

OLD ICELANDIC: A NON-CONFIGURATIONAL LANGUAGE?

*1. Introduction*

It has sometimes been suggested (cf. especially Hale 1982, 1983; Chomsky 1981) that the languages of the world fall into two main categories; **configurational** and **non-configurational**.<sup>1</sup> According to Hale (1982:86-87, 1983:5) the following properties, among others, are typical of non-configurational languages, as opposed to the configurational ones:

- (1) a. 'free' word order
- b. lack of pleonastic NPs (expletives)
- c. extensive null anaphora (pro-drop)
- d. syntactically discontinuous expressions
- e. lack of NP-movement (passive, raising etc.)
- f. use of a 'rich' case system

This distinction was a lively research topic in the early eighties, and several languages were claimed to be non-configurational (to some extent at least); among these languages are Warlpiri (Hale 1983), Japanese (Chomsky 1981), Hungarian (Kiss 1987), Homeric Greek (Taylor 1988), German (Haider 1982), and Old Icelandic (or Old Norse; Faarlund 1990, 1992).<sup>2</sup>

Some of the above-mentioned languages have been claimed to have changed from being non-configurational to configurational. This is the case with Greek; Taylor (1998:1) claims that 'at some point, or over some period in its history, Greek has changed from basically non-configurational to basically configurational'. This claim has also been made with respect to Icelandic and Norwegian. Faarlund (1990) argues at great length that Old Norse (Old Icelandic) was a non-configurational language, in contrast to its descendants, Modern (New) Norwegian and Modern Icelandic, which are uncontroversially configurational according to Faarlund.

However, Platzack (1991) has expressed doubts that the syntactic differences between Old Norse and its descendants can be as great as Faarlund claims; and Stockwell and King (1993:67) state explicitly 'that Faarlund's C[onfigurationality] H[ypothesis] is incorrect'. On the other hand, Harris (1992:294) accepts Faarlund's main thesis; she says that '[w]hile some of the argumentation is problematic, on the whole it is clear that O[ld] N[orse] was indeed a non-configurational language in Hale's sense, while Norwegian is configurational'.

Chomsky (1981) assumed that the syntax of non-configurational languages does not fall under the X'-theory, and Hale (1982) suggested that non-configurational languages only made use of one bar-level (X') instead of two. These suggestions imply a deeply rooted typological difference between these two types of languages. However, it has often been pointed out (Klavans 1982; Grafstein 1986; Webelhuth 1984-85; Taylor 1988) that the reality is not like that. Thus, although some languages (such as Warlpiri) display most or all of the properties in (1), whereas others (such as English) show none of them, most languages seem to be somewhere in between. This makes it suspicious that there is a single 'configurationality parameter', as suggested in Chomsky (1981) and Hale (1983).

For this reason (among others), recent developments in generative grammar have moved away from the distinction between configurational and non-configurational languages, and many, if not most, generative syntacticians now seem to believe that the X'-theory (and binary branching) can adequately account for the syntactic structure of all languages; cf., for instance, Speas (1990). This does not entail, of course, a rejection of the empirical observations underlying the differences illustrated in (1). It means, however, that even though a language displays one or more of the properties in (1), that cannot be taken as indicating that the syntactic structures of this language do not obey the X'-system.

It is not my purpose in this paper to discuss whether the terms 'configurational' and 'non-configurational' are to be taken as representing some typological and parametrized difference. I will use these terms in a theory-neutral manner, to refer to languages which express few vs. many of the properties in (1), respectively. But the main purpose of the paper is to show that the syntactic changes between Old and Modern Icelandic are far from being as radical as the reversal of the configurationality parameter would entail, and even though we accept a distinction between configurational and non-configurational languages, Old Icelandic could not be counted among the latter.

In the following, I will consider several arguments for and against the non-configurationality of Old Icelandic. In section two, I look at the characteristics in (1a-d), and show that even though Old Icelandic certainly exhibits these features to a much greater extent than Modern Icelandic does, this does not warrant the conclusion that Old Icelandic was non-configurational. In section three, I demonstrate that Old Icelandic clearly had syntactic NP-movement, which presupposes a verb phrase (VP), and I also show that several syntactic processes in Old Icelandic were sensitive to subject-object asymmetries which presuppose a hierarchical structure. My conclusion in section four is that even if a configurationality parameter exists, there is no reason to assume that its setting has changed in the history of Icelandic.

## *2. Indications of non-configurationality*

### *2.1 'Free' word order*

Free word order is usually considered one of the main characteristics of non-configurational languages; but it must be kept in mind that it is not at all clear what exactly 'free' means in this connection. Old Icelandic, for instance, was a strict Verb-Second language, just like Modern Icelandic; the finite verb is always in either first or second position (see Nygaard 1905).<sup>3</sup> However, almost any order of post-verbal constituents is found in the texts; of the 18 possible word orders in sentences with two non-finite verbs and two objects, at least 12 are actually attested, cf. Rögnvaldsson (1993a).<sup>4</sup> Only one of these patterns would be grammatical in Modern Icelandic. Thus, Old Icelandic certainly appears to have had relatively free word order, compared to Modern Icelandic at least; cf. criterium (1a) above. In the light of this diversity, it might look rather natural to claim that the finite verb could be followed by any number of constituents in any order, as the following general schema is intended to show (Faarlund 1990:110; cf. also Chomsky 1981:128; Hale 1983:7):

$$(2) S \rightarrow (XP) V_{[+T]} XP^*$$

This schema 'says that the finite verb is preceded by at most one element of any category and is followed by any number of elements (including null) of any category' (Faarlund 1990:110).<sup>5</sup> Faarlund argues that neither grammatical relations nor the (S-structure) positions of the subject and the object in Old Icelandic were determined by structural relations, but rather by other factors; especially the case and the semantic role carried by each NP and the information structure of the sentence. It is clear, of course, that there is an intimate relation between the verb and its complements, but Faarlund claims that in Old Icelandic, this relation was semantic rather than syntactic, as evidenced by the free post-verbal word order. Hence, the VP was a (semantic) constituent at Logical Form, but not at the syntactic level(s).<sup>6</sup>

## 2.2 Expletives and null anaphora

Let us now look at two other closely related characteristics of non-configurational languages; lack of expletives (1b) and null anaphora (1c). Lack of expletives is actually one of the defining properties of non-configurationality (cf. Faarlund 1990:105); since there are no special 'positions' in the structure, it would make no sense to posit a semantically empty element whose sole purpose is to fill some position - which does not exist.

It is usually claimed that Old Icelandic had no expletives (see for instance Jóhannsdóttir 1992; Faarlund 1990). To be sure, there are no instances of expletives with weather verbs and in impersonal passives, for instance, in Old Icelandic; the first unequivocal examples I know of where the expletive *það* occurs with weather verbs are from the first Icelandic translation of the *New Testament* in 1540. However, there are hundreds of examples like the following in Old Icelandic:

- (3) a. Þat var eitt haust, at þar var gildi fjolmennt.  
 it was one fall that there was feast well-attended  
 'One fall, a well-attended feast was held there.'

(*Egils saga Skallagrímssonar*, p. 18)

- b. þat uar snema spad at eg munda uerda allramaNa ellztur.  
 it was early predicted that I would become of-all men oldest  
 'It was soon predicted that I would become very old.'

(*Bandamanna saga*, p. 65)

In these examples we have the expletive *þat* in subject position, and an extraposed *that*-clause in post-verbal position.<sup>7</sup> Thráinsson (1979) shows that in Modern Icelandic, the *það* we get in such sentences usually behaves like a true expletive (for instance, it 'disappears' if something is topicalized); but it can also behave like a pronoun (in Icelandic, as in English and German, the expletive in such sentences is synonymous with the neuter singular third person pronoun); i.e., it can be stressed and then inverts with the finite verb if something is topicalized. In such examples, Thráinsson argues that *það* originates as the left branch and the extraposed clause as the right branch of a complex NP.

It is impossible to apply Thráinsson's tests to the Old Icelandic examples. In some of them, we get *þat* following the finite verb, indicating that it is not an expletive; but the majority of the examples are compatible with both analyses. Weibelhuth (1984-85) also claims that it is not clear whether German has overt expletives; it depends on the analysis of *es* in sentences similar

to (3). Thus, I conclude that even though it cannot be proven that Old Icelandic had expletives, that possibility certainly cannot be excluded either.<sup>8</sup>

It is well known that several types of null arguments existed in Old Icelandic; see especially Nygaard (1905) and Hjartardóttir (1987). Hjartardóttir showed that Old Icelandic could have *pro* (or some other empty category, perhaps a variable bound by an empty operator in Spec-CP, cf. Sigurðsson 1993a) both in subject and object positions, and also as objects of prepositions. Most of these possibilities remain in the language up to the end of the eighteenth century (Hjartardóttir 1987); but in Modern Icelandic, the use of referential null arguments is highly constrained (mostly confined to coordinated clauses and imperatives, cf. Rögnvaldsson 1993b; Sigurðsson 1989).

It is clear that in this respect, Old Icelandic differs remarkably from Modern Icelandic, although it must be pointed out that Modern Icelandic makes extensive use of non-referential and quasi-argumental *pro* (cf. Sigurðsson 1989). But even though it is certainly true that null anaphora has been used as one of the defining criteria for non-configurationality, it can never be conclusive *per se*. If it were, we would have to characterize such typical pro-drop languages as Italian and Spanish, for instance, as non-configurational, which would contradict many other well-established assumptions about these languages.

Hence, I conclude that even though the extensive use of null anaphora and the lack (or limited use) of expletives in Old Icelandic would presumably be consistent with analyzing the language as non-configurational, these features cannot be used to **prove** anything about the setting of the configurationality parameter in Old Icelandic.

### 2.3 Discontinuous NPs and PPs

In the literature on configurationality, distinction is sometimes made between 'strongly non-configurational languages', which exhibit most or all of the properties in (1), and 'weakly non-configurational languages', which lack a VP, but have syntactic NPs and PPs (Webelhuth 1984-85:206). The word order patterns found in the VP in Old Icelandic show that the relation between a verb and its complements is somehow looser in Old Icelandic than it is in Modern Icelandic, which might be taken to indicate that Old Icelandic was at least weakly non-configurational. Indications of Old Icelandic being strongly non-configurational can also be found; various examples of discontinuous NPs and PPs, which are (for the most part, at least) ungrammatical in Modern Icelandic. A few examples of discontinuous prepositional phrases are shown in (4) below (cf. Faarlund 1990:97-99):

- (4) a. barnit var at komit dauða.  
 child-the was to come death  
 'The child was almost dead.' (Heimskringla II, p. 267)
- b. `ok munu vér frá hverfa ánni.'  
 and will we from depart river-the  
 'And we shall depart from the river.' (Laxdæla saga, p. 41)
- c. ok hafi þit vel ifir slett vanhyggiu mina.  
 and have you well oversmoothed negligence mine

‘And you have made up well for my negligence.’

(*Gunnlaugs saga ormstungu*, p. 8)

d. var mikit til aflat þessar veizlu.  
was much to providedthis feast  
‘Much had been provided for this feast.’

(*Laxdæla saga*, p. 93)

However, such examples are relatively rare in Old Icelandic. In a count I have made of 5 of the most common prepositions (*í, á, til, með*, and *við*), it turned out that in more than 99% of the cases, the preposition was adjacent to its complement. If Old Icelandic had no syntactic PP, this is certainly a higher percentage than expected.<sup>9</sup>

Old Icelandic also has several examples of discontinuous NPs; attributive adjectives or determiners which are separated from their heads (Faarlund 1990:95-96), nouns separated from their quantifier (Faarlund 1990:96), etc. Some of these examples are shown in (5) below.

(5) a. en væta var á mikil um daginn.  
but wetness was on great in day-the  
‘It rained much during the day.’

(*Heimskringla II*, p. 231)

b. engi var hann hermaðr.  
no was he soldier  
‘He was not a good soldier.’

(*Heimskringla I*, p. 45)

c. `hversu margar vildir þú kýr eiga?’  
how many would you cows own  
‘How many cows would you like to have?’

(*Heimskringla II*, p. 133)

d. `góðan eigum vér konung.’  
good own we king  
‘We have a good king.’

(*Heimskringla II*, p. 464)

Note that many such examples (for instance, (5a-c) above) involve quantifiers like *engi* ‘noone’, *margar* ‘many’, etc. Even though these sentences are impossible in Modern Icelandic (except perhaps in a highly formal literary language), it is well known that quantifiers have considerable positional freedom in many languages, and often appear separated from their head nouns (the so-called quantifier-floating or quantifier-stranding). Hence, it is doubtful that such sentences can be taken as real examples of discontinuous phrases, in the sense of Hale’s criterium in (1d) above.<sup>10</sup>

However, some such examples, like (5d) above, involve adjectives, not quantifiers. It is not clear to me how to analyze such sentences, but it must be pointed out that the internal structure of NPs is a much debated issue; cf., for instance, Sigurðsson (1993b) and references cited there. I will suggest, tentatively, that the existence of split NPs like those in (5) can be attributed to syntactic movement; and it is possible that the structure of the NP has changed from Old to Modern Icelandic, resulting in the impossibility of such movement in Modern Icelandic. Be that as it may, it is clear that taking the existence of discontinuous NPs and PPs as indicating that NPs and PPs were not syntactic constituents in Old Icelandic would give rise to

various and severe problems. Consider, for instance, the following sentences:

- (6) a. Ok á því sama ári fæddi Þorbjörg meybarn.  
and on that same year bore Þorbjörg girl  
'And the same year, Þorbjörg gave birth to a girl.' (Víglandar saga, p. 175)
- b. Í því nesi stendr eitt fjall.  
in that cape stands one mountain  
'There is a mountain on that cape.' (Eyrbyggja saga, p. 9)
- c. Vm þat þótti honum gott at ræða.  
about it found he good to talk  
'He liked to talk about that.' (Egils saga Skallagrímssonar, p. 122)

It was pointed out above (in note 5) that in Old Icelandic, a preposition can be topicalized, leaving its complement NP behind. But just as in Modern Icelandic, a preposition **and** its complement can also perfectly well precede the finite verb, as the sentences in (6) show. If the preposition and the NP did not make up a syntactic constituent (a PP) in Old Icelandic, it seems that we will have to say that in such sentences, **two** elements precede the verb. And if the discontinuous NPs in (5) show that NPs did not make up syntactic constituents either, the sentence in (6b) has three elements preceding the verb (*í*, *því*, and *nesi*); and (6a) has four. Such a conclusion would, however, be unacceptable. It would contradict the sentence schema in (2), of course; and it would also contradict well-established empirical facts; it is never possible to have two NPs preceding the finite verb, for instance (cf. also note 3):

- (7) \*Þenna mann Grettir hafði drept.  
this man (Acc) Grettir (Nom) had killed  
'This man, Grettir had killed.'

Descriptively, it is clear that a string of two or more words can only precede the finite verb in Old Icelandic if the corresponding string qualifies as a constituent in Modern Icelandic. If NPs and PPs were not syntactic constituents in Old Icelandic, this is of course a very strange generalization. Thus, it seems to be unavoidable to say that the preposition and the NP in (6) are in fact one 'element', i.e., a constituent. If we claim that certain other facts make it necessary to assume that PPs and NPs were not constituents, then we are in the uncomfortable situation of counting a preposition and its complement sometimes as a constituent and sometimes not. Such situations are of course to be avoided, if at all possible.

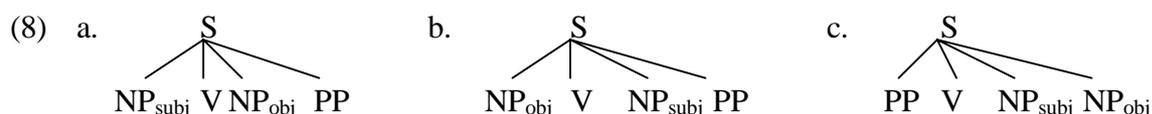
Thus, I conclude that even though Old Icelandic exhibits several instances of discontinuous NPs and PPs, this does not warrant the conclusion that NPs and PPs did not exist as syntactic constituent in the language. Therefore, I will take it for granted that Old Icelandic was not strongly non-configurational. In the next section, I will consider the evidence for Old Icelandic being weakly non-configurational instead; i.e., lacking a VP-constituent.

### 3. Evidence for the VP

### 3.1 Types of evidence

I will present two types of evidence for the existence of VP as a syntactic constituent in Old Icelandic. The first type concerns constituency; I show that the Old Icelandic VP did in fact, in some instances at least, behave like a constituent with respect to 'pronominalization'.

The second type of evidence involves NP-movement. Given the sentence schema in (2), we have the following possibilities of the tree-structure representation of a simple sentence with a finite verb, two arguments (subject and object) and a PP-adjunct:



Thus, both arguments and adjuncts have the same structural relation to the verb; they are all its sisters. One of the consequences of this is that processes which involve NP-movement, like passive, subject-to-object raising, subject-to-subject raising etc. could not have existed in Old Icelandic. The reason is that these processes involve movement of an NP from its base-generated position to another position in the structure. The target position is assumed to be an NP-position which is base-generated empty. These processes typically change the grammatical function of the moved NP with respect to the verb; passive, for instance, 'changes' a D-structure object into an S-structure subject. This change is a direct consequence of the fact that the target position bears a different structural relation to the verb than the base position of the NP.

In a non-configurational language, there are, by definition, no base-generated empty positions, as pointed out above. Furthermore, the subject and the object have exactly the same structural relationship with the verb, as illustrated in (8). Therefore, NP-movement would not be expected in Old Icelandic if it was non-configurational, for two reasons: There would be no empty position for the NP to move into; and the movement would be vacuous and not have any effect on grammatical relations in the sentence (cf. Faarlund 1990:168).

### 3.2 VP constituency

A typical test for determining constituency is the so-called *do so*-test (cf., for instance, Lakoff and Ross 1966). It is claimed that if a pro-form like *do so* can be substituted for a verb and its complement(s), this indicates that the verb and the complement(s) form a constituent; a VP. If we can show that Old Icelandic has instances of such 'VP pronominalization', then we ought to have a strong case for postulating a VP-constituent. Such examples seem to exist, as the following sentences show:

- (9) a. Ingolfr segr: *‘Vann hann a Þormóði Bersasyni?’*  
 Ingolfr says: Won he on Þormóðr Bersason  
 ‘Ingolfr says: Did he kill Þormóðr Bersason?’

Grima segr: *‘Sia enn sami gerði þat.’*  
 Gríma says: That the same did it  
 ‘Gríma says: He was the one who did it.’

(*Fóstbræðra saga*, p. 63-64)

- b. Þórir *hvarf aptr* ok *gørði þat* at ráði Þorgils.  
 Þórir went back and did it for advice Þorgils's  
 'Þórir went back because Þorgils advised him to do so.'

(*Þorsteins saga hvíta*, p. 12)

- c. hann kom hier at óbygdu landi ok *bygdi fyrztr landit*.  
 he came here to uninhabited country and inhabited first country-the;  
 'He came here to an uninhabited country and was the first man to inhabit it;

*geyrdu þat* adrir landnamsmenn epter hans dæmum.  
 did it other settlers after his examples

other settlers followed his examples.'

(*Landnámabók*, p. 134)

In these sentences, the phrase *gerði/gerðu það* 'did it' appears to be exactly parallel to the *do so*-construction in English. These examples cannot be dismissed as examples of sentence pronominalization (cf. Faarlund 1990); the *do so*-phrase clearly refers to the VP of the preceding clause, but not to the clause as a whole.<sup>11</sup>

Another classical test of constituenthood is topicalization; if a string of words can be topicalized as a whole, it is usually taken as evidence that this string makes up a constituent. As pointed out above, NPs and PPs could clearly be topicalized in Old Icelandic; and if we could find examples of the fronting of a verb together with its complements in Old Icelandic, that would be a strong argument in favour of the existence of the VP as a syntactic constituent. However, no examples of topicalization of the VP as a whole can be found in Old Icelandic; although non-finite verbs (10a) and objects (10b) are often fronted, sentences like (10c) are unattested:

- (10) a. *gefa* vil ek þer fyrst klæði.  
 give will I you first clothes  
 'First I will give you some clothes.'

(*Droplaugarsona saga*, p. 158)

- b. þui *þad* hefer ek alldre giartt aadur.  
 because it have I never done before  
 'Because I have never done that before.'

(*Svarfdæla saga*, p. 5)

- c. \*því *gert þat* hefi ek aldrei áðr.  
 because done it have I never before  
 'Because I have never done that before.'

However, such fronting is at best very marginal and usually ungrammatical in Modern Icelandic too (contrary to what is sometimes claimed; cf. for instance Zaenen 1985; Holmberg and Platzack 1988:32), even though there is hardly any doubt that Modern Icelandic is configurational (cf. above). Hence, this does not count as evidence for the claim that Old Icelandic had another setting for the configurationality parameter (if it exists) than Modern Icelandic has.<sup>12</sup>

### 3.3 Passive

It has sometimes been claimed (Dyvik 1980, Faarlund 1990) that transformational passive did not exist in Old Icelandic; all the passive-like sentences we find in that language exhibit lexical passive rather than passive derived by syntactic NP-movement (or chain-formation). As pointed out above, transformational passive ought to be impossible in a non-configurational language.

In his comments on Dyvik (1980), Benediktsson (1980) showed that there exist sentences in Old Icelandic which certainly seem to be transformationally derived. In my corpus, I have also found several such sentences. They are of two types; the first type is sentences where the agent is expressed in a *by*-phrase, as in (11):

- (11) a. þa uar hann bedín af uinum sinum at stadfestaz hier.  
then was he asked by friends REFL to settle here  
'Then he was asked by his friends to settle down here.' (Bandamanna saga, p. 5)
- b. Þa var hann tekinn af v-vinum sínum.  
then was he taken by enemies REFL  
'Then he was taken by his enemies.' (Sturlunga saga, p. 242)
- c. hann var kallaðr af morgum monnum Eysteinn meyla.  
he was called by many men Eysteinn meyla  
'He was called Eysteinn meyla by many people.' (Heimskringla III, p. 484)
- d. þá var þetta kveðit af einhverjum.  
then was this composed by someone  
'Then this was composed by someone.' (Sturlunga saga, p. 21)

Several such sentences occur in my corpus. It is quite clear that a *by*-phrase expressing the agent cannot be added to copula sentences with adjectives. The same goes for many sentences with *vera* plus a past participle; lexical passives certainly do exist in Old (and Modern) Icelandic. The main point is, however, that some sentences are clearly different, such as those in (11). The 'first role' (the agent role) is not always lost; it can be expressed in a *by*-phrase (*contra* Faarlund 1990:170).

The second type involves the interaction of (subject-to-object) raising and passive. According to Wasow's (1977) well-known criteria, lexical rules are 'local'; they do not involve variables and thus cannot move a constituent from a subordinate to a superordinate clause, for instance. Therefore, one would not expect the syntactic subject of a passive verb in a superordinate clause to be thematically related to a predicate in a subordinate clause (i.e., to be the 'logical subject' of the latter). Yet, this seems to be the case in sentences like (12):

- (12) a. Eigi var hann sagðr mikilmenni.  
not was he said great man  
'He is not considered a great man.' (Reykdaela saga, p. 170)
- b. sá var honum sagðr frendi Savrla.

that was him said uncle Sörli's  
`He was told that this one was Sörli's uncle.'

(*Sturlunga saga*, p. 330)

In all these sentences, it is clear that the syntactic subject of the main clause is the 'logical subject' of the lower predicate; semantically and thematically, the main clause subject belongs to the subordinate clause (it gets its  $\Theta$ -role from there). A purely lexical analysis of passive cannot possibly account for this.

### 3.4 Subject raising and quirky subjects

Since the subject and the object are both sisters of the verb according to the schema in (2), subject-object asymmetries related to structure cannot exist in a non-configurational language, as pointed out above. This means that if we can find some process which only applies to subjects in Old Icelandic, then we have a piece of evidence for the claim that Old Icelandic really had a syntactic VP. I think such processes can be found. Consider the following sentences:<sup>13</sup>

(13) a. Auðun settiz niðr við árbakkann ok kvaz þyrsta.  
Auðun sat-REFL down at river-bank-the and said-REFL thirst  
`Auðun sat down at the river-bank and said he was thirsty.'

(*Sturlunga saga*, p. 270)

b. Rafn qvaz synaz, at halldinn væri.  
Rrafn said-REFL find that held was [guard]  
`Rafn said that it was his opinion that they should be on their guard.'

(*Sturlunga saga*, p. 312)

Furthermore, the verb *kveðast* sometimes behaves like a subject-to-subject raising verb, as the following examples show:

(14) a. Arna qvaz þat illt þickia.  
Árni (Dat) said-REFL it bad find  
`Árni said that he found this bad.'

(*Sturlunga saga*, p. 129)

b. Rafne Odds syni qvaz þat vel líka.  
Rafn Oddr's son (Dat) said-REFL it well like  
`Hrafn Oddsson said that he liked this.'

(*Sturlunga saga*, p. 233)

c. Henni kvaðst harðla gott þykja hann at finna.  
she said-REFL very good find him to find  
`She said she enjoyed very much to meet him.'

(*Finnboga saga ramma*, p. 306)

In these sentences, the case of the initial NP is clearly governed by the lower predicate (the verbs *þykja* and *líka* both take dative NPs. (13b) shows that the verb *kveðast* does not always take a dative subject; in fact, it never does, except when sentences with verbs like *þykja* and *líka*

are embedded under it. It is impossible to account for this by a lexical rule.

It has also been argued that Old Icelandic already had established a syntactic category of 'subject', and that 'quirky' subjects are found in Old Icelandic (cf. Rögnvaldsson 1991). One of the arguments for this conclusion has to do with 'AcI' (accusativus cum infinitivo) constructions (or E(xceptional) C(ase) M(arking) constructions):

(15) a. Aron qvað sic dreymt hafa, að ...  
 Aron said REFL (Acc) dreamt have that  
 'Aron said that he had dreamt that ...' (Sturlunga saga, p. 276)

b. Þórðr ... kvað Þorgeiri mjok missýnask.  
 Þórðr ... said Þorgeir (Dat) much see wrongly  
 'Þórður said that Þorgeir was much mistaken.' (Ljósvetninga saga, p. 9)

In Modern Icelandic, the only NPs that can immediately follow the finite verb in such constructions are those that pass the classical subject tests (cf. Thráinsson 1979); dative objects are impossible in this position. In Modern Icelandic, accusative NPs like *sig* in (15a) and dative NPs like *Þorgeiri* in (15b) are clearly subjects of the subordinate clauses in sentences like these. The fact that such oblique NPs could occur in this construction in Old Icelandic is an indication of their subject status already at that stage.

### 3.5 Reflexivization

One type of subject-object asymmetries in Modern Icelandic involves reflexivization. The use of reflexive anaphors is obligatory if the antecedent is the subject of the same clause; but if the antecedent is an object (or some other NP), reflexivization is optional or impossible, subject to structural relations and also to speaker variation.

It is clear that non-subject-controlled reflexivization is much more frequent in Old Icelandic than it is in Modern Icelandic (Magnússon 1985; Nygaard 1905; Faarlund 1990:118):

(16) a. Konungr þakkaði þeim<sub>i</sub> vel orð sín<sub>i</sub>.  
 king thanked them well words REFL  
 'The king thanked them well for their words.' (Heimskringla I, p. 211)

b. Þakkar hann [þeim bræðrum]<sub>i</sub> sína<sub>i</sub> liðveizlu.  
 thanks he them brothers REFL assistance  
 'He thanks the brothers for their assistance.' (Hrafnkels saga Freysgoða, p. 22)

Due to the frequency of such sentences, one might conclude that reflexivization did not show any subject-object asymmetries in Old Icelandic, as opposed to Modern Icelandic (cf. Faarlund 1990:110). But on a closer inspection, I think this neither shows the absence of a subject-object asymmetry with respect to reflexivization in Old Icelandic, nor that there is any substantial difference between Old and Modern Icelandic in this respect. In Old Icelandic, as far as I can see, reflexivization is obligatory when referring to subjects but optional when referring to objects, just as in Modern Icelandic.

Furthermore, for many speakers of Modern Icelandic, reflexives can also have nonsubject antecedents (cf., for instance, Maling 1990b:278 and many others). To be sure, not all speakers of Modern Icelandic will accept sentences like (16), but many of them will; and since Modern Icelandic is configurational, this means that sentences such as (16) cannot be used as evidence for Old Icelandic being non-configurational.

Actually, reflexivization fact can be used to argue for subject-object asymmetries in Old Icelandic. As is well known, Modern Icelandic has so-called 'long-distance reflexivization' (Thráinsson 1990 and many others); an anaphor in a subordinate clause can refer to an antecedent in a higher clause, but only if that antecedent is a subject, as (17) shows:

- (17) Anna<sub>i</sub> sagði Maríu<sub>j</sub>[<sub>CP</sub> að ég elskaði sig<sub>i\*j</sub>]  
 Anna told María that I loved REFL  
 'Anna told María that I loved her'

Long-distance reflexivization is rare in Old Icelandic (Magnússon 1985); but when it occurs, it always appears to have a subject antecedent. As pointed out above, such subject-object asymmetry is not expected if Old Icelandic was non-configurational.

### 3.6 Other types of subject-object asymmetries

I argued above that even though the extensive use of null arguments in Old Icelandic would be consistent with the claim that the language was non-configurational, it is also perfectly compatible with analyzing the language as configurational. In fact, the distribution of null arguments in Old Icelandic actually lends some support to the conclusion that the language was configurational after all. As Hjartardóttir (1987) has shown, null arguments in Old Icelandic usually have a coreferential antecedent in the preceding context (even though that antecedent does not necessarily c-command the null argument). The only exceptions to this generalization are null arguments in the subject position of main clauses, which do not necessarily need such an antecedent, as (18) shows (from Hjartardóttir 1987:53; cf. Sigurðsson 1993a):

- (18) Þá sigldi hann í haf og fengu \_\_\_ veður stór.  
 then sailed he to sea and got (3pl) weathers great  
 'Then he sailed and [he and his crew] got bad weather.'

The verb in the second conjunct shows that the null subject is third person plural; however, no plural antecedent is found in the first conjunct (nor elsewhere in the preceding context). It is crucial in this respect that only subjects (of main clauses) can behave like that; empty categories in object position must always have a linguistic antecedent. If there was no structural difference between subjects and objects in Old Icelandic, such a contrast is unexpected.<sup>14</sup>

In looking for subject-object asymmetries which can be attributed to different structural positions, one might also consider synthetic compounds. Baker (1988) has argued that (at least many of) such compounds are formed by syntactic incorporation; movement of a noun 'into' its governing head (usually a verb or a preposition). Given a hierarchical structure, as usually assumed for configurational languages, this predicts that we should get subject-object asymmetries with respect to incorporation possibilities, as Baker points out; since the verb only

governs the object, but not the subject, only object nouns should be able to form compounds with the verb (cf., however, Van Valin 1992:208-209).

A detailed analysis of synthetic compounding in Old Icelandic is obviously beyond the scope of this paper. However, a quick glance at a word list from the Old Icelandic Family Sagas (Rögnvaldsson 1992) shows a number of compounds which could be analyzed as object incorporation, but no examples which appear to involve subject incorporation. Obviously, this deserves a closer inspection; but even though this preliminary investigation cannot prove anything, of course, it points to the same direction as the other arguments presented above.

#### *4. Conclusion*

One of Hale's criteria in (1) has not been mentioned; (1f), the claim that non-configurational languages make use of a 'rich' case system compared to the configurational ones. The status of the criterium is unclear; as Webelhuth (1984-85:204) points out, it depends on what counts as 'rich'. However, the exact definition of 'rich' in this connection does not matter here, since it is clear that the case system of Modern Icelandic is just as rich as it was in Old Icelandic; both stages of the language make use of four clearly distinctive morphological cases. If this system is sufficiently rich for Old Icelandic to count as a non-configurational language, the same should go for Modern Icelandic; but there is abundant evidence for the configurationality of Modern Icelandic (cf., for instance, Sigurðsson 1989 and many others).

To sum up: Even though the (post-verbal) word order of Old Icelandic is certainly less rigid than it is in Modern Icelandic, and certain instances of discontinuous NPs and PPs can be found, there is nevertheless clear evidence for the existence of NPs and PPs as syntactic constituents. Tests for VP constituency also appear to give the same results for Old and Modern Icelandic. There are also several examples where an NP-movement analysis appears to be unavoidable, and some syntactic processes are clearly sensitive to structurally determined subject-object asymmetries.

As I mentioned in the Introduction, most generative syntacticians nowadays appear to have abandoned the configurationality parameter. For instance, no mention is made of non-configurational languages in Chomsky's (1992) 'Minimalist paper', and it seems to be clear that Chomsky is claiming that the binary branching structures assumed in that work are valid for all languages. Many of the arguments for binary branching hierarchical structures are of course theory-internal, and it remains to be seen whether they can be empirically justified. The existence of non-configurational languages would appear to be one of the most serious challenges for this theory, and therefore it is very important to investigate whether the languages that have been claimed to be non-configurational could, after all, be analyzed as binary branching.

Of course, I have not presented any arguments against the very existence of a configurationality parameter in this paper; but I hope to have shown that even if such a parameter exists, there is no reason to assume that its setting has changed in the history of Icelandic. I conclude that Icelandic has clearly been configurational, for the last 700 years at least, and a rule schema stating that in Old Icelandic, the finite verb could be followed by any number of constituents in any order, cannot be correct.

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### *Notes*

1. I would like to thank the University of Iceland Research Fund for a grant that made it possible for me to write this paper. Thanks are also due to Joan Maling, Höskuldur Thráinsson, the editors of NOWELE, and an anonymous reviewer for the journal for several useful comments, and to Guðrún Ingólfssdóttir, cand.mag., for checking my examples in diplomatic editions.
2. Faarlund usually refers to his object of study as 'Old Norse', which covers both Old Icelandic and Old Norwegian; but since almost all of his examples are taken from Icelandic texts, I will talk about 'Old Icelandic' in this paper.
3. Old Icelandic is a Verb-Second language just as Modern Icelandic; in a corpus which includes a great majority of the most important Old Icelandic texts (cf. note 7 below), I have only found one sentence where the finite verb is in third position.
4. The logical possibilities are of course not 18, but rather 24. The remaining 6 are those where the two objects are adjacent, but their order is reversed, such that the direct object precedes the indirect object. This is sometimes possible with certain verbs in Modern Icelandic, especially if the indirect object is heavy. It seems to me that the situation is essentially the same in Old Icelandic.
5. One might raise some terminological questions with respect to the formulation in (2). In generative grammar, the notation *XP* usually stands for a maximal projection; a head (a noun, verb, preposition, adjective, etc) together with its complement(s) and an (optional) specifier. Thus, noun phrases (NPs), verb phrases (VPs), prepositional phrases (PPs) and adjective phrases (APs) are all XPs, but nouns, verbs, prepositions and adjectives are not. Thus, if non-configurational languages only project to the one-bar level, X', the notation *XP* is misleading. Cf. also the examples in (6) below, where a part of an NP precedes the finite verb whereas the rest of this NP is to the right of the verb. Furthermore, prepositions can sometimes be topicalized, leaving their complement NP behind. If this is taken as indicating that NPs and/or PPs were not syntactic constituents in Old Icelandic, it shows that *XP* in (3) cannot be understood in the usual sense of generative grammar. Of course, Faarlund is careful not to say that it should; he talks about 'at most one element', but not 'at most one phrase'. But if 'element' does not have to be a maximal projection, then it is rather unfortunate to have *XP* in the schema.
6. Webelhuth (1984-85:213), in arguing against similar claims for German, points out that it is not clear what 'LF-constituency' means, and brings forth various arguments which show

that 'the LF-constituent theory is incorrect'. Due to the syntactic differences between Icelandic and German, most of these arguments do not carry over to Icelandic; however, I agree with Webelhuth that the empirical and theoretical content of the claim is unclear.

7. All examples from Old Icelandic have been collected with the aid of a new concordance to the *Íslendinga sögur* (Family Sagas, Rögnvaldsson et al. 1992) and forthcoming concordances to *Sturlunga saga* (Rögnvaldsson 1994a), *Heimskringla* (Rögnvaldsson 1994b) and *Landnámabók* (Book of Settlements; Rögnvaldsson 1994c). These concordances (except for the concordance of *Landnámabók*) are based on new editions with modernized spelling, but the examples have been checked against diplomatic editions wherever possible, and the citations are taken from those editions.
8. Faarlund cites several *það*-less examples from Old Icelandic, where the expletive subject *det* 'it' would be 'more or less obligatory' in the equivalent sentences in the 'descendent language' Modern (New) Norwegian. He claims (1990:17) that this difference 'provides rather strong evidence' against the existence of the expletive in Old Norse. True, Modern Norwegian is a 'descendent language' of Old Norse; however, it is quite obvious that Modern Icelandic is a much closer descendent than Modern Norwegian. In Modern Icelandic written prose, the expletive *það* is very rare, compared to its high frequency in the spoken language. In the written norm, there is great tendency to use topicalization or Stylistic Fronting (see Maling 1990a), or even Narrative V1 (see Sigurðsson 1990), instead of *það*. This is actually recommended in schools and in (prescriptive) grammars of Modern Icelandic; thus, for instance, Smári (1920:19) states explicitly that expletive *það* should be avoided. None of Faarlund's examples (1990:105-106) would have *það* in normal Modern Icelandic written prose, even though most of them presumably would in the spoken language.
9. To be sure, Faarlund does not claim that PPs are discontinuous as a rule, but he says that 'Old Norse seems to be a language with no convincing evidence for a VP constituent, and maybe not even of a PP constituent' (1990: 101). However, he points out (1990:97) that 'it is, of course, normal for prepositions to precede their objects immediately,' but he adds that '[t]he exceptions to this rule are, however, so numerous that they should be taken seriously as indicative of important syntactic phenomena in this language'. It is easy to agree on this, but I think that these 'important syntactic phenomena' are movement rules rather than non-configurationality. - As a matter of fact, Harris (1992:294) claims that Faarlund's reasoning concerning the difference between Old Norse and Modern Norwegian in this respect is circular; but on the particular point she makes I must take stand with Faarlund.
10. Webelhuth (1984-85:239-240, note 2) gives examples of similar sentences in German. He points out that 'only quantifiers and certain adjectives' can be separated from the head noun in such sentences, and argues that they should be analyzed as instances of *wh*-movement. Stockwell and King (1993) also argue that Faarlund's examples can be explained by assuming that quantifiers were heads in Old Norse; incidentally, this fits nicely with Sigurðsson's (1993b) recent analysis of the structure of the NP in Icelandic. I can also point out that it is possible to move adverbs out of NPs in Modern Icelandic, as (ib) shows:

(i) a. Hann er ótrúlega stór.  
he is unbelievably big

b. Ótrúlega er hann stór.  
unbelievably is he big

11. Faarlund (1990, 1992) claims that there are no clear cases of VP pronominalization in Old Icelandic. He cites some sentences which look like they involve VP pronominalization, but he argues that they either are instances of sentence pronominalization or can be explained in some other way. In arguing against VP-pronominalization he relies heavily on 'the principle of "missed opportunities": if VP-pronominalization is not used in cases where it would be natural for a speaker of modern Norwegian to use it, or where the translations of Old Norse texts into modern Norwegian use it, we have reason to assume that it does not exist as a possibility' (Faarlund 1990:88-89). I am sceptical of such arguments in general; but if used here, it would be much more natural to draw examples from Modern Icelandic than from Norwegian. It is clear that the lexical, morphological and syntactic similarities between Old and Modern Icelandic are much greater than those between Modern (New) Norwegian and Old Norse. I do not think that Modern Icelandic would use VP-pronominalization in all the examples where it is used in Modern Norwegian.
13. Furthermore, Stockwell and King (1993) show that 'the data are compatible with a nested VP structure [...] where arguments are projected in specifier positions of empty verbal heads, and the lexical verb is projected in the lowest head position'.
13. Faarlund (1990:124) gives the following hypothetical example of a sentence that ought not to exist in Old Icelandic:

(i) ?Bárðr sagðist þyrsta mjök.  
Bárður said-REFL thirst much  
'Bárður said he was very thirsty.'

As can be seen, however, the example in (13a) is almost exactly parallel to (i). Faarlund says that if (i) is grammatical, 'it would indicate that the first argument can always associate outside its clause, regardless of what case it would associate with in finite clauses'. Since the corresponding sentence in (13a) actually occurs, it seems that the nominative has no special status with respect to raising in Old Icelandic (incidentally, (13a) would be ungrammatical in Modern Icelandic).

14. I leave open here how to account for this asymmetry; for the present purposes, it suffices to show that it exists. One possible explanation is given in Sigurðsson (1993), but I think the analysis of Rizzi (1992) could be fruitfully applied to such sentences.

### *Sources*

- Bandamanna saga*. Utgjeven for Samfund til udgivelse af gammel nordisk litteratur LXVII ved Hallvard Mageröy. København 1956-1976.
- Droplaugarsona saga = *Austfirðinga sogur*. Udgivne for Samfund til udgivelse af gammel nordisk litteratur XXIX ved Jakob Jakobsen. København 1902-1903.
- Egils saga Skallagrímssonar*. Udgiven for Samfund til udgivelse af gammel nordisk litteratur XVII ved Finnur Jónsson. København 1886-1888.
- Eyrbyggja saga*. Íslenzk fornrit IV. Einar Ól. Sveinsson og Matthías Þórðarson gáfu út. Hið íslenska fornritafélag. Reykjavík 1935.
- Finnboga saga ramma = *Kjalnesinga saga*. Íslenzk fornrit XIV. Jóhannes Halldórsson gaf út. Hið íslenska fornritafélag. Reykjavík 1959.
- Fóstbræðra saga*. Udgivet for Samfund til udgivelse af gammel nordisk litteratur XLIX ved Björn K. Þórólfsson. København 1925-1927.
- Gunnlaugs saga ormstungu*. Udgiven for Samfund til udgivelse af gammel nordisk litteratur XLII ved Finnur Jónsson. København 1916.
- Heimskringla I-IV*. Nóregskonunga sogur. Udgivne for Samfund til udgivelse af gammel nordisk litteratur LXXIII ved Finnur Jónsson. København 1893-1901.
- Hrafnkels saga Freysgoða*. Udgivet af Jón Helgason. Nordisk filologi. København 1974.
- Landnámabók I-III*. Hauksbók, Sturlubók, Melabók. Udgiven af Det Kongelige Nordiske Oldskrift-Selskab. København 1900.
- Laxdæla saga*. Udgiven for Samfund til udgivelse af gammel nordisk litteratur XIX ved Kr. Kålund. København 1889-1891.
- Ljósvetninga saga*. Íslenzk fornrit X. Björn Sigfússon gaf út. Hið íslenska fornritafélag. Reykjavík 1940.
- Reykðæla saga = *Ljósvetninga saga*. Íslenzk fornrit X. Björn Sigfússon gaf út. Hið íslenska fornritafélag. Reykjavík 1940.
- Sturlunga saga I-II*. Efter membranen Króksfjarðarbók, udfyldt efter Reykjarfjarðarbók. Udgiven af Det Kongelige Nordiske Oldskrift-Selskab. København 1906-1911.
- Svarfdæla saga*. Jónas Kristjánsson bjó til prentunar. Rit Handritastofnunar Íslands II. Reykjavík 1966.
- Víglundar saga = *Kjalnesinga saga*. Íslenzk fornrit XIV. Jóhannes Halldórsson gaf út. Hið íslenska fornritafélag. Reykjavík 1959.
- Porsteins saga hvíta = *Austfirðinga sogur*. Udgivne for Samfund til udgivelse af gammel nordisk litteratur XXIX ved Jakob Jakobsen. København 1902-1903.

## References

- Baker, Mark C. 1988. *Incorporation. A Theory of Grammatical Function Changing*. Chicago: University of Chicago Press.
- Benediktsson, Hreinn. 1980. 'The Old Norse Passive: Some Observations.' In *The Nordic Languages and Modern Linguistics* 4, pp. 108-119. Ed. Even Hovdhaugen. Oslo: Universitetsforlaget.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam. 1992. 'A Minimalist Program for Linguistic Theory.' *MIT Occasional Papers in Linguistics* 1. Department of Linguistics, MIT, Cambridge, Mass.
- Dyvik, Helge. 1980. 'Har gammelnorsk passiv?' In *The Nordic Languages and Modern*

- Linguistics* 4, pp. 82-107. Ed. Even Hovdhaugen. Oslo: Universitetsforlaget.
- Faarlund, Jan Terje. 1990. *Syntactic Change. Toward a Theory of Historical Syntax*. Berlin: Mouton.
- Faarlund, Jan Terje. 1992. 'The Subject as a Thematic Category in the History of Scandinavian.' *Folia Linguistica* 26:151-170.
- Grafstein, Ann. 1986. 'Configurationality and Parameter Setting in Universal Grammar.' *Proceedings of the Eastern States Conference of Linguistics* 3:247-257.
- Haider, Hubert. 1982. 'Dependenzen und Konfigurationen.' *Groninger Arbeiten zur Germanistischen Linguistik*.
- Hale, Ken. 1982. 'Preliminary Remarks on Configurationality.' *Proceedings of the North Eastern Linguistic Society* 12:86-96.
- Hale, Ken. 1983. 'Warlpiri and the Grammar of Non-Configurational Languages.' *Natural Language and Linguistic Theory* 1:5-47.
- Harris, Alice. 1992. Review of Faarlund (1990). *Diachronica* 9:287-296.
- Hjartardóttir, Þóra Björk. 1987. *Getið í eyðurnar. Um eyður fyrir frumlög og andlög í eldri íslensku*. Master's thesis, University of Iceland, Reykjavík.
- Holmberg, Anders, and Christer Platzack. 1988. 'On the Role of Inflection in Scandinavian Syntax.' *Working Papers in Scandinavian Syntax* 42.
- Jóhannsdóttir, Kristín M. 1992. *Það er nú það*. BA-thesis, University of Iceland, Reykjavík.
- Kiss, Katalin É. 1987. *Configurationality in Hungarian*. Dordrecht: Reidel.
- Klavans, Judith. 1982. 'Configuration in Non-Configurational Languages.' *Proceedings of the West Coast Conference of Formal Linguistics* 1:292-306.
- Lakoff, George, and John R. Ross. 1966. 'Criterion for Verb Phrase Constituency.' *Mathematical Linguistics and Automatic Translation, Report No. NSF-17*. Harvard University Computation Laboratory, Cambridge, Mass.
- Maling, Joan. 1990a. 'Inversion in Embedded Clauses in Modern Icelandic.' In *Modern Icelandic Syntax, Syntax and Semantics* 24. Eds. Joan Maling and Annie Zaenen. San Diego: Academic Press. [Originally published in *Íslenskt mál og almenn málfræði* 2:175-193, 1980.]
- Maling, Joan. 1990b. 'Clause-Bounded Reflexives in Modern Icelandic.' In *Modern Icelandic Syntax, Syntax and Semantics* 24. Eds. Joan Maling and Annie Zaenen. San Diego: Academic Press.
- Magnússon, Friðrik. 1985. 'Skýrsla um sögulega afturbeygingu.' MS, University of Iceland, Reykjavík.
- Nygaard, Marius. 1905. *Norrøn syntax*. Kristiania: Aschehoug.
- Platzack, Christer. 1991. Review of Faarlund (1990). *Arkiv för nordisk filologi* 106:183-184.
- Rizzi, Luigi. 1992. 'Early Null Subjects & Root Null Subjects.' *GenGenP* 0, 1-2:102-114. Département de Linguistique Générale, Université de Genève.
- Rögnvaldsson, Eiríkur. 1991. 'Quirky Subjects in Old Icelandic.' In *Papers from the Twelfth Scandinavian Conference of Linguistics*, pp. 369-378. Ed. Halldór Ármann Sigurðsson. Reykjavík: Institute of Linguistics, University of Iceland.
- Rögnvaldsson, Eiríkur. 1992. 'Orðaforði Íslendinga sagna.' MS, University of Iceland, Reykjavík.
- Rögnvaldsson, Eiríkur, Bergljót S. Kristjánsdóttir, Guðrún Ingólfssdóttir and Örnólfur Thorsson. Eds. 1992. *Orðstöðulykill Íslendinga sagna*. University of Iceland, Reykjavík.
- Rögnvaldsson, Eiríkur. 1993a. 'Word Order Variation in the VP in Old Icelandic.' In

- Proceedings of the Second Diachronic Generative Syntax Workshop*, University of Pennsylvania, Philadelphia (forthcoming).
- Rögnvaldsson, Eiríkur. 1993b. 'Coordination, ATB-extractions, and the Identification of *pro*.' *Harvard Working Papers in Linguistics* 3:153-180.
- Rögnvaldsson, Eiríkur. Ed. 1994a. *Orðstöðulykill Sturlunga sögu*. Forthcoming, University of Iceland, Reykjavík.
- Rögnvaldsson, Eiríkur. Ed. 1994b. *Orðstöðulykill Heimskringlu*. Forthcoming, University of Iceland, Reykjavík.
- Rögnvaldsson, Eiríkur. Ed. 1994c. *Orðstöðulykill Landnámabókar*. Forthcoming, University of Iceland, Reykjavík.
- Sigurðsson, Halldór Ármann. 1989. *Verbal Syntax and Case in Icelandic*. Doctoral dissertation, University of Lund, Lund. [Reprinted 1992 by the Institute of Linguistics, University of Iceland, Reykjavík.]
- Sigurðsson, Halldór Ármann. 1990. 'Verb Initial Declaratives in Icelandic: Their Syntax and Their Semantics.' In *Modern Icelandic Syntax*, Syntax and Semantics 24. Eds. Joan Maling and Annie Zaenen. San Diego: Academic Press.
- Sigurðsson, Halldór Ármann. 1993a. 'Argument-drop in Old Icelandic.' *Lingua* 89:247-280.
- Sigurðsson, Halldór Ármann. 1993b. 'The Structure of the Icelandic NP.' *Studia Linguistica* 47:117-197.
- Smári, Jakob Jóh. 1920. *Íslensk setningafræði*. Bókaverzlun Ársæls Árnasonar, Reykjavík. [Reprinted 1987 by the Institute of Linguistics, University of Iceland, Reykjavík.]
- Speas, Margarethe. 1990. *Phrase Structure in Natural Language*. Dordrecht: Kluwer.
- Stockwell, Robert P., and Karn King. 1993. Review of Faarlund (1990). *Nordic Journal of Linguistics* 16:60-68.
- Taylor, Ann. 1988. 'From Non-Configurational to Configurational: A Study of Syntactic Change in Greek.' *The Penn Review of Linguistics*, 12th Penn Linguistics Colloquium, February 1988, pp. 1-15.
- Thráinsson, Höskuldur. 1979. *On Complementation in Icelandic*. New York: Garland.
- Thráinsson, Höskuldur. 1990. 'A Semantic Reflexive in Icelandic.' In *Modern Icelandic Syntax*, Syntax and Semantics 24. Eds. Joan Maling and Annie Zaenen. San Diego: Academic Press.
- Van Valin, Robert D., Jr. 1992. 'Incorporation in Universal Grammar: a Case Study in Theoretical Reductionism.' Review article [of Baker (1988)]. *Journal of Linguistics* 28:199-220.
- Wasow, Thomas. 1977. 'Transformations and the Lexicon.' In *Formal Syntax*, pp. 327-360. Eds. Peter Culicover, Thomas Wasow and Adrian Akmajian. New York: Academic Press.
- Webelhuth, Gert. 1984-85. 'German is Configurational.' *The Linguistic Review* 4:203-246.
- Zaenen, Annie. 1985. *Extraction Rules in Icelandic*. New York: Garland.