never met Mary.
 - b. Mary I have never met.
- (2) a. Ég hef aldrei hitt Maríu. 'I have never met Mary (ACC).'
 - b. Maríu hef ég aldrei hitt.
 Mary (ACC) have I never met 'I have never met Mary.'

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The neutral English word order given in (1a) has the subject in initial position, preceding the (finite) verb. Example (1b) shows that in English it is possible to have a nonsubject NP immediately preceding the subject. Germanic V2 languages such as Icelandic differ from English on this point, as illustrated in (2a-b). Again, (2a) reflects the so-called neutral word order, with the subject in initial position preceding the finite verb (Vf), but in (2b) there is a nonsubject in initial position. The important feature to note here is that in (2b) the subject no longer precedes the Vf but instead immediately follows it. In other words, the Vf is preceded by only one constituent in both instances and thus occupies second position. This is the famous V2 phenomenon.

While various accounts of this phenomenon have been proposed, it is probably fair to say that most of the recent proposals written within Chomsky's GB framework involve double movement of the finite verb. We sketch such an analysis of Icelandic word order in Section 2.1 below. Analyses of this sort involve movement of the finite verb to the INFL-position in all clauses (the V-to-I rule) and then on to the COMP-position in main clauses (the V-to-C rule). We refer to such analyses as 2VM (= double verb-movement) analyses. Platzack (1985) argues for a 2VM analysis in his survey. He was also the first to apply such an analysis to Icelandic (Platzack, 1983a). Others who have been instrumental in developing 2VM analyses for Icelandic include Holmberg (most recently 1986) and Sigurðsson (e.g., this volume:

The major appeal of the 2VM analyses of the V2 phenomenon lies in the fact that they account rather neatly for certain word order differences between main clauses and subordinate clauses in Germanic V2 languages (cf. section 2). These differences are particularly obvious in languages such as German and Dutch, for instance, where the finite verb occupies a totally different position in these two types of clauses. Certain differences in the relative ordering of finite verbs and sentential adverbs (S-adverbs) in the Mainland Scandinavian languages, for instance, also follow directly from a 2VM analysis of these languages. But this kind of support is absent in Icelandic, which makes a 2VM analysis less appealing for that particular language. This was one of the reasons why Rögnvaldsson (1984) proposed a different account of the V2 phenomenon in Icelandic. He argued that V-to-C rule does not apply in Icelandic, although the V-to-I rule does. His analysis is thus a 1VM (single verb-movement) analysis. It has been further developed by Thráinsson (1984b, 1986a, 1986b).

The purpose of this article is to try to clarify some issues involved in the 1VM analysis and to contrast it with the 2VM analyses. In section 2 we sketch the two types of analyses. To make them more comparable, we choose Holmberg (1986) as representative of 2VM analyses and propose a binary branching version of our 1VM analysis to contrast with it. In section 3 we go through the most important descriptive problems of Icelandic word order that both types of theories can accommodate. In section 4 we discuss some areas where the theories make different predictions. We maintain that the scales tip in favor of the 1VM analysis, although some unsolved problems remain for both analyses. We show, in particu-

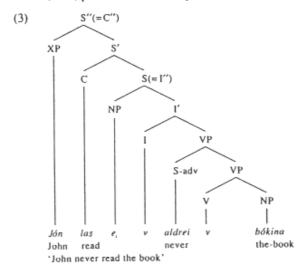
lar, that the two types of theories under discussion do not differ in the extent to which they have to refer to nonsyntactic concepts in order to account for the data, although it is obviously not possible to go into all aspects of Icelandic word order in an article of this kind. In section 5, we conclude that the IVM analysis is a viable alternative approach from a general theoretical point of view.

2. A SKETCH OF 2VM AND 1VM ANALYSES OF ICELANDIC WORD ORDER

2.1. Holmberg's 2VM Analysis

In his dissertation, Holmberg (1986) proposes a 2VM analysis of Icelandic word order. Since it is one of the most recent and in many respects the most explicit version of the 2VM analysis of Icelandic word order available at present, we use it here as a point of departure (but see Sigurðsson, 1989, for a more detailed account of some of the issues within a 2VM analysis). Different assumptions made by other proponents of the 2VM analyses are only mentioned when particularly relevant for the arguments at hand.

Holmberg assumes the following basic structure for Icelandic sentences (1986: 85–86, 121, passim; additions in parentheses are ours):

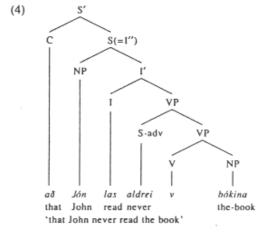


This structure is consistent with the X-bar theory, as described in Chomsky (1986a:2-3), for instance. As indicated, C (the COMP "slot") is the head of S' (and S") in this structure, and I (INFL) is the head of S. The clause given as an example is a main clause. The (finite) verb has thus moved twice, as indicated by its traces (the ν under V and the ν under I); we discuss later the reasons for these

verb movements. The subject originates in the NP-position under S and moves to the "topic position" indicated by XP in (3), since this is a clause with the normal, declarative SVO order.

This may seem a rather complex analysis of a straightforward declarative main clause, but Holmberg motivates each of the movements involved. Following Kayne (1982), he argues that clauses can have different functions. These functions depend on the nature of their heads. According to principles assumed by Holmberg (and also Kayne, 1982; Taraldsen, 1986, in slightly different versions), predicates must be verbal (or [+V]) whereas arguments must be nonverbal (or [-V]). Although the formal details of these principles need not concern us at present (see Holmberg, 1986: 135-145), they play a crucial role in accounting for the movements. First, the verb not only moves to I to get inflected but also to fill I with verbal ([+V]) material, which is necessary since I is the head of the predicate according to Holmberg (1986:145-147). But in a main clause such as (3), S' is also a predicate in a sense, since the "relation between XP and S', 'topic and comment' [in a structure such as (3)] is similar to the relation between NP and I, subject and predicate, both semantically and syntactically" (Holmberg, 1986:137). This means that S' has to have a verbal head in main clauses, which is provided by moving the finite verb to C. The topic need not be a subject, of course. When a nonsubject element is topicalized, the subject stays in the NPposition under S (Holmberg, 1986: 102 ff.), but the finite verb will nevertheless be in second position (i.e., under C). That is the famous V2 effect (cf. section 3.3).

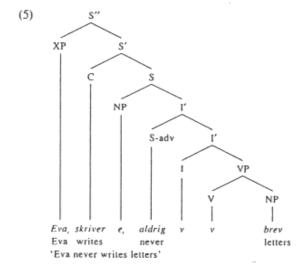
The situation is a little different in a subordinate clause according to Holmberg (1986) and any other 2VM analysis. An example is given in (4):

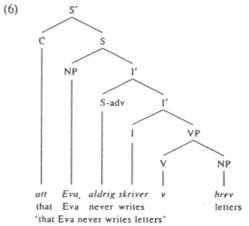


Here the C-position is occupied by the complementizer $a\delta$ 'that', which is marked [-V] in Holmberg's feature system and can thus head an argument, and that-clauses are typical argument clauses. Consequently, the finite verb stays in I, where it rightfully heads the predicate. The subject also stays in place under NP,

since there is no XP-slot for it to move to in embedded clauses, the XP being to the left of C. (This formulation predicts, of course, that topicalization, i.e., movement of nonsubject constituents to XP, will not normally occur in embedded clauses, as we see below.)

The reader may have noticed that the order of subject, finite verb, and adverb is the same in (3) and (4), although (3) involves two more movements than (4) (i.e., subject-to-XP and V-to-C, in addition to V-to-I common to both). In that sense, these two additional movements are string vacuous in Icelandic. This is not so in Swedish, for instance, since the relative ordering of the finite verb and the S-adverb is different in main clauses and subordinate clauses, as demonstrated by (5) and (6) (Holmberg, 1986:89 ff.):

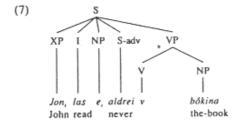


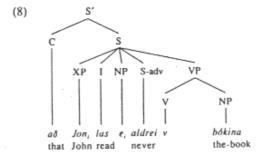


In (5) the finite verb has moved twice and thus ends up to the left of the S-adverb. But in (6) it has only moved to I and therefore stays to the right of the S-adverb. This kind of evidence for V-to-C is missing in Icelandic, as mentioned in section 1.

2.2. Our 1VM Analysis

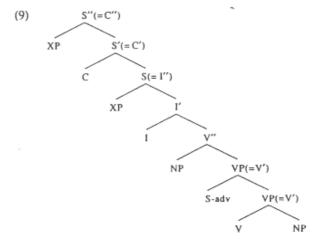
Rögnvaldsson (1984) was the first to account for V2 in Icelandic by a IVM analysis. Rögnvaldsson proposed relatively flat structures that would look essentially like the sentences in (3) and (4) above (Rögnvaldsson, 1984:10ff.—Rögnvaldsson was not dealing with S-adverbs but we have added S-adverbs for ease of comparison):





Rögnvaldsson's (1984) arguments were mainly based on (1) certain properties of $ba\bar{\sigma}$ -insertion in Icelandic (which we discuss below); (2) the lack of evidence for V-to-C in Icelandic main clauses as opposed to their Swedish counterparts, for instance (cf. section 2.1); and (3) the relative frequency of topicalization in embedded clauses in Icelandic (as opposed to some other Germanic languages; cf. section 4 below). Thráinsson (1984b, 1986b) and Rögnvaldsson (1987) basically assume the same kind of structure and give some additional arguments for the analysis. But the flat structure shown in (7) and (8) is not really necessary for any of the most important arguments of the IVM analysis, we will translate this structure into the binary branching framework to make the comparison with

Holmberg's 2VM analysis easier. Before giving the relevant structures of our example sentences, we propose (9) as the "maximal" sentential structure for Icelandic, assuming, with Holmberg (1986), an X-bar framework similar to that of Chomsky (1986a):

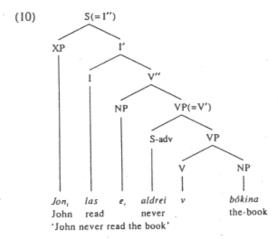


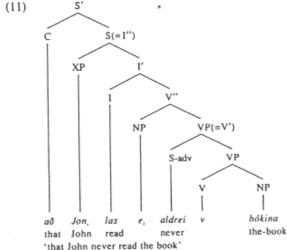
Like Holmberg, we assume that C is the head of S', and I the head of S, as shown here. There are, however, several important differences, which we discuss in detail in the next sections. First, note that we are assuming two XP-positions, the topmost being the specifier of C (as Holmberg's XP), whereas the second is to the right of C, immediately dominated by S and the specifier of I. We propose that the topmost XP is the slot filled by certain dislocated elements (see section 4.3 below). It is to the left of C, and left dislocation, for instance, does not apply in embedded clauses, thus differing from topicalization (Thráinsson, 1979:63-64). This slot has sometimes been labeled E (cf. Zaenen, 1980:19, following Banfield, 1973; see also Thráinsson, 1986b:189), and it will not be present in all sentences. Following recent GB practice, one could assume that all the slots shown in this tree are in fact optional-everything is optional unless some principle of grammar requires occurrence. Second, there is a second XP-slot that follows C; subjects and nonsubjects can move to this position in embedded clauses as well as in main clauses. Third, we assume that there is a maximal projection of V in the structure, namely V" (sometimes labeled VP' [VP-bar]), and that the basic subject position is dominated by this V". The subject is thus the specifier of V in Icelandic D-structure, rather than the specifier of I as argued by Holmberg.

Turning now to our example sentences, their structures are represented as follows:



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The main differences between this analysis and Holmberg's should be fairly obvious. First, the finite verb moves only once: we have the V-to-I movement in the main clause in (10) and in the subordinate clause in (11). We assume with Holmberg that the finite verb does this in order to get inflected and also to provide the predicate I' in these structures with a verbal head. But since there is no S' in main clauses such as (10) (no principle of grammar calls for it), no further verb movement is needed. The main clause is just a S in examples of this sort and the S is verbal, as it should be, since its head (the I) contains verbal material already after V-to-I. But in a declarative SVO structure such as this, the subject moves to the XP-position (Diderichsen's, 1946, fundament), it being the topic or Theme of the sentence in the functional sense.

The derivation of a subordinate clause is very much the same in a IVM analy-

sis. We find the same V2 phenomenon in embedded clauses as in main clauses in Icelandic; we thus assume in our analysis the same kind of movement in both clause types. The only difference is that the embedded clauses are S' rather than just S and hence their head is C. In our example sentence (11), this head position is filled by the nonverbal ([-V]) complementizer $a\bar{\sigma}$ 'that', since this is an argument clause.

3. SOME COMMON PREDICTIONS OF HOLMBERG'S ANALYSIS AND OURS

3.1. A List of Facts Compatible with Both Analyses

Having sketched a 2VM and a 1VM analysis of Icelandic word order, we can now show in more detail how these analyses account for certain word order facts in Icelandic. We begin by listing some of the predictions made by both analyses (or distributional facts compatible with both of them), and then we go through them one by one, explaining why or how they are made and showing that they are borne out. The list is as follows:

- (12) a. The finite verb in Icelandic normally occurs in second position in both main clauses and subordinate clauses. In this respect, Icelandic differs from the Mainland Scandinavian languages.
 - Fronted question words cannot cooccur with complementizers in embedded questions in Icelandic. Icelandic again differs from the Mainland Scandinavian languages in this respect.
 - c. The finite verb in Icelandic can occur in initial position, for example, in direct yes/no questions, imperatives, parentheticals, and conditionals.
 - d. A nonfinite verb can move to I in infinitival clauses, for example, control infinitives.
 - Topicalization and paō-insertion cannot cooccur in Icelandic; they are incompatible but should obey more or less the same restrictions.

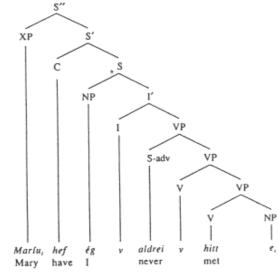
3.2. The V2 Effect

We have already briefly discussed and illustrated the V2 phenomenon. In section 1 we gave examples showing the basic difference between the word order in English and in a V2 language such as Icelandic, and in section 2 we sketched a 2VM and a 1VM analysis. Our illustrations in section 2 involved only a normal SVO order in main clauses and subordinate clauses [cf. examples (3), (4), (10), and (11) above]. It is perhaps more instructive to see what happens in sentences with nonsubjects in initial position, since it is there that the difference between V2 and non-V2 languages can be most clearly seen. The examples in (13), therefore, repeat our Icelandic example sentences in (2), for ease of reference:

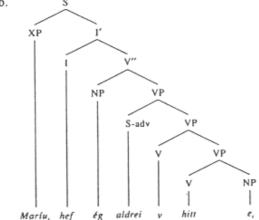
- (13) a. Ég hef aldrei hitt Maríu.
 - 'I have never met Mary (ACC).'
 - b. Mariu hef ég aldrei hitt. Mary (ACC) have I never met 'I have never met Mary.'

As explained earlier, (13a) reflects the so-called neutral word order, with the subject in initial position preceding the finite verb (Vf), but in (13b) there is a non-subject in initial position. The derivations of this typical V2 word order can be illustrated as in (14a-b) for the 2VM and IVM analyses, respectively, taking (13b) as an example:

(14) a.



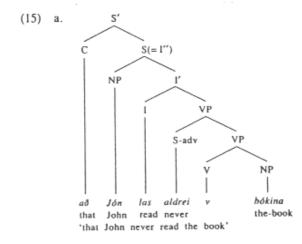
b.



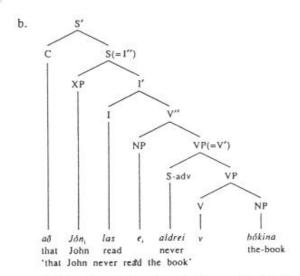
The two analyses thus account for the V2 phenomenon in main clauses in rather different ways. In Holmberg's 2VM analysis, the V-to-C rule (the second verb-movement rule, which moves the verb from the I-position to C) is essential to get the verb to second position in main clauses (the position following the XP). That position precedes the subject position in D-structure, and hence the verb will precede the subject if a nonsubject is moved to the XP-position. In our IVM analysis, in contrast, the I-slot precedes the subject position in D-structure so the verb already precedes the subject after V-to-I and no further verb movement is needed to get the verb to second position. If a nonsubject is fronted to XP, then the subject follows the verb.

Holmberg suggests that the reason English is not a V2 language is basically because it does not have a general V-to-C rule. Consequently, if an object is topicalized, we get the order OSV, as seen in (1b) above (with the C position presumably empty, if we assume a structure comparable to [14a]) (Holmberg, 1986: 147 ff.). The reason why English does not need this rule in order to make S' verbal, according to Holmberg, is that C is marked [+V] by default in English (but [-V] in the V2 languages) and hence V-to-C is not needed. The reason why it is not allowed to apply anyway, even if it is not needed, might be a universal "last resort principle": Do not move unless you have to (Holmberg, 1986:151; cf. Chomsky, 1986b:143; 1987). Since we are only arguing against structures such as (14a) and a 2VM analysis for Icelandic and not excluding such structures or analyses for other languages, we have no special objections to Holmberg's account of English word order.

Both analyses also provide straightforward accounts of the basic word order in embedded clauses, as we have already seen. In (15a-b) we repeat examples (4) and (11), respectively, to illustrate this:







Common to both analyses is the claim that the position for S-adverbs follows I in Icelandic, so that the finite verb precedes the S-adverb after V-to-I. Hence we get similar word order in Icelandic main clauses and embedded clauses as far as the relative positions of the Vf and S-adv are concerned, although this is not so in the Mainland Scandinavian languages [cf. (3) versus (15a) above]. The two analyses under discussion do, however, make rather different predictions about topicalization in embedded clauses, as mentioned in section 2.2. We return to that problem in section 4.5 below.

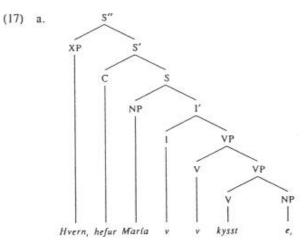
3.3. The Postion of Fronted Question Words

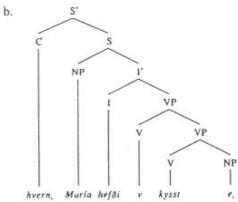
It is well known that there is a word order asymmetry between main and subordinate WH-questions in Germanic (V2) languages. This is illustrated in (16) with examples from Icelandic:

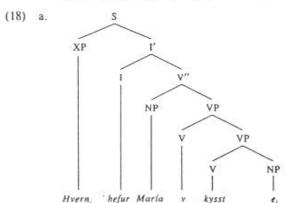
(16) a. Hvern hefur María kysst?
'Whom (ACC) has Mary kissed?'
b. Hún spurði hvern María hefði kysst.

'She asked whom (ACC) Mary had kissed.'

To account for his asymmetry in Icelandic, we propose that the landing sites for the WH-phrases are different in main clauses and subordinate clauses, namely, XP-position in main clauses and C in embedded clauses. Holmberg (1986:104–106) argues for a similar difference within his 2VM analysis of Icelandic, although for partly different reasons. The relevant part of Holmberg's analysis is illustrated in (17), and of ours in (18):

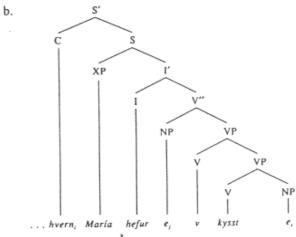






Kyssti

María



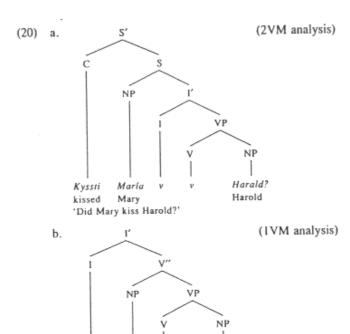
Again, the two analyses account for the facts in rather different ways. One argument for assuming what WH-words (or hv-words) are fronted to the C-position in Icelandic, but not in languages such as Swedish, is based on the fact that a complementizer can sometimes cooccur with a fronted question word in Swedish embedded questions, whereas it cannot in Icelandic (Thráinsson, 1986: 184–185). This difference is illustrated in (19) (cf. Holmberg, 1986: 104–106):

- (19) a. Jag undrar vem som har skrivit det här. (Swedish)
 - I wonder who that has written this
 - 'I wonder who has written this.'
 - b. Ég veit ekki hver *sem/* að hefur skrifað þetta. (Icelandic)
 - I know not who that has written this
 - 'I do not know who has written this.'

The impossibility of a complementizer following the fronted hv-word in C in Icelandic would then follow from some sort of ban against a doubly filled C. This restriction could, for instance, be based on c-command relations between fronted constituents and their traces: the fronted hv-word does not c-command its trace if it is dominated by a branching C (Thráinsson, 1986b:185). But Holmberg assumes that in Swedish the fronted question word in embedded questions occupies the XP-position. Hence the C-position can be filled by a complementizer of the proper kind (but not by the finite verb because that would make the embedded question [+V], which is ruled out since this is an argument clause).

3.4. Some V1 Possibilities

It is well known that there are a few instances of V1 order in the Germanic V2 languages, for example, yes/no questions. The derivation of these is rather simple under both types of analyses considered here, as illustrated in (20a) and (20b), respectively:



In both analyses, the structures differ from declarative main clauses in that there are no XP-positions and hence no fronting of the subject (or any other) NPs. Both structures are therefore "nonmaximal" in the sense that the topmost specifiers are missing (SPEC of C in Holmberg's structure, SPEC of I in ours). As before, Holmberg's analysis involves double verb-movement, whereas ours involves a single movement. Holmberg's structure is verbal because the C (the head of S') is occupied by the finite verb; ours is verbal because I (the head of I') is occupied by the finite verb.

Harald?

Similar analyses could be proposed for the V1 structures found in imperatives and asides (cf. Holmberg, 1986:118-119; Thráinsson, 1986b:186-187). The asides are probably more interesting; they are illustrated in (21):

(21) Hefur Jón, spurði María/*María spurði, domið hér? has John asked Mary / Mary asked come here 'Has John, Mary asked, been here?'

As indicated, the VI order is obligatory in the aside. This follows under both analyses if we assume, with Holmberg, that the asides (and imperatives) are for some reason subject to what he calls the "no-XP-conditions." For they are then "bare S's" with finite verbs in C under Holmberg's analysis and "bare I's" with finite verbs in I under our analysis, just like the yes/no questions illustrated in (20a-b) above.

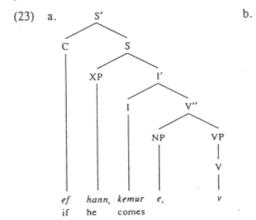
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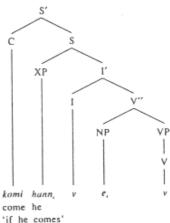
Another type of V1 order involves conditional clauses without a complementizer, illustrated in (22b) (cf. Thráinsson, 1986b:186-187; Holmberg, 1986:96):

- (22) a. Ég fer ef hann kemur.
 I go if he comes (ind)
 'I go if he comes.'
 - b. Ég fer, komi hann.
 I go come (subj) he
 'I go if he comes.'

Holmberg cites sentences of this sort (in Swedish) as evidence for what he calls "complementary distribution of complementizer and verb." The argument is that when the C-position is occupied by the complementizer, as in (22a), the verb cannot move into it; hence, it will stay in I and follow the subject as it normally does in embedded clauses. But in sentences such as (22b) the complementizer is missing, and hence the verb is free to move into the C-position. There are no feature restrictions prohibiting such movement since the conditional is not an argument clause. Hence, its head should not be nominal and therefore it can be occupied by the verb marked [+V].

While it is possible under our analysis to account for the V1 conditionals in a similar way as applied to the asides, that is, by analyzing them as bare I's without XP-slots, there are reasons for agreeing with the 2VM proponents in these cases and for assuming that the verbs actually move to the C-positions in these clauses. First, note that the conditionals are subordinate clauses; hence, there is good reason to assume that they do in fact each contain a C—that is, that they are S's. The nonconjoined conditionals such as (22b) alternate, in fact, with conjoined conditionals such as (22a), where the complementizer shows up. Second, note that the verb in the V1 (nonconjoined) conditional shows up in the subjunctive, which could be seen as an indication of subordination in some sense. Thus, we propose the following kind of analysis of the conditionals:





For constructions such as (23b), then, we propose a 2VM analysis, although it differs from Holmberg's in that he does not assume an XP in embedded clauses and thus an absence of fronting of the subject, as we have seen. Instead, his analysis of the V1 conditionals parallels his analysis of yes/no questions such as (19).

There is, however, one instance of V1 where the two analyses make different predictions. It is the so-called narrative V1 (Sigurðsson, this volume: ______), discussed in section 4.3.

3.5. V-to-I in Control Infinitives

As Holmberg (1986:145) points out, it might appear that the explanation for a rule of V-to-I is trivial: the verbal inflections are somehow located in or associated with I (the inflection position), and hence the finite verb must move there in order to get inflected. But this cannot be the whole story, since there is also evidence for V-to-I in control infinitives, for instance, as first observed by Thráinsson (1984a:254; see also Holmberg, 1986:146):

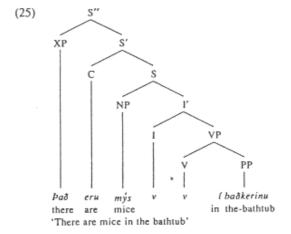
- (24) a. Ég mun aldrei berja konuna mína.
 - I will never beat wife my
 - 'I will never beat my wife.'
 - b. Ég ber aldrei konuna mína.
 - I beat never wife my
 - 'I never beat my wife.'
 - c. Ég lofa [, að PRO berja aldrei konuna mína].
 - I promise to beat never wife my
 - 'I promise never to beat my wife.'

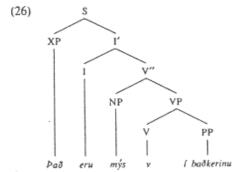
As illustrated in (24a-b), the S-adverb aldrei 'never' follows the finite verb and thus precedes the main verb berja 'beat' if there is an auxiliary present, as in (24a), but follows the main verb if it is finite, as in (24b). The analyses under discussion here account for this distributional difference by maintaining that the main verb moves to I if there is no auxiliary to move there, otherwise it stays in the VP and thus to the right of the S-adverb. This is also the argument given by Thráinsson (1984a). This means, however, that the nonfinite main verb berja in (24c) must have moved to I, too, since it shows up to the left of the S-adverb aldrei. But obviously the nonfinite verb cannot move to I in order to get finite rinflection features such as person and number. But if the reason for V-to-I is, at least partly, the need to provide the predicate with a verbal head, as Holmberg and we assume (cf. sections 2.1 and 2.2 above), then nonfinite verbs occurring in complete clausal structures such as the control infinitives should also move to I. The fact that they do move thus supports both analyses.

3.6. Það-insertion and Topicalization

Finally, it should be mentioned that it is now standard in analyses of Icelandic baō-insertion (e.g., since Zaenen, 1980; and Platzack 1983a, 1983b) to view

 $ba\delta$ 'there' as base generated in the XP-position, where topicalized elements otherwise occur. We adopt this standard here and expect that Holmberg (1986) would do so too. That would give analyses such as the following for a well-known $ba\delta$ -insertion sentence from Icelandic:





The essential differences between these two analyses should be familiar by now; what they have in common is that in both cases the subject NP stays in place and the $pa\bar{a}$ 'there' is assumed to be base generated in the XP-position. This predicts, correctly, that we will not find $pa\bar{a}$ -insertion and topicalization in the same clause. It also predicts that $pa\bar{a}$ -insertion should be as possible under similar circumstances as topicalization. We see later that this is essentially true. As a consequence, however, the two analyses make different predictions about $pa\bar{a}$ -insertion possibilities in embedded clauses, just as they do with respect to topicalization (cf. section 3.3 above). We return to this issue in section 4.4.

This concludes our account of facts equally compatible with both theories. We now turn to areas where the theories make different predictions.

4. SOME EMPIRICAL DIFFERENCES BETWEEN THE THEORIES

4.1. The Different Predictions

We begin this section by listing the different predictions and then go through the facts in turn in the following subsections:

- (27) a. Our theory predicts that (narrative) V1 structures should be possible inside embedded clauses, following an overt complementizer, since they would be generated by not fronting the subject (or anything else) to the XP-position and by having the finite verb in I. Holmberg predicts that this should not be possible since he can only get V1 order by V-to-C.
 - b. We predict that topicalization (fronting of a nonsubject constituent) should be possible, in principle, in any type of embedded clause where the subject can precede the finite verb. This is so because the subject can only precede the verb if it has been fronted to the XP-position, which is the position where fronted nonsubjects also end up. Holmberg predicts that topicalization should only be possible in embedded main clauses, that is, in embedded clauses that have main-clause characteristics and main-clause structures (basically, asserted clauses—see Holmberg, 1986:109 ff.).
 - c. We predict that pað-insertion, just like topicalization, should be possible in various types of embedded clauses, including embedded questions and relatives, just as topicalization should be possible in such clauses [cf. (27b) above]. Holmberg predicts that this should not be the case.
 - d. Holmberg (1986:110ff.) predicts that extraction out of clauses where topicalization has occurred should be virtually impossible for syntactic reasons, possibly because of the intervening S", which acts as a barrier (this type of clause being an embedded main clause with all main-clause constituents, including an XP, according to Holmberg). For the same reason, Holmberg predicts that extraction should be impossible out of embedded clauses where \(\frac{pa\delta}{\delta}\)-insertion has occurred. We do not predict anything like this on the basis of structural differences, since the boundaries of embedded clauses where topicalization or \(\frac{pa\delta}{\delta}\)-insertion has occurred do not differ from ordinary clause boundaries under our analysis.
 - e. Finally, our theory predicts that it should be possible to find evidence for two different XP-positions, one preceding C (and thus not occurring in embedded clauses), the other following it. According to Holmberg's theory, there is only one XP and it precedes the C-position. Furthermore, while we do not exclude the possibility of having a C in a main clause, we consider that an exception and thus predict that when-

(0)

Icelandic Word Order Once More

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ever there is evidence for a C in a main clause, the clause will be exceptional in one way or another. But according to Holmberg (1986:94), all clauses will have a C. For him, then, it is normal for main clauses to have a C, and they will only be exceptional if this C is filled by some exceptional material.

4.2. V1 in Subordinate Clauses

Holmberg's analysis of V1 constructions predicts that they should be nonexistent in embedded clauses with overt complementizers. The only exception to this constraint is when the subject has been postposed (e.g., by some sort of indefinite-NP movement). One could, for instance, argue that (28) is derived in such a way:

(28) Hann spurði [s' hvort hefðu komið margir gestir]. whether had come many guests he asked 'He asked whether there had been many guests.'

Here the finite verb immediately follows the complementizer hvort 'whether', but the subject comes at the end of the sentence and has thus evidently been postposed. Hence this kind of V1 is not a counterexample to Holmberg's analysis.

Another type of VI order that has received a fair amount of attention in the linguistic literature is so-called narrative V1 or narrative inversion (henceforth NI). This order seems to be much more common in Icelandic than in any other has investigated this construction more than anybody else and has found that it is virtually nonexistent in embedded clauses. Thráinsson (1986b:173, 180) has claimed that it is possible, however, to come up with reasonably good examples of embedded NI, such as (29):

(29) Hann sagði [5, að hefðu þeir þá komið að stórum helli]. that had they then come to a big cave 'He said that then they had come to a big cave.'

According to Holmberg's analysis, NI should not occur in embedded clauses. According to our analysis, we expect it to be much more common than it in fact is. Although most speakers seem to agree that sentences such as (29) are passable, we must admit that there is a main-subordinate clause asymmetry here that is not predicted by our analysis and that calls for an explanation. Thráinsson (1986b) has argued that the semantics (or rather the functional role) of NI is for the most part incompatible with subordination.

4.3. Topicalization in Embedded Clauses

Emonds (1970, 1976) considered topicalization a root transformation. While it is difficult to maintain this even for English, and certainly for Germanic lanusually more difficult, or at least less common, in subordinate clauses than in main clauses in all Germanic languages. It does, however, occur in certain embedded clauses in most Germanic languages. Some relevant examples from English and Swedish are given in (30)-(31): (30) a. John said that yesterday Pam wanted to get up early.

guages, in general, it is fair to say that topicalization of nonsubject constituents is

- b.*John doubts that tomorrow Pam will get up early.
- (31) a. Jan sa att den här boken kommer du aldrig att läsa. Jan said that this here book will you never read 'Jan said that you will never read this book.'
 - b.*Jan ångrar att den här boken läste jag. Jan regrets that this here book read I 'Jan regrets that I read this book.'

For English it has been claimed that where topicalization can occur, embedded clauses are (almost) always asserted (Hooper and Thompson, 1973:473 ff., 484), and it has been maintained that the same holds for the Mainland Scandinavian languages as well (Platzack, 1986:224; Andersson, 1975:30 ff.). If we assume that the notion of assertion is relevant here, it would seem that we are dealing with a semantic (or pragmatic) notion rather than a syntactic difference—which is in fact what Hooper and Thompson (1973:495) originally concluded. Some proponents of the 2VM analyses of Germanic word order have maintained, however, that contrasts of the sort illustrated in (30)-(31) are due to structural differences (see, e.g., Platzack, 1986:224ff.). More specifically, it has been suggested that subordinate clauses, where we find main-clause phenomena such as topicalization, have two C-slots. Although discussed in more detail later, the basic idea is that this type of structure makes it possible to have a complementizer in the first C-slot [att in (31)] followed by a main-clause structure with the preposed constituent in the XP-slot [den här boken in (31a)] and the finite verb in the other C-slot [kommer in (31a)].

Hooper and Thompson (1973:473) maintain that in "most cases the assertion of a declarative sentence is found in the main clause." Hence, one might argue that because topicalization is mostly restricted to asserted subordinate clauses, main-clause structure can be assumed for exactly those subordinate clauses. Again, however, the Icelandic facts are problematic here. Topicalization in subordinate clauses is not restricted to asserted clauses, as illustrated in (32) (see also Platzack, 1986:224):

- (32) a. Jón efast um að á morgun fari María snemma á fætur. John doubts that tomorrow get Mary early 'John doubts that Mary will get up early tomorrow.'
 - b. Jón harmar að þessa bók skuli ég hafa lesið. John regrets that this book shall I have read 'John regrets that I have read this book.'

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We argue in this subsection that topicalization in Icelandic applies even more generally in subordinate clauses than previously thought. We thus maintain that there is no general asymmetry between main clauses and subordinate clauses in Icelandic as far as topicalization possibilities are concerned. Since this claim rests in part on the abandoning of a generally accepted dichotomy between two fronting processes in Icelandic, it deserves a detailed analysis.

Maling (this volume: was the first to claim that there are two different fronting processes at work in Icelandic: topicalization, which applies to object NPs, PPs, and so on, and stylistic fronting (or stylistic inversion), which applies to past participles, adjectives, some adverbs, particles, and so on. These processes are exemplified by (33) and (34), respectively:

- (33) a. Jón hefur barið Guðmund. 'John has hit Guðmundur.'
 - b. Guðmund hefur Jón barið.
 Guðmundur has John hit
 'John has hit Guðmundur.'
- (34) a. Allt [s. sem hefur verið sagt er satt]. 'Everything that has been said is true.'
 - b. Allt [s. sem sagt hefur verið er satt]. everything that said has been is true 'Everything that has been said is true.'

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ms. 36
(33) /s-rom?
(33) /s-rom?
(34)

Maling (this volume: wall—wall) claims that the differences between these processes are (in part) syntactic and gives a list of six criteria where they differ, the most important one being the condition in (35) [=Maling's (9), this volume: wall)

(35) STYLISTIC INVERSION in an embedded clause is possible only if there is a subject gap in that clause.

The term *subject gap* in Maling's paper refers to clauses that either have no overt subject or else the subject has been moved away from its usual position by some independent process. The former class includes relative clauses, impersonal passives, and so on; whereas most sentences in the latter class have a postposed indefinite subject. Under our analysis, the latter class also includes all clauses where the subject has not been fronted to the XP-position but instead stays in its D-structure position.

Since Maling's study, all writers except Rögnvaldsson (1982) have agreed that these two fronting processes differ, although they do not make use of all of Maling's criteria. Platzack (1987), for instance, only mentions the subject gap condition. It has also been shown, for instance, by Rögnvaldsson (1982:90–93), that fronting of nonsubject NPs in a subordinate clause is much easier if the clause is subjectless. In accordance with this, we henceforth refer to any fronting in a subjectless clause as *stylistic fronting*.

In the Mainland Scandinavian languages, such fronting of past participles, particles, and so on in subjectless clauses is impossible, whereas it is very common in Icelandic. An analysis that maintains the basic sentence structure of Icelandic is the same as of the other Scandinavian languages therefore has to explain this difference, which is in part what Platzack (1987) sets out to do. His main thesis is that these differences (and various other differences) can be explained by postulating that C can be specified [+pronoun] in Icelandic (and in Faroese), whereas it cannot be so specified in the Mainland Scandinavian languages.

Maling (this volume: α) does not say anything about the landing sites of elements moved by topicalization and stylistic fronting; but Platzack claims that they are different. Under his analysis, stylistic fronting moves elements to an empty subject position and thus contrasts with topicalization, which moves elements to the XP. One would think that such movement to the subject position should normally be impossible, since there would be a trace of the subject in that position. Platzack refers to Lasnik and Saito (1984), who maintain that Move- α leaves traces only optionally; general principles, such as the projection principle and the case filter, ensure that sentences with essential traces missing are filtered out. From Platzack's postulation that C can be specified [+pronoun] and hence can absorb the nominative case that otherwise would be assigned to the subject position, it follows that the empty subject position can be freely used as a landing site for elements moved by out of IP by stylistic fronting.

There are various reasons, however, why this analysis cannot be maintained. First, it is important to note that stylistic fronting is just as frequent and as normal in adverbial clauses as in complement clauses. Consider the following examples:

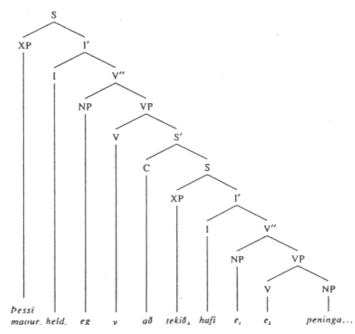
- (36) a. Pegar komið var til Reykjavíkur when arrived was to Reykjavík 'When one arrived in Reykjavík'
 - b. Ef gengið er eftir Laugaveginum
 if walked is along the-Laugavegur
 'If one walks along Laugavegur'
 - c. Ég fer, nema komið verði til móts við óskir mínar.
 - I leave, unless come gets to meeting with wishes mine
 - 'I will leave unless my wishes are fulfilled.'

Since stylistic fronting appears to behave in the same manner in all types of subordinate clauses, it seems clear that the same analysis should be applied. This entails that C in adverbial clauses is also [+pronoun], which does not seem feasible. Since Platzack claims that C is the head of S (=Holmberg's S') in the Scandinavian languages, it seems inevitable that Cs in adverbial clauses are marked [-N,-V], as characteristic of adverbials, if the feature system is to have any value. The feature [+pronoun] should not be assigned to a node that is not at all nominal. Second, note that the *that-trace filter is not valid in Icelandic (cf. Maling and Zaenen, this volume: *** about the subordinate clauses. This is one more way to create subject gaps, and, as expected, stylistic fronting can then apply in the subordinate clause:

- (37) a. Ég held [að þessi maður hafi tekið út peninga úr bankanum]. I think that this man has taken out money from the-bank 'I think this man has raised some money from the bank.'
 - b. Pessi maður i held ég [að ei hafi tekið út peninga úr bankanum]. This man think I that has taken out money from the-bank
 - c. Pessi maður i held ég [að tekið j hafi ej út peninga úr This man think I that taken has out money from bankanum]. the-bank

Under Platzack's analysis, the past participle $teki\delta$ 'taken' must have been moved to the empty subject position in (37c), erasing the trace of the extracted element. But this should be impossible. The verb in the subordinate clause obviously assigns a θ -role to the subject position; Platzack (1987:384) claims that the feature [+pronoun] in C absorbs nominative case but not θ -role. This means that if the trace in the subject position is erased, the extracted subject NP has no way of getting its θ -role, and (37c) should be ill formed. Under our analysis, however, such sentences do not cause any problems; the derivation of (37c) is shown in (37d):

(37) d.



Furthermore, the subject of a passive subordinate clause can be extracted, and stylistic fronting subsequently take place, as in (38):

- (38) a. Ég held [að þessi bóki hafi verið notuð ei á námskeiðinu].
 I think that this book has been used on the course
 'I think this book was used on the course.'
 - b. Pessi bók; held ég [að ei hafi verið notuð ei á námskeiðinu].
 This book think I that has been used on the-course
 - c. Pessi bók; held ég [að notuð; hafi verið e; e; á námskeiðinu]. This book think l that used has been on the-course

In this sentence the verb in the subordinate clause does not assign a θ -role to the subject position, of course. Instead, we have in (38a) a chain consisting of the NP in the subject position and its trace in the object position. In (38b) the subject has been extracted; and if its trace in the subject position is erased by the past participle, which has been fronted in (38c), the chain is obviously broken. This should lead to the ill-formedness of (38c) (cf. Chomsky, 1981:332), but the sentence is grammatical.

Similar problems arise when indefinite-subject postposing occurs in subordinate clauses. As Platzack (1987:391, n. 8) observes, "This is possible since the subject position is coindexed with the postposed subject, hence forming a chain with it." Note that it is possible to apply stylistic fronting in such clauses, as shown in (39):

(39) Ég hélt [að kysst_j hefðu e_j hana margir stúdentar_i].
I thought that kissed had her many students
'I thought that many students had kissed her.'

If the part participle *kysst* 'kissed' has been moved to the empty subject position, the chain must again have been broken, and the sentence ought to be ill formed.

Finally, stylistic fronting is not limited to subordinate clauses; main clauses beginning with a particle or a past participle, for example, are also very common:

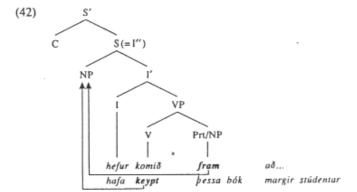
- (40) Fram hefur komið að

 out has come that

 'It has become clear that'
- (41) Keypt hafa Þessa bók margir stúdentar, bought have this book many students 'Many students have bought this book.'

Just as in subordinate clauses, such fronting of particles and past participles is only possible in clauses that have a subject gap. If that criterion is the determining factor, the movement in (40)–(41) is due to stylistic fronting, not to topicalization. That conclusion does not fit into Platzack's (1987) analysis of stylistic fronting, since that process moves elements to an empty subject position, as explained above. Since (40) and (41) are main clauses, the finite verbs [hefur in

(40) and hafa in (41)] must be moved to C, according to Platzack's description; and C is to the left of the subject position under his analysis, as (42) shows. This means that we must either claim that the finite verbs have for some reason not been moved to C in these sentences, or we must assume that fram in (40) and keypt in (41) have not been moved to the subject position but rather to the XP.



Consider first the possibility of actually keeping the finite verb in I in these cases. Recall that, according to Platzack, the reason for verb movement to C in main clauses is that C must be able to act as a proper governor for the subject, and hence it must be lexically filled. The feature [+pronoun] thus does not suffice as a case assigner, since it has no lexical content. Sentence (41) must be analyzed as a case of indefinite-subject postposing from the "real" subject position, thus forming a chain. This chain needs a case assigner, which must be the finite verb. Note that we cannot save this analysis by assuming that *fram* and *keypt* are moved to C in these cases; this would result in feature conflict, since C must be marked [+Tense], but *fram* and *keypt* are obviously [-Tense].

So let us turn to the second possibility, that the particles and past participles in such sentences are moved to the XP. This entails either the postulation of no difference between the landing sites of stylistic fronting and topicalization or the attribution of the fronting in such sentences to topicalization, rather than to stylistic fronting. No matter which one of these possibilities we choose, we are without a principled way of distinguishing between the two processes. Hence, we conclude that they are syntactically a unified process, even though they are certainly different functionally (Rögnvaldsson, 1982; see also Sigurðsson, 1989, for further discussion of various facts that show Platzack's analysis of stylistic fronting cannot be maintained).

One other possibility, pointed out to us by Sigurosson (personal communication), is that stylistic fronting is a case of adjunction to IP. Under that hypothesis, we have to explain why stylistic fronting and topicalization never cooccur in the same clause, nor do stylistic fronting and $ba\bar{b}$ -insertion. However, our IVM analysis accounts for these cooccurrence restrictions automatically: XP is the

landing site of both topicalization and stylistic fronting, and also the place where dummy $ba\bar{o}$ is generated. It is clear, then, that the possibilities of fronting some element in a subordinate clause strongly support our analysis over the 2VM analysis.

4.4. Það-Insertion in Subordinate Clauses

As pointed out in section 3.6, both analyses assume that the dummy $ba\delta$ is base generated in the XP-position, but they make rather different predictions about the distribution of this $ba\delta$. Under our analysis, $ba\delta$ ought to be syntactically possible in literally all subordinate clauses, since they are all assumed to have the XP-slot. This does not mean, of course, that $ba\delta$ is actually possible in all types of subordinate clauses, since there might be pragmatic or other factors involved. But the 2VM analysis predicts that $ba\delta$ is only possible in those subordinate clauses that have main-clause characteristics, since no other subordinate clauses have the XP-position.

At first glance, it is not very appealing to assume that $ba\delta$ is generated in the XP-position. One would think that this position should be occupied by the Theme or topic of the clause, but $ba\delta$ can hardly be called a Theme in any usual sense of the word. However, it has been suggested that "what the dummy actually does is to allow for the sentence type in which nothing is topicalized, not even the subject that in general acts as a discourse topic by default" (Zaenen, 1983:496). We can thus look at $ba\delta$ at the beginning of a clause as a sort of traffic signal, telling us that what follows is a clause with no Theme at all. This falls rather neatly-into our IVM analysis, where XP is present in all clauses by default. It does not fit quite as well with the 2VM analysis, where XP in a subordinate clause is exceptional. We would thus expect that the $ba\delta$ -clauses be exceptional in some way.

It seems to us that they are not, at least, not most of them. It is well known that $pa\delta$ is perfectly possible in $a\delta$ -clauses; topicalization is also common in $a\delta$ -clauses, so proponents of the 2VM analysis have reasons to claim that these clauses are in fact subordinate main clauses. But $pa\delta$ is also common in various types of adverbial clauses, including those introduced by ef 'if', pegar 'when', and nema 'unless':

- (43) Ég fer, ef pað getur enginn gert þetta. I go if there can no one do this 'I am leaving if no one can do this.'
- (44) Mér leið strax betur þegar það fór að hlýna. me felt immediately better when there went to warm 'I felt immediately better when it got warmer.'
- (45) Ég kem í kvöld, nema það komi gestir til mín. I come in evening unless there come guests to me 'I will be coming tonight, unless I have some visitors.'

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Such sentences do not pose problems for the 1VM analysis; the subordinate conjunctions are placed in C, and <code>pad</code> is in XP. It is not obvious, however, what the 2VM analysis would do with these examples. They are certainly not "asserted" in the usual sense. If it is claimed that they are, nevertheless, subordinate main clauses, the connection between this atypical construction and some special meaning is lost; and then it is not clear how to restrict this type of clause. If we can always get main-clause characteristics in subordinate clauses, we have presumably lost the motivation for assuming different syntactic structures for these two types.

The only alternative that we see for the 2VM analysis is to suggest that $\dot{p}a\bar{\sigma}$ is somehow generated or inserted in the subject position in subordinate clauses; this has in fact been suggested by Sigurðsson (1986). He points out that " $\dot{p}a\bar{\sigma}$ is totally impossible in subordinate binding domain clauses where the bindee is in subject position, whereas corresponding examples with the bindee in other positions are regularly much better." Sigurðsson's examples, together with his judgments, are shown in (46); similar contrasts are also mentioned in Rögnvaldsson (1984:20):

- (46) a. maður; sem ** það/e; elskar margar konur a man that there love many women 'a man who loves many women'
 - b. ??maður sem það elska e margar konur a man that there love many women 'a man who many women love'
 - c. ?maður sem það eru margar konur hrifnar af e a man that there are many women fascinated of 'a man whom many women are in love with'

It is not clear to us how this proposal could be made to fit with various principles of GB theory. Even if Platzack's analysis of stylistic fronting could be upheld, contrary to our arguments in the previous subsection, this analysis cannot be generalized to cover $pa\bar{o}$ -insertion. This is because we are not dealing with movement but rather with base generation; and even though it might be possible to move something into the subject position and thus erase the trace of the subject, it ought to be impossible to generate $pa\bar{o}$ (or any phrase other than the subject) in subject position. But this is clearly not the case, as shown in (47):

- (47) a. Ég veit [að enginn hefur lesið bókina]. I know that no one has read the-book.
 'I know that no one has read the book.'
 - b. Ég veit [að það hefur enginn lesið bókina].
 - I know that there has no one read the-book

Leaving aside the theoretical problems with this solution, it also is not feasible for empirical reasons, for it destroys the explanation of the fact that topicaliza-

tion and $ba\delta$ -insertion never go together. It also leads us to expect that extractions out of clauses with $ba\delta$ -insertion are perfectly possible, since such sentences do not have the S"-level; but such extractions are in fact usually bad, although there are exceptions, as we see in the next section.

Pað-insertion is also common in those embedded questions where the WHword is not an argument:

- (48) Ég spurði [hvort það hefðu margir komið í vesiluna]. I asked whether there had many come to the-party 'I asked whether many people had come to the party.'
- (49) Jón vissi ekki [hvernig það hefðu komist svona margir í mark]. John knew not how there had come so many in goal 'John did not know how so many people had reached the goal.'
- (50) Veistu [hvenær það fer að skyggja]? know-you when there goes to darken 'Do you know when it begins to get dark?'

It is much more difficult to construct reasonably good examples of *bað*-insertion in relative clauses, but we think that many speakers would accept the following sentence [cf. also (46c)]:

(51) Petta er maðurinn [sem það var talað við e í sjónvarpinu í gær]. This is man-the that there was talked to on the-TV yesterday 'This is the man who was interviewed on TV yesterday.'

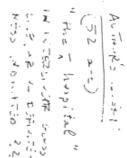
It is extremely difficult to deal with $pa\bar{\sigma}$ -insertion in subordinate clauses. There seems to be enormous idiolectal variation, and the same speaker's judgments of sentences that are syntactically similar can range from OK to completely unacceptable. There is no doubt that a variety of syntactic and pragmatic factors (which we have not touched on) are involved here. Nevertheless, we think that $pa\bar{\sigma}$ -insertion in subordinate clauses is so common that it cannot be correct to consider it exceptional, as the 2VM analysis does.

4.5. Extractions

The answer to the question of whether extraction out of topicalized clauses is possible in Icelandic again depends on the status of stylistic fronting. We argued in section 4.4 that there is no syntactic difference between topicalization and stylistic fronting. There is certainly no problem extracting out of clauses where stylistic fronting has applied, as shown in (52)–(53):

(52) a. Ég hélt [að e hefði verið farið með þennan mann á sjúkrahús].

I thought that had been gone with this man to hospital
'I thought that this man had been taken to the hospital.'



- b. Ég hélt [að farið_i hefði verið e_i með þennan mann I thought that gone had been with this man á sjúkrahús].
 to hospital
- c. Pennan mann_j hélt ég [að farið_i hefði verið e_i með e_j This man thought I that gone had been with á sjúkrahús]. to hospital
- (53) a. Ég vona [að e verði rætt um þennan atburð á fundinum]. I hope that gets talked about this incident at the-meeting 'I hope that this incident will be discussed at the meeting.'
 - b. Ég vona [að rætt; verði e, um þennan atburð á fundinum].
 1 hope that talked gets about this incident at the-meeting
 - c. Um þennan atburð_j vona ég [að rætt_i verði e_i e_j á About this incident hope I that talked gets at fundinum]. the-meeting
 - d. Pennan atbur δ_j vona ég [a δ [um e_j], ver δ i rætt e_i á fundinum]. This incident hope I that about gets talked at the-meeting

But it is almost impossible to find good examples of extraction out of subordinate clauses where an element has been topicalized, unless there is a subject gap:

- (54) a. Ég veit [að Ólafur lofaði Maríu þessum hring]. I know that Olaf promised Mary this ring. 'I know that Olaf promised this ring to Mary.'
 - b. Ég veit [að þessum hring; lofaði Ólafur Maríu e_i].
 l know that this ring promised Olaf Mary
 - c. *Maríu_i veit ég [að þessum hring_j lofaði Ólafur e_i e_j].
 Mary know I that this ring promised Olaf
 - d.?* Pessum hring; veit ég [að Maríu; lofaði Ólafur e; e;].
 This ring know l that Mary promised Olaf

According to the 2VM analysis, the subordinate clauses in (52)–(53) all have a subject gap, so that stylistic fronting can apply there and the S"-level is not needed; hence, extraction can take place. However, the subordinate clause in (54) has a definite subject and hence no subject gap; therefore, we need an extra level with a higher C to be able to topicalize, and this extra level makes extraction impossible.

If topicalization and stylistic fronting are two syntactically different processes, which assume (as the proponents of the 2VM analysis must assume) that the distinction depends on the presence or absence of a subject gap, we would expect that extraction out of subordinate clauses with a fronted phrase of any category could always take place, provided that there was a subject gap. However, this prediction is not borne out:

(55) *Jóni vona ég [að þessa bók láni einhver]. John hope I that this book lend somebody 'I hope that somebody will lend John this book.'

Icelandic Word Order Once More

In this sentence, the subject of the $a\delta$ -clause, einhver 'someone', is indefinite; hence, we should have a genuine subject gap here. This means that stylistic fronting of the direct object $pessa\ b\delta k$ 'this book' to the empty subject position, according to Platzack's (1987) analysis, should be possible; and this fronting should not make extractions out of the $a\delta$ -clause impossible, since no XP is needed. However, sentence (55) is ungrammatical.

To account for this difference, proponents of the 2VM analysis could agree with us that the topicalized object ends up in the XP-position in the subordinate clause. This would entail, however, that the subject gap condition cannot be used as a means of distinguishing the two processes in question, or that extraction is not always possible even though the clause out of which the extraction has taken place has the same structure as any other subordinate clause.

It is also not easy to find good examples of extractions out of clauses with bab-insertion, but we think that most speakers would find the following to be at least moderately acceptable:

- (56) ?Hvað víntegund, heldurðu [að það sé drukkið mest af e, á which wine-sort think-you that there is drunk most of in Íslandi?]
 Iceland?
 'Which sort of wine do you think that Icelanders drink most of?'
- (57) ?Pennan mann, held ég [að það hafi stundum verið talað illa This man think I that there has sometimes been talked bad um ei].
 about
 - 'I think that people have sometimes talked badly of this man.'
- (58) ?Í þessu húsi; grunar mig [að það hafi ýmislegt gerst sem in this house suspect me that there has various happened that ekki sé á allra vitorði e;].

 not is in everybody's knowledge

 'I think that many things which most people know nothing about have happened in this house.'

As stated in (27d), our analysis does not exclude extractions out of clauses with $ha\delta$ -insertion on any *syntactic* ground. It must be stressed that such examples are hard to find and will not be accepted by all speakers; but the main point is that the 2VM analysis predicts that they should not occur at all, which is incorrect. The widely differing judgments offered when we ask speakers about sentences such as (56)–(58) are, in our opinion, a strong indication of the interference of some pragmatic factors with the syntactic ones.

If $\dot{p}a\bar{\delta}$ signals that its clause of occurrence is themeless, it is not surprising that extractions are difficult. Recall that extracted elements are usually thematic; if we insert $\dot{p}a\bar{\delta}$ to signal that a clause has no Theme, but at the same time signal the Themehood of some element of the same clause by extracting that element, we have a paradox. Given these pragmatic premises, it is quite natural that speakers find fault with sentences such as (56)-(58), even though they are syntactically normal.

4.6. Positions in Front of XP

Left dislocation in Icelandic was first discussed in Thráinsson (1979:59 ff.). An example is given in (59):

(59) Stefnumótið_i, ég gleymdi þvί_i. 'The appointment (nom), l forgot it (dat).'

As can be seen here, the left-dislocated element occurs in the nominative case, and in the following clause there is a coreferential pronoun in the appropriate case (here, dative). But whereas topicalization can occur in embedded clauses [cf. (60a)], left dislocation (LD) cannot [cf. (60b)]:

(60) a. Hann segir [s' að stefnumótinu; hafi ég gleymt e;].

he says that the-appointment have I forgotten

'He says that I have forgotten the appointment.'

b.*Hann segir [s' að stefnumótið;, ég hafi gleymt því;].

he says that the-appointment, I have forgotten it

If left-dislocated elements really occur to the left of C, whereas topicalized elements occur to the right of C, as we have argued, the difference observed in (60) would be expected. The question is, then, what, if anything, could occur in the C-position under such an analysis of LD. Before we address that question, the existence of a second type of dislocation in Icelandic should be mentioned: contrastive dislocation (CD), illustrated in (61a) (cf. Thráinsson, 1979:62 ff.; see also Zaenen, 1980:43 ff.). Example (61b) indicates that unlike LD, CD can occur in embedded clauses:

(61) a. Stefnumótinui, þvíi gleymdi ég ei!
the-appointment (DAT), it (DAT) forgot I
'The appointment, that I forgot!'
b. Hann segir [s að stefnumótinui, þvíi hafi ég
he says that the-appointment (DAT), that (DAT) have I
gleymt ei]
forgotten
'He says that I have forgotten the appointment.'

This indicates that the LD and CD constructions have different structures. Zaenen (1980) suggested that the CD constituent might be adjoined to S, and we do not have a better proposal. Note that since CD can occur in embedded clauses, Holmberg's (1986:103) suggestion that the CD constituent occurs in an extra E-position to the left of the XP (i.e., outside S") is apparently incorrect.

Turning again to the topmost XP in our structure and the LD construction, one has to propose a sensible account of what can happen to C in such constructions. Interestingly, a lexically filled C can appear in at least some of them:

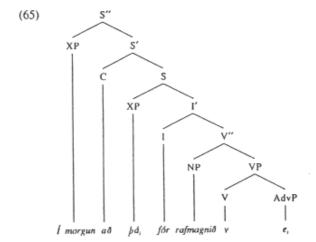
- (62) Stefnumótið, að ég (subj) skyldi gleyma því!

 'The appointment, that I should forget it!'
- (63) Stefnumótið, hvort ég skal ekki muna eftir því! 'The appointment, whether I shall not remember it!'

There are also other types of sentences where an extra XP appears to be needed. One example is (64), which is natural (with or without $\dot{p}\dot{a}$ 'then') for many speakers (cf. Rögnvaldsson, 1982:65-66):

(64) Í morgun, að þá fór rafmagnið (subj). this morning that then went the-electricity 'This morning we had a power outage.'

In these examples, the "normal" XP, to the right of C, is either filled by the subject [as in (62)–(63)] or by the particle $p\acute{a}$ [in (64)]. But it appears that we also need an "extra" XP to the left of C, and, as indicated in (65), this would seem to fit perfectly into the structure we have proposed. (We assume here that the adverbial phrase originates in the VP, but that is of no particular importance for us.)



The same analysis could be proposed for the fronting of many types of adverbial clauses, where an extra $p\acute{a}$ or $a\eth$ $p\acute{a}$ very often intervenes between the fronted adverbial clause and the main clause:

(66) Þegar þú kemur að þá verð ég glaður. when you come that then become I glad 'I will be glad when you come.'

Also, Haegeman (1984) has argued that some adverbials and adverbial clauses are attached to an E- (=S''-) node outside S'.

There are also various types of exclamations where it is apparently natural to assume the presence of C in main clauses. A few examples are shown in (67)–(69):

- (67) Að María skuli elska Jón! 'That Mary should love John!'
- (68) Hvort ég skal ekki muna þetta!
 whether l shall not remember this
 'This I will certainly remember!'
- (69) Bara að hann komi! only that he come 'If only he would come!'

Some sentences of this type begin with a NP or an adjectival phrase. This is consistent with our analysis, since we assume that a higher XP can under special circumstances precede C. Holmberg's analysis does not account for these sentences in any straightforward manner. Note especially that stylistic fronting can apply in such sentences, as (72) shows. Unless we accept Platzack's (1987) account of stylistic fronting, which we have shown to be untenable, this means that two XP-positions, one preceding and one following, are in fact needed.

- (70) Mikil heppni (NOM) að þú skyldir koma!

 Great luck that you should come
 'How fortunate that you came!'
- (71) Ótrúlegt að hann skyldi gera þetta! Amazing that he should do this 'It was amazing that he did this!'
- (72) Bölvuð vitleysa (NOM) sem fram kom í þættinum! bloody nonsense that out came in the-program 'What bloody nonsense did they say in this program!'

As Thráinsson (1986b: 188) has shown, many sentences of this type "have a property normally associated with (certain) subordinate clauses, namely an obligatory subjunctive."

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Holmberg (1986:162) points out that sentences such as (67) pose a problem for his theory; since they are main clauses, they ought to be verbal. The presence of $a\bar{\sigma}$ in C, however, necessarily makes each nominal. While Holmberg admits that he does not "have anything enlightening to say about this class of expressions," he points out that exclamations in languages such as English and French typically have "embedded clause form."

However, we think that sentences of this type should not be considered main clauses at all. The ability to occur in isolation should not suffice to classify a certain clause as a main clause. Note that we can also have exclamations with nonfinite verbs:

- (73) Að sjá til þín! to see to you 'Don't you do this!'
- (74) Að geta gert þetta! to can do this 'That one should do this!'

In our view, these exclamations, as well as those in (67)–(72), should be classified with exclamations or sentence fragments such as *John!*, *No!*, and *Here!* With this classification, it is quite natural to have a nonverbal element in C.

There is clearly much work to be done before we can satisfactorily explain the facts reported on in this section. Nonetheless, we believe that the facts indicate the need for more than one type of XP-slot, which is why an analysis such as ours is compatible.

5. CONCLUSION

In this article we have compared two analyses of the basic sentence structure of Icelandic. One is the double verb-movement (2VM) analysis of Holmberg (1986), Platzack (1986, 1987), and Sigurðsson (1985, this volume: (1986), Platzack (1986), 1987), and Sigurðsson (1985, this volume: (1984, 1987) and Thráinsson (1984b, 1986b). The latter analysis has been advocated and further elaborated in this article. While many facts concerning Icelandic word order can be handled by both analyses, some facts are only compatible with the IVM analysis, whereas there are no word order types that can only be explained with the 2VM analysis. It is interesting to note here that a IVM analysis has also been proposed by Diesing (1988, 1990) for Yiddish, a Germanic language similar to Icelandic with respect to word order.

Finally, we might ask what the connection is between the basic sentence structure of Icelandic and that of the other Scandinavian languages. While we do not believe that the 2VM analysis is valid for Icelandic, strong arguments for it clearly can be found in the other Scandinavian languages. It is also evident that it is the latter that have changed; the word order of Icelandic is in all relevant respects the same as it was in Old Norse. We suggest that the other Scandinavian languages have changed from being IVM to 2VM languages.

It is not difficult to conceive of such a change. Suppose that word order in subordinate clauses has become more and more rigid in the other Scandinavian languages, until it was almost exclusively the subject that was topicalized. Then it is quite natural that the XP-position is reanalyzed as the subject position, and the old subject position vanishes. But when main clauses are reanalyzed in this way, a problem arises since nonsubject topicalization is still frequent in main clauses. This problem is then solved by generalizing C to all clauses, moving the finite verb there in main clauses and developing a new XP-position in front of C; we then have the sentence structure of the modern Mainland Scandinavian languages. While this account is purely speculative, it does not seem to contradict any known facts about the development of the modern word order of these languages.

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NOTES

Note in passing that under our analysis, the subject could move directly from its D-structure position to the main-clause XP, without ever moving to the subordinate XP. Hence, the *that-trace filter would not be violated.

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