

# **Icelandic Case Fluctuation and Movement into Theta-Positions<sup>1</sup>**

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## **1. Introduction**

Raising and control constructions have received a lot of attention in the literature. One of the main goals of the investigation has been the attempt to reduce control structures to raising ones (e.g. Hornstein 1999). In this line of research, controlled PRO is reinterpreted as a trace/copy of an argument moved to the matrix clause. The interesting theoretical implication is that this kind of analysis presents a case of movement into a theta-role position, typically not allowed by the Theta Criterion (Chomsky 1981, 1986). Another goal of the investigation has been the discovery of the basic properties of these two different types of constructions (for an excellent overview, see Haegeman 1994). One of the approaches to capture these differences is based on the assumption that control and raising predicates select for (infinitival) complements of a different size (e.g. Wurmbrand 2001, and references cited therein). Wurmbrand (2001) argues that infinitival clauses can be of (at least) four different categories: VP, *v*P, TP and CP. Somewhat simplified here, identifying different bundles of properties associated with certain kinds of predicates, Wurmbrand is able to account for these differences by assuming differing categorical selection by the individual groups of predicates (for a very handy summary, see page 309).

The primary goal of this paper is to shed light on both types of issues. On the one hand, I provide new evidence that arguments can move into theta-role positions; on the other hand, I suggest that certain verbs are ambiguous in that they can select for different

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types of infinitival clauses. The evidence for these points comes from variation in morphological case on the matrix subject of ‘reflexive middle’ verbs such as *kveðast* ‘say of oneself to be’ and *segjast* ‘say one’s self to be’. To illustrate, as is well known, Icelandic allows inherently case-marked subjects, so-called ‘quirky’ subjects, where the subject may bear a dative case:

- (1) Drengnum gengur vel við vinnuna  
 the-boy(DAT) goes well at work  
 ‘The boy is doing well at work.’

Now, if this sentence is embedded under the middle reflexive predicate *segjast* ‘say one’s self to be’, there are two conceivable possibilities with regard to case on the matrix subject: either nominative (as expected with control predicates) or accusative case (as expected with raising predicates). Andrews (1990: 206) provides the following data (his (47c-d)):

- (2) a. Drengurinn segist ganga vel við vinnuna  
 the-boy(NOM) says-self to-go well at work  
 ‘The boy<sub>i</sub> says he<sub>i</sub> is doing well at work.’  
 b. Drengnum segist ganga vel við vinnuna  
 the-boy(DAT) says-self to-go well at work

In a survey (see below for details), Andrews (1990) found three basic judgments: while some speakers find (2a) and/or (2b) grammatical, others accept neither (2a) nor (2b). I will call this phenomenon ‘case fluctuation’. He further observes that these “structures are rather complicated and found rarely, if at all, in normal performance” (p. 202). In view of their infrequent occurrence in the primary linguistic input, we may claim that these structures have not been “learned” by the child during the course of her acquisition of the language. Interestingly, however, speakers still have intuitions about them and they need to be accounted for. If this is true, then this variation presents a good testing ground for theoretical issues such as the reductionist view of Hornstein (1999).

A secondary goal is to give an account of this variation in a restricted framework such as the Minimalist Program (Chomsky 1995). The motivation behind this is that some scholars take the overt case realization on the matrix subject as an indication as to whether or not a structure involves raising of the argument. For instance, Wurmbbrand (2001: 190-2) argues against Thráinsson & Vikner (1995) in that not only epistemic but also root modals involve raising. She derives one of her arguments from the retention of the quirky case on the subject in these structures. If this argument is not to lose some of its force, then variation in case realization has to be accounted for in principled manner (at least for the most part). To foreshadow the analysis, I will give new evidence that quirky subjects as in (2b) have a matrix subject theta-role. Assuming the restricted framework of the Minimalist Program, this implies that movement of an argument has occurred from the embedded clause into the matrix theta-position. In order to account for the fluctuation, I will propose that the observed differences in morphological case are a reflection of the different analyses that speakers assign to the embedded infinitival clauses, namely either VP or, what I call, ‘VerbP’.

The paper is organized as follows: first, I illustrate the phenomenon of case preservation in Icelandic. Then I provide data for case fluctuation from both Old and Modern Icelandic. In section 4, I discuss the argument structure of *segjast*, concluding that it is a control predicate selecting a raising-type infinitival. At the end of section 4, I provide evidence for the possibility of movement into theta-positions. The following proposal comprises a more detailed discussion of the raising-type infinitival suggesting that it might be ambiguous with regard to its size. After the account of the variation, further issues are discussed in section 6 and the main findings are summarized in the conclusion.

## **2. Case Preservation in Icelandic**

In the introduction, we saw that the case on the matrix subject may vary. In order to demonstrate that this fluctuation is the exception rather than the rule and, consequently, of interest to us, I will briefly review the main relevant clause types in Icelandic, showing that lexical case is retained in ECM and raising constructions but not in control structures (for general background on lexical case, see e.g. Freidin & Sprouse 1991, Sigurðsson 2002). This will set the stage for the proposal that the variation is most straightforwardly accounted for by assuming that *segjast* is ambiguous in having (traditional) raising or control properties with regard to movement.

### **2.1. Simple Sentences**

Icelandic has the familiar case pattern in (3a), in which structural nominative and accusative cases are assigned to the subject and object, respectively. However, as already mentioned in the introduction, Icelandic also has quirky subjects, which bear inherent case. This is illustrated in (3b) with the subject in the dative case and the object in the nominative:

- (3) a.      Haralður    las    bókina  
         Harald(NOM) read the-book(ACC)  
         ‘Harald read the book.’  
      b.      Haraldi      batnaði            veikin  
         Harald(DAT) recovered-from the-disease(NOM)  
         ‘Harald recovered from the disease.’

Without going into any detail here, note that there are a number of tests that show that the dative noun phrase in (3b) is indeed the subject (e.g. Andrews 1976, 1982: pp. 461; Thráinsson 1979, Zaenen, Maling & Thráinsson 1985; Sigurðsson 1989: 204-9, 1992, 2002). As for the nominative object in (3b), Sigurðsson (1989: 206 fn. 6) tentatively suggests that this nominative might also be a lexical case (see Maling & Sprouse 1995: pp. 178 for arguments against this view).

## 2.2. ECM Predicates

If the sentences in (3a-b) are embedded under an Exceptional Case Marking (ECM) predicate, then the structural nominative case is ‘changed’ to a structural accusative, while the inherent dative case is ‘preserved’. Compare (4a) to (4b):

- (4) a. Ég tel Harald hafa lesið bókina  
 I believe Harald<sub>(ACC)</sub> to-have read the-book<sub>(ACC)</sub>  
 ‘I believe Harald to have read the book.’  
 b. Ég tel Haraldi hafa batnað veikin  
 I believe Harald<sub>(DAT)</sub> to-have recovered-from the-disease<sub>(NOM)</sub>  
 ‘I believe Harald to have recovered from the disease.’

Next, I show that retention of lexical case is not only found with subject-to-object raising predicates, but also with subject-to-subject verbs. This is in stark contrast to control structures.

## 2.3. Raising vs. Control Predicates

One distinguishing property between raising and control verbs in Icelandic is the different case realizations on their matrix subjects (for different theta-role properties, see section 4). Similar to ECM predicates, inherent case is preserved with raising predicates. In other words, if the sentences in (3a-b) are embedded under the raising verb *virðast* ‘to seem’, the case assigned by the embedded verb is retained in the matrix clause:

- (5) a. Haraldur virðist hafa lesið bókina.  
 Harald<sub>(NOM)</sub> seems to-have read the-book<sub>(ACC)</sub>  
 ‘Harald seems to have read the book.’  
 b. Haraldi virðist hafa batnað veikin.  
 Harald<sub>(DAT)</sub> seems to-have recovered-from the-disease<sub>(NOM)</sub>  
 ‘Harald seems to have recovered from the disease.’

Standard accounts argue that the subject raises from the embedded clause into the subject position of the matrix clause, keeping its case.

- (6) a. Haraldur<sub>i</sub> virðist [ t<sub>i</sub> hafa lesið bókina ]  
 b. Haraldi<sub>i</sub> virðist [ t<sub>i</sub> hafa batnað veikin ]

On the other hand, if these sentences are embedded under the control verb *vonast til* ‘to hope’, the inherent case assigned to the embedded subject does not show up on the matrix subject. Unlike in (5b), the subject appears in the nominative:

- (7) a. Haraldur vonast til að lesa bókina  
 Harald<sub>(NOM)</sub> hopes PRT to read the-book<sub>(ACC)</sub>  
 ‘Harald hopes to read the book.’

- b. Haraldur vonast til að batna veikin.  
Harald(NOM) hopes PRT to recover-from the-disease(NOM)  
'Harald hopes to recover from the disease.'

In order to capture the difference in case assignment on the matrix subject (among other things), it has been argued that control predicates do not allow movement from the embedded clause. In fact, the matrix subject is assumed to have been merged in the matrix clause and the embedded clause has an 'understood' subject (controlled PRO).

- (8) a. Haraldur<sub>i</sub> vonast til [ að PRO<sub>i</sub> lesa bókina ]  
b. Haraldur<sub>i</sub> vonast til [ að PRO<sub>i</sub> batna veikin ]

To sum up, the main point of the preceding discussion is that raising contexts preserve lexical case while control ones do not. With this in mind, we turn to the instances of case fluctuation.

### 3. Case Fluctuation in Icelandic

I take 'case fluctuation' to be a "real" and interesting phenomenon as evidence for it comes from two different sources and times in the development of Icelandic. Thus, I will follow Barðdal & Eythórsson (to appear), who argue against the possibility that this variation may involve performance errors.

#### 3.1. Old Icelandic

Consider the following sentence from Old Icelandic, which is basically parallel to (3b) in its case realization (modern spelling):

- (9) Þórði þykkja tvennir kostir til. (Old Icelandic)  
Þórðr(DAT) seem two choices(NOM) to  
'Þórðr seems to have two possibilities.'

When the sentence in (9) is found embedded under *kveðast* 'say of oneself to be', giving a reflexive middle construction, *two* case realizations on the matrix subject have been attested in Old Icelandic: whereas (10a) is in the dative case, (10b) is in the nominative (taken from Faarlund 1999: 36; for more examples, see Barðdal & Eythórsson 2003: 452-3, 458-9):

- (10) a. Þórði kvaðst þykkja tvennir kostir til (Old Icelandic)  
Þórðr(DAT) said-refl seem two choices(NOM) to  
'Þórðr said that he felt that two possibilities existed.'  
b. Þórðr kvaðst þykkja tvennir kostir til  
Þórðr(NOM) said-refl seem two choices(NOM) to

According to Faarlund, the example in (10b) is from Þorgils saga (which is part of Sturlunga saga) and the example in (10a) is found in other editions of Sturlunga saga (which are based on the most reliable manuscript, the Króksfjarðarbók). Faarlund's (1999: 9) explanation of these different case markings is the following: "[10a)] and the very few similar examples found are due to some kind of contamination." He goes on to claim that "[w]hen this sentence was embedded under *kvað*, the writer "forgot" to change the dative experiencer of *þykkja* into the nominative agent of *kveda*, and at the same time "forgot" to change the nominative *tvennir kostir* into the accusative." (Ibid 37)

There are several problems with this view: to name only two, the notion that scribes systematically (albeit rarely) 'forgot' to change the case of the matrix subject *and* that of the embedded object *within* the same sentence is not very appealing. Furthermore, this statement cannot amount to an explanation at all since it basically restates the facts in *non-linguistic* terms (for a more thorough critique, see Barðdal & Eythórsson 2003). As we will see below, however, this is a more general phenomenon and we will try to find a deeper explanation. Recalling the discussion in section 2, suffice it to say at this point that (10a) seems to have properties of raising verbs as in (11a) while (10b) seems to behave like a control structure as in (11b).

- (11) a. Þórði<sub>i</sub> kvaðst [ t<sub>i</sub> þykkja tvennir kostir til ]  
 b. Þórðr<sub>i</sub> kvaðst [ PRO<sub>i</sub> þykkja tvennir kostir til ]

### 3.2. Modern Icelandic

If we follow Anderson (1990: 264) in grouping *kveðast* 'say of oneself to be' and *segjast* 'say one's self to be' together, then evidence for case fluctuation in Icelandic comes actually in two forms: (i) from written Old Icelandic as seen above (Barðdal & Eythórsson 2003, to appear, also provide attested examples in writing in Modern Icelandic) and (ii) from (current) native speaker judgments. This means that this fluctuation has been going on for several hundred years and may be a reflection of a linguistic change still in progress. Consider the second type of evidence more closely.

Building on earlier work (Andrews 1982: 475), Andrews (1990: 203-7) conducted a survey in the Spring of 1983, in which he asked students and staff in linguistics at the University of Iceland (overall seventeen native speakers of Modern Icelandic) to judge examples in which the subject of each matrix verb ending in *-st* varied between nominative case and the case that the embedded verb would normally assign to its subject. In other words, all seventeen speakers judged both kinds of case realization on the matrix subject with the same predicates. His findings basically confirmed that case preservation occurs in Icelandic as expected (p. 205). However, with the matrix reflexive middle predicate *segjast* 'say one's self to be', the questionnaire showed considerable case fluctuation on the matrix subject: some speakers accepted the case assigned in the matrix clause, other speakers that by the embedded verb, while a third group did not accept either (p. 202). Note that the examples in (12c) and (12d) are parallel to the Old Icelandic sentences given above (p. 206, ex. (47)):

- (12) a. Stúlkan segist vanta efni í ritgerðina  
the-girl(NOM) says-self to-lack material for the-paper  
'The girl<sub>i</sub> says that she<sub>i</sub> lacks material for the paper.'
- b. Stúlkuna segist vanta efni í ritgerðina  
the-girl(ACC) says-self to-lack material for the-paper
- c. Drengurinn segist ganga vel við vinnuna (= (2a))  
the-boy(NOM) says-self to-go well at work  
'The boy<sub>i</sub> says he<sub>i</sub> is doing well at work.'
- d. Drengnum segist ganga vel við vinnuna (= (2b))  
the-boy(DAT) says-self to-go well at work

The grammaticality judgments of the seventeen speakers are summarized in the following chart:

Figure I

matrix case	√	?	??	?*	*	**
(12a) NOM	6	3	2	4	2	0
(12b) ACC	2	1	1	1	9	3
(12c) NOM	1	0	3	5	7	1
(12d) DAT	3	3	1	0	9	1

(Andrews, 1990: 206 (48))

To see this more clearly, I will collapse figure I into three groups of judgments:

Figure II

matrix case	√/?	??/?*	*/**
(12a) NOM	<b>9</b>	<b>6</b>	2
(12b) ACC	<b>3</b>	2	<b>12</b>
(12c) NOM	1	<b>8</b>	<b>8</b>
(12d) DAT	<b>6</b>	1	<b>10</b>

In figure II, nine grammaticality judgments for the nominative in (12a) have three corresponding judgments for the inherent accusative in (12b) whereas one grammaticality judgment for the nominative in (12c) has six corresponding judgments for the inherent dative in (12d). Furthermore, the 'in-between' judgments (??/?\*) are more numerous with the matrix nominative (12a and 12c) than with the matrix inherent case (12b and 12d). This implies that native speakers have clearer judgments when the inherent case is on the matrix subject. If this is correct, then we find an interesting situation: although both inherent case realizations on the matrix subject receive clearer judgments, accusative case is less often accepted than the nominative while dative case is more frequent than the nominative. In other words, with an embedded accusative assigning verb, the reflexive middle verb is more likely to exhibit control properties whereas with the dative it is more

likely to show raising properties. Note at the same time that although less frequent, the reverse does also occur. Finally, some speakers do not accept any of the sentences in (12a-d). I summarize these facts and observations:<sup>2</sup>

- (i) The nominative case on the matrix subject is grammatical.
- (ii) The inherent case (accusative or dative) on the matrix subject is grammatical.
- (iii) Neither the structural nor the inherent cases are possible.
- (iv) There are clearer judgments with an inherent case on the matrix subject.
- (v) The inherent dative case is more frequent than the inherent accusative.

In what follows, I will concentrate on (i) and (ii) and only briefly comment on (iii) and (iv) at the end of section 5.3 and on (v) in section 6.2. Before we turn to the proposal to derive the different judgments, it is essential to determine the argument structure of *segjast*. This discussion will also lay the groundwork for the argument that movement into theta-role positions is possible.

#### 4. The Argument Structure of Reflexive Middles

Among others, Andrews (1990: 202) and Anderson (1990: 265) discuss the reflexive middle construction with respect to its syntactic behavior. Both authors conclude that these verbs are a mixture of syntactic properties of raising predicates such as *virðast* ‘to seem’ and control predicates such as *vonast til* ‘to hope’ (cf. also Barðdal & Eythórsson 2003). In what follows, I add to the discussion, illustrating the “hybrid” character of the verb. I will show that the control and raising properties do not appear to manifest themselves randomly, but distribute over both parts of the construction homogeneously: while the matrix predicate exhibits only control properties, the embedded infinitival shows only raising characteristics. The conclusion that I will draw from these facts is that *segjast* is a control verb that embeds an infinitival clause with raising properties. In section 4.3, I provide evidence for the claim that arguments may move into theta-positions.

##### 4.1. Control Properties of *segjast*

There are four pieces of evidence that suggest that *segjast* assigns a subject theta-role. First, the occurrence of agentive adverbs with *segjast* suggests that an agentive theta-role is present in the syntax (although not necessarily on the subject itself). Second, Icelandic *do so*-constructions, non-thematic NPs (subject idiom chunks and expletives), and selectional restrictions on the matrix subject argue that it is the subject that receives the agentive theta-role.<sup>3</sup>

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<sup>2</sup> Having no access to the details of the survey, I have not been able to establish any correlations between or within speakers. For instance, it is not clear to me to what extent speakers find both the nominative *and* the inherent case grammatical.

<sup>3</sup> Note that it is difficult to construct minimal pairs in some instances (due to different aspectual requirements of the matrix predicate). What is crucial in the following data sets is that there are clear contrasts in grammaticality.



There is evidence that *segjast* assigns an agentive theta-role in the syntax (although not necessarily to the subject itself). Discussing a number of differences between middle verbs and passives, Sigurðsson (1989: 268) argues that one difference concerns the possibility of the relevant predicates to co-occur with an agentive adverb such as *viljandi* ‘intentionally’, which require the presence of an agent. While middle verbs like *opnaðist* in (13a) do not allow *viljandi*, passives like *var opnaður* in (13b) do:

- (13) a. Glugginn opnaðist (\*viljandi).  
the window opened-refl intentionally  
‘The window opened.’  
b. Glugginn var opnaður (viljandi).  
the window was opened intentionally  
‘The window was opened (intentionally).’

Considering the difference in (13a) and (13b), Sigurðsson concludes that an agent is syntactically absent with the middle verb in (13a) but present with the passive in (13b). Valfells (1970: 555) and Fagan (1992, for German) reach a similar conclusion (but Stroik 1999, see footnote 7). Following the same line of reasoning, we have a test to establish whether or not *segjast* assigns an agent theta-role in the syntax. In order to test for the theta-role of the matrix predicate only, we need to embed under *segjast* a non-agentive predicate such as *vera ríkur* ‘(to) be rich’. Now, if *segjast* patterns with the middle in (13a) or a typical raising verb for that matter, then we have proof that it does not assign a subject theta-role. However, if *segjast* allows an agentive adverb, then a subject theta-role must be present in the syntax. The latter seems to be the case:

- (14) a. \* Jón virtist viljandi vera ríkur.  
Jón seemed intentionally to-be rich  
‘Jón seemed to be rich.’  
b. (?) Jón sagðist viljandi vera ríkur.  
Jón said-refl intentionally to-be rich  
‘Jón intentionally said that he was rich.’

Considering the contrast between (14b) and both (13a) and (14a), we conclude that an agentive theta-role is present in the syntax. If this is true, then *segjast* cannot be a (true) middle predicate.

Second, Anderson (1990: 265) maintains that in sentences such as *Jón segist vera ríkur* ‘Jón says he is rich.’, two subject theta-roles are assigned: one by the predicate *vera ríkur* ‘(to) be rich’, and one by the matrix verb *segjast*. If this is true, then the same example with a raising predicate instead of *segjast* is expected to behave differently. This becomes obvious if we consider the *do so*-construction in Icelandic (Anderson’s (39)):<sup>4</sup>

<sup>4</sup> Note that most of my informants preferred *það* to be topicalized:

- (i) a. Jón segist vera ríkur og það gerir Ólafur líka  
John says-refl be rich and it does Olaf too.  
‘John says he is rich, and Olaf does so too.’  
b. \* Jón virðist vera ríkur og það gerir Ólafur líka

- (15) a. Jón segist vera ríkur og Ólafur gerir það líka  
 John says-refl be rich and Olaf does it too.  
 ‘John says he is rich, and Olaf does so too.’  
 b. ?\* Jón virðist vera ríkur og Ólafur gerir það líka  
 John seems be rich and Olaf does it too.  
 ‘John seems to be rich, and Olaf does so too.’

According to Anderson, the *do so*-construction (*gera það*) in the second conjunct needs to be licensed by an agentive role in the first conjunct. Note first that both infinitival clauses contain *vera ríkur* ‘(to) be rich’, which does not assign an agentive theta-role. Consequently, the difference must be explained by the different matrix predicates. Assuming that *virðast* does not assign an agentive theta-role, we can conclude that *segjast* differs in that respect. So far then, we have seen evidence that *segjast* assigns a subject theta-role in the syntax. Next, in order to see, if the subject itself bears that theta-role, we need to insert a passive in the first conjunct of the *do so*-construction. Above, we saw that passives are compatible with agentive adverbs and concluded that they assign a subject theta-role in the syntax (they typically do not have an overt subject). Now, if the passive contrasts in grammaticality with *segjast*, then we have evidence that it is the matrix subject of *segjast* that receives the subject theta-role. This is borne out, comparing (15a) and (16):

- (16) \* Jón er handtekinn og það gerir Ólafur líka.  
 Jón is arrested and it does Olaf too  
 ‘Jón is arrested and Olaf does so too.’

The ungrammaticality of (16) suggests that the mere presence of an agentive subject theta-role in the syntax is not enough to license the *do so*-construction. Thus, in order to capture the contrast in (15a) and (15b), we are left to conclude that *segjast* assigns a theta-role to its subject. In that respect then, *segjast* patterns with control predicates.

The next piece of evidence for *segjast* to be a control predicate comes from non-thematic NPs (an argument originally due to Rosenbaum). Non-thematic NPs come in two types: subject idiom chunks and expletives. According to Radford (1988: 441-2), subject idiom chunks such as *the cat is out of the bag* have two interpretations: a literal one where a feline critter managed to get out of a sack, and a figurative one, meaning a secret has been carelessly revealed. He observes that both readings hold with typical raising verbs. However, with control predicates, only the literal interpretation is available. In other words, whereas the raising predicate in (17a) allows for both readings, the control predicate in (17b) “loses” the figurative meaning:

- (17) a. The cat seems to be out of the bag.  
 b. The cat is anxious PRO to be out of the bag.

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John seems be rich and it does Olaf too.  
 ‘John seems to be rich, and Olaf does so too.’

This difference in interpretation follows if we assume that unlike the raising predicate, the control predicate *anxious* assigns a separate theta-role to its subject but *the cat* as part of an idiom cannot satisfy it (as it is a non-thematic NP). Now, if we can find an appropriate subject idiom in Icelandic, then we have another test for the argument structure of *segjast*. Similar to (17b) in English, if the figurative meaning of the idiom disappears when the idiom is embedded under *segjast*, then we can conclude that *segjast* assigns an independent subject theta-role. The expression *fjandinn er laus* seems to be such a case. In its literal interpretation, it means ‘the devil is loose’, in its figurative reading, it means that “everything goes bananas”. As expected, both readings are possible with a raising verb but only the literal one with a control predicate. Compare (18a) to (18b). Crucially for us, when embedded under *segjast*, only the literal meaning is available (the following examples have been provided by Gunnar Hrafnbjargarson):

- (18) a. Fjandinn virtist vera laus.  
the devil seemed to-be loose  
‘The devil seemed to be loose.’  
‘Everything seemed to go bananas.’  
b. Fjandinn vonaðist til að vera laus.  
the devil hoped PRT to be loose  
‘The devil hoped to be loose.’  
c. Fjandinn sagðist vera laus.  
the devil said-refl to-be loose  
‘The devil said that he was loose.’

This loss of meaning follows straightforwardly if we assume that *segjast* is a control predicate that assigns a theta-role to its subject and non-thematic *fjandinn* ‘the devil’ cannot satisfy it. If this is so, we expect the same situation with expletives (or quasi-arguments). This can be tested with constructions such as *það rignir* ‘it rains’, where the weather predicate takes an expletive (or quasi-argument) as its subject. While the expletive is possible with a raising verb, this is not the case for a control verb and *segjast* under their most natural reading:

- (19) a. Það virtist vera að rigna.  
it seemed to-be to rain  
‘It seemed to be raining.’  
b. \* Það vonaðist til að rigna.  
it hoped PRT to rain  
‘It hoped to rain.’  
c. \* Það sagðist rigna.  
it said-refl to-rain  
‘It said it rained.’

Again, our earlier expectation is borne out. To conclude, the fact that *segjast* cannot take non-thematic subjects suggests that it assigns a theta-role to its subject and thus it behaves like a control predicate.

Finally, it is well known that verbs impose selectional restrictions on their arguments. We have seen two arguments above that *segjast* takes a subject argument. Thus, we expect selectional restrictions on the subject. The way to test for selectional restrictions on the subject is to modify the subject with regard to its features. For instance, if it is true that *segjast* assigns an agentive theta-role, then [-animate] subjects should lead to ungrammaticality. Again, this is borne out:

- (20) a. Vasinn virtist vera að brotna.  
the-vase seemed to-be to break  
'The vase seemed to be breaking.'
- b. \* Vasinn vonaðist til að brotna.  
the-vase hoped PRT to break  
'The vase hoped to break.'
- c. \* Vasinn sagðist brotna.  
the-vase said-refl to-break  
'The vase said it broke.'

Note that the expletive in (19c) and the inanimate subject in (20c) are not independently out because of a verb of saying since the following English sentences involving *be said* are fully grammatical, both with an expletive and an inanimate subject (data are due to Rex Sprouse):

- (21) a. It is said to rain at least once a day in Vancouver  
b. This building is said to have been torn down in the 19<sup>th</sup> century.  
c. His arm is said to have been broken in a skiing accident.

To sum up, considering the co-occurrence of agentive adverbs and *segjast*, we concluded that *segjast* assigns a subject theta-role in the syntax. Furthermore, we argued that that theta-role is assigned to the subject itself. These arguments derived from the *do so*-construction, non-thematic NPs (subject idiom chunks and expletives), and selectional restrictions on the subject. In view of these facts, we conclude that *segjast* is a control-type predicate. Recall from above that Sigurðsson (1989) concluded that middles do not exhibit any sign that they have an agentive subject theta-role. If this is correct, then the name 'reflexive middle' for *segjast* is a misnomer with regard to its semantics and can only be used to group *segjast* with other verbs that have the same morphological ending. In what follows, however, I continue using this term. Next, I discuss the properties of the embedded infinitival clause. We will conclude that unlike its embedding predicate, the embedded clause itself has raising properties.

#### 4.2. Raising Properties of the Embedded Infinitival Clause

There are four pieces of evidence that suggest that *segjast* embeds a raising-type infinitival clause: the infinitival complementizer *að* does not occur, negation is not possible, extraposition and clefting of the infinitival clause are not allowed, and pronominalization of the infinitival clause by *það* 'that' leads to ungrammaticality.

It has been observed that control predicates select for an infinitival clause with the infinitival complementizer *að* while raising verbs take a complement without *að*. Crucially, infinitivals under *segjast* pattern with raising clauses in this respect:

- (22) a. Haraldur virtist lesa bókina.  
Harald seemed to-read the book  
'Harald seemed to read the book.'  
b. Haraldur sagðist lesa bókina.  
Harald said-refl to-read the book  
'Harald said he read the book.'  
c. Haraldur vonaðist til að lesa bókina.  
Harald hoped PRT to read the book  
'Harald hoped to read the book.'

Second, it has traditionally been claimed that the non-finite verb does not raise above negation as in (23a). However, Sigurðsson (1989: 85) has pointed out that prototypical sentence adverbs seem to be infelicitous *inside* raising infinitivals in Icelandic as in (23b):

- (23) a. María virtist (ekki) lesa (\*ekki) bókina.  
Maria seemed not read not the book  
'Maria seemed not to read the book.'  
b. María hafði virst (\*ekki) lesa (\*ekki) bókina.  
Maria has seemed not read not the book

Interestingly, the same situation holds for *segjast*. While negation is possible with a simple tense, this is not the case with periphrastic tenses (Gunnar Hrafnbjargarson points out to me that (24b) is ungrammatical with all auxiliaries).

- (24) a. Þeir sögðust (ekki) vilja (\*ekki) gera það.  
they said-refl not to-want not to-do that  
'They said they did not want to do that'  
b. Þeir munu segjast (\*ekki) vilja (\*ekki) gera það.  
they will say-refl not to-want not to-do that  
'They will say they do not want to do that.'

(Note that two of my four speakers accepted the upper negation in (24b), a fact to which I return.) I will interpret these facts such that in (24a), the negation is in the matrix clause but can take scope over the embedded clause,<sup>5</sup> while in (24b), the negation is forced by the periphrastic tense to be in the embedded clause and results in ungrammaticality (see

<sup>5</sup> Zoëga (1910: 252-3) translates the following Old Icelandic example with negation in the embedded clause:

(i) hann kveðst eigi ríða mundu (Old Icelandic)  
he said-refl not ride would  
'He said he would not ride.'

below for a possible explanation). To complete the picture, the non-finite verb precedes negation in control predicates (Holmberg & Platzack 1995: 117):

- (25) *María lofaði að (\*ekki/\*alltaf) lesa (ekki/alltaf) bókina.*  
 Mary promised to not/always read not/always the-book  
 ‘Mary promised not/always to read the book.’

We have seen that unlike with control constructions, negation is not possible inside raising infinitives. As the same restriction holds for the embedded clause under *segjast*, we conclude that its infinitival clause is of a raising type.

A third piece of evidence can be derived from clefting and extraposition. Andrews (1990: 201) observes that *segjast* behaves like raising predicates in that it does not allow these constructions. *það sem* ‘that which’ introduces the cleft and *það / þess* ‘that(ACC/GEN)’ marks the extraposition of the infinitival clause (his (34)):

- (26) a. \* *Það sem hún segist / virðist er (að) elska Svein.*  
 that which she says-refl / seems is to love Svein  
 ‘What she says / seems is to love Svein.’  
 b. \* *Hún segist / virðist það elska Svein.*  
 she says-refl / seems it love Svein  
 ‘She says / seems to love Svein.’

In contrast, both clefting and extraposition are grammatical with control predicates:

- (27) a. *Það sem hún vonast til er að kyssa Svein.*  
 that which she hopes is to kiss Svein  
 ‘What she hopes for is to kiss Svein.’  
 b. *Hún vonast til þess að kyssa Svein.*  
 she hopes it to kiss Svein  
 ‘She hopes to kiss Svein.’

In view of the contrasts between (26a-b) and (27a-b) and the lack thereof within (26a-b), we conclude that the infinitival clause embedded under *segjast* has raising properties.

Finally, Thráinsson (1979: 349) shows that control infinitivals can be pronominalized by *það* ‘that’ (provided *það* is in the appropriate morphological case). This is not possible with subject-to-object raising infinitival clauses (i.e. infinitivals under ECM-predicates). If we apply this test to subject-to-subject raising infinitivals and the clauses under *segjast*, both become ungrammatical:

- (28) a. \* *Jón virtist það.*  
 Jón seemed that  
 ‘Jón seemed that.’  
 b. \* *Jón sagðist það.*  
 Jón said-refl that  
 ‘Jón said (he) that.’

- c. Jón vonaðist til þess.  
Jón hoped PRT that  
'Jón hoped that.'

Considering the distribution of the judgments, the impossibility of pronominalization of the infinitival under *segjast* is then another piece of evidence that *segjast* embeds a raising-type infinitival clause.

To sum up this subsection, we have seen four arguments that the embedded clause under *segjast* behaves like a raising infinitival. This evidence was derived from the absence of the infinitival complementizer *að*, the impossibility of negation inside and extraposition and clefting of the infinitival clause, and the resulting ungrammaticality if the infinitival clause is pronominalized by *það* 'that'.<sup>6</sup> This conclusion contrasts with the results of the previous subsection, where we demonstrated that *segjast* itself has control properties. In view of the traditional assumption that control predicates take only CP-infinitivals as their complement, this might look like a paradox. Diverging from this tradition, I will suggest in what follows that *segjast* is a control predicate that takes a raising-type infinitival clause as its complement. Put differently, *segjast* embeds a non-CP complement as schematically shown in (29) (SUBJ stands for the projection of a subject argument).

- (29) SUBJ *segjast* [<sub>XP</sub> CLAUSE ] (XP ≠ CP)

Note that this is in line with, for instance, Sigurðsson (1989), Thráinsson (1979, 1984, 1986, 1993), and, especially, Wurmbrand (2001, for German), who argue that infinitival complements may differ in size. Above, we demonstrated that the matrix subject in the nominative has a theta-role assigned by *segjast*. In the next section, I will show the same for the matrix subject in the dative.

### 4.3. Oblique Matrix Subjects Bear a Subject Theta-role

In section 3, we documented that the morphological case on the matrix subject is subject to variation, repeating (12c-d) here for convenience:

- (30) a. Drengurinn segist ganga vel við vinnuna  
the-boy(NOM) says-self to-go well at work  
'The boy<sub>i</sub> says he<sub>i</sub> is doing well at work.'  
b. Drengnum segist ganga vel við vinnuna  
the-boy(DAT) says-self to-go well at work

Recall that it was reported that there are speakers who find (30a) and/or (30b) grammatical, and some who accept neither. Note, however, that to the extent that I am aware of it, this fluctuation occurs in predictable ways, that is, the case realization on the

<sup>6</sup> One could also imagine to derive another argument for the different types of infinitival clauses from Stylistic Inversion, which describes the restricted possibility of fronting some elements before the (finite) verb (Maling 1980/1990, Jónsson 1991, Hrafnbjargarson 2003, 2004). However, Gunnar Hrafnbjargarson points out to me that Stylistic Fronting is not possible in embedded non-finite clauses.

matrix subject can only be that called for by the embedded verb or that assigned in the matrix subject position. In order to account for these facts, we might make the suggestion that case assignment is somehow “optional” in that some speakers assign the dative in the embedded case but others do not. If the embedded subject is then moved to the matrix clause, the former speakers exhibit the dative on their subjects in these sentences but the latter the nominative. I believe, however, that a more interesting proposal would involve another strategy. In fact, in a restricted framework such as the Minimalist Program (Chomsky 1995), such optionality is not allowed and we need to find a different explanation. In order to prevent unexpected case realizations such as the genitive or accusative in (30b), I assume that the embedded predicate always assigns its dative case. Now, if the nominative is assigned to the matrix subject, then I assume that no movement from the embedded clause has taken place and another argument was merged as the subject in the matrix clause. If the dative is on the matrix subject, then the embedded subject has raised to the matrix clause. In section 4.1, we saw evidence that *segjast* assigns a subject theta-role. Assuming the Theta Criterion (Chomsky 1981, 1986), which bans movement into theta positions, the nominative case marking on the matrix subject in (30a) is expected, while the dative case on the matrix subject in (30b) is not. The theoretically interesting question is whether the latter is a case of true raising (as suggested by one reviewer) or whether (30b) presents a case of moving an argument into the theta position of the matrix predicate. In order to tease both possibilities apart, two reviewers suggested that the example with inherent case on the matrix subject be tested for agentivity.

Of my four consulted informants, only one consistently allowed *segjast* with an embedded infinitive that assigns an oblique case to its subject argument. Importantly, this informant clearly preferred the dative over the nominative on the matrix subject:

- (31) a. \* Drengurinn segist leiðast við vinnuna  
           the-boy(NOM) says-self to-be-bored at work  
           ‘The boy<sub>i</sub> says he<sub>i</sub> is bored at work.’  
       b. Drengnum segist leiðast við vinnuna  
           the-boy(DAT) says-self to-be-bored at work

Crucially, this speaker found the agentive adverb to be grammatical with the dative subject. Moreover, she judged it to be on the same level of grammaticality as the example with an embedded nominative subject, repeating (14b) here as (32b):

- (32) a. Drengnum segist viljandi leiðast við vinnuna.  
           the-boy(DAT) says-self intentionally to-be-bored at work  
           ‘The boy intentionally says that he is bored at work.’  
       b. Jón segist viljandi vera ríkur.  
           Jón says-self intentionally to-be rich  
           ‘Jón intentionally says that he is rich.’



Recalling the discussion from above, we conclude that *segjast* with a dative matrix subject in (32a) assigns a subject theta-role in the syntax.<sup>7</sup> In order to test, whether the dative subject itself receives the theta-role, we need to conduct the other tests discussed in section 4.1, involving the *do so*-construction, non-thematic NPs, and selectional restrictions on the subject. We will see that there is (some) evidence that the dative subject gets a theta-role from *segjast*. To the extent that this is true, these data argue for the possibility of movement into theta positions.

Concerning the first test, for some unclear reason, this informant did not accept the *do so*-construction, neither with a nominative subject in the infinitival nor with an oblique one. Second, I have not been able to find inherently case-marked non-thematic NPs, that is, an idiom with an animate oblique case-marked subject or an oblique case-marked expletive. Finally, in order to test for the selectional restrictions on the dative subject of *segjast*, we need to find a verb that takes an inanimate oblique subject, but does not allow an animate one. If *segjast* has the same selectional requirements on the dative subject as it did on the nominative subject above, then we can conclude that it does assign a subject theta-role to the dative matrix subject. Such a predicate is provided in Sigurðsson (1989: 200). My informant observes that the verb *hvolfa* ‘to turn upside down’ cannot be used with a person (here marked with two question marks):

- (33) a. Skipinu hvolfdi.  
the-ship(DAT) capsized  
‘The ship capsized.’  
b. ?? Haraldi hvolfdi.  
Harald(DAT) capsized  
‘Harald capsized.’

If *hvolfa*, which takes an inanimate subject, is embedded under *segjast*, then the sentence becomes ungrammatical. Interestingly, my informant still clearly preferred the subject to be in the dative case:

- (34) a. \* Skipið segist hvolfa  
the-ship(NOM) says-self to-capsize  
‘The ship says it capsizes.’  
b. ?? Skipinu segist hvolfa  
the-ship(DAT) says-self to-capsize

Crucially then, *segjast* imposes selectional restrictions on its oblique case-marked subject. This is expected if *segjast* does not change its argument structure, depending on the case marking of its subject, and assigns a theta-role to its subject in each case. In

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<sup>7</sup> Note that this is a conservative view. Stroik (1999) argues that the subject theta-role with (true) middles is not only projected in the syntax but actually assigned to an argument. The relevant difference between middles and passives is that the former is a stative predicate while the latter is eventive. According to him, agentive adverbs such as *viljandi* test for both agentivity and eventiveness (hence the difference between the middle and the passive). If we follow Stroik, then the possibility of *viljandi* in (32a) already suggests that *segjast* assigns a theta-role to its subject. However, as there is still debate over the issue, I take the more conservative view.

other words, if we assume that case assignment occurs in a constrained way,<sup>8</sup> then the data above argue for the possibility of moving an argument into a theta position.<sup>9</sup>

Above, I argued that reflexive middle predicates such as *segjast* are control predicates that embedded raising-type infinitival clauses. In what follows, I propose that the size of the raising-type infinitival may vary for speakers. Depending on how the infinitival clause is analyzed with regard to its size, speakers treat the reflexive middle constructions as involving true control predicates or as control predicates with raising properties (in traditional terms).

## 5. The Proposal

The literature of Generative Grammar has devoted a lot of attention to the differences between Raising and Control Predicates (for an excellent survey, see Haegeman 1994). Besides different case realizations on the matrix subject, as documented in section 2, another difference between the two types of predicates concerns the assignment of theta-roles. As already discussed in section 4.1, control verbs assign a subject theta-role, raising verbs do not. Traditional accounts such as Chomsky (1981, 1986) capture this difference by (pure) merge of a subject argument in the matrix clause (control) or by movement of an embedded argument into the subject position of the matrix clause (raising). However, already Jackendoff (1972) pointed out that there is no strict one-to-one match between theta-roles and arguments in that some arguments may have more than one theta-role. Some scholars have attempted to account for this by suggesting that arguments may move into theta-role positions under certain conditions. In what follows I review one of these proposals (Bošković 1994). Its virtue is that it is more restricted than other analyses (e.g. Hornstein 1999, see footnote 10) and it makes a direct connection between the possibility of movement into theta-positions and the size of the infinitival clause. I will employ this proposal to account for the variation discussed above. Section

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<sup>8</sup> There is a caveat here. When the sentence was tested with an animate subject, my informant stated that the example became worse but that the nominative on the matrix subject was slightly better than the dative:

- (i) a. ?\* Haraldur segist hvolfa  
Harald(NOM) says-self to-capsize  
'Harald says he capsizes.'
- b. \* Haraldi segist hvolfa  
Harald(DAT) says-self to-capsize

What is surprising with regard to the discussion in the text is that the subject in the nominative is slightly better than the one in the dative. Although I have no good explanation for this, note that in this case, the subject *Harald* is subject to contradictory selectional requirements: while the embedded predicate selects an inanimate subject, the matrix verb takes an animate one. It might be that due to this conflict, the (default?) nominative "wins out". Clearly, more informant work is necessary here.

<sup>9</sup> Although, I have no clear evidence at this point, there might also be a group of speakers who allow a dative case on the matrix subject but do not assign a theta-role to it (as suggested by one reviewer). For these speakers, *segjast* would be a true raising verb. In order to account for the "absorption" of the matrix subject theta-role, we could follow Marantz (1984: 163-165), who argues that the reflexive ending –*st* absorbs the subject theta-role lexically, making the reflexive middle essentially into a raising predicate. (This would be in keeping with discussions on Romance reflexive clitics (Grimshaw 1990: 152-162, Pesetsky 1995: 102-109)).

5.2 discusses the inner structure of the raising-type clause under *segjast* where I suggest that *segjast* may take different complements, section 5.3 provides the concrete derivations.

### 5.1. Control Predicates Involving Movement into their Theta-role Position

Bošković (1994) demonstrates that movement into theta-role positions must be allowed. He argues that movement from a theta-position (T) into a theta-position (T) is allowed as long as that movement does not pass through a non-theta-position (T'), as schematically illustrated in (35):

- (35) a.        T'        T        T  
               b. \*    T'        T        T'        T

He rules out the representation in (35b) by Improper Movement, which he derives from the 'Make the Fewest Steps Condition' (p. 258). One of his arguments for movement into theta-positions comes from Spanish restructuring+psych verb constructions (his (29)):

- (36) a.        Marta le quiere gustar    a Juan  
                   Marta cl. wants to-please to Juan  
                   'Marta wants for Juan to like her.'  
               b.        A Juan le quiere gustar Marta  
                   'A Juan wants to like Marta.'

He follows Beletti & Rizzi (1988) who argue that *a* is an overt instantiation of the inherent case that the psych verb *gustar* assigns to the noun phrase bearing its experiencer theta-role. In order to derive the different interpretation in (36b), he gives the following derivation (his (36)):

- (37)    A Juan<sub>i</sub> le quiere<sub>j</sub> [VP t<sub>i</sub> t<sub>j</sub> [VP gustar Marta t<sub>i</sub> ]]

The noun phrase *Juan* gets its experiencer theta-role from *gustar*, receiving its inherent case (marked by *a*) in the process. It then moves to the matrix Spec,VP where it picks up its subject theta-role. Movements of *quiere* and *a Juan* to IP follow. Crucially, an embedded IP or CP is not projected in (37). If an embedded IP is projected as in (38), movement proceeds through a non-theta-role position (to check the EPP), leading to Improper Movement. This accounts for the ungrammaticality of (38) (his (18a)):

- (38) \* John<sub>i</sub> [ t<sub>i</sub> BELIEVES/remarked [ t<sub>i</sub> to [ t<sub>i</sub> like Mary ]]]

(For more details, see Bošković (1994).)<sup>10</sup> To sum up, the crucial idea of Bošković's proposal is that if only a VP is projected, movement into a theta-role position of the matrix clause is allowed. However, if an intervening non-theta phrase is projected, then movement of the embedded argument into such a position is blocked by Improper Movement. This is the idea that I would like to extend to Icelandic. In what follows, I will propose that the variation discussed above can be explained if we assume that speakers vary with regard to the size of the embedded infinitival that *segjast* selects. The basic idea is that if *segjast* selects a VP, then movement into the matrix clause subject position is allowed and the dative case on the matrix subject is explained. On the other hand, if *segjast* selects a bigger phrase containing the VP, then there will be an intervening non-theta phrase. Consequently, movement to the matrix subject theta-position is not allowed and another argument has to be (pure) merged in the matrix clause to satisfy the subject theta-role of *segjast*. It will then get the nominative case. Before we turn to the details, here is a summary of the main idea:

- (39) a. *No Movement into Theta-Role Position*  
       - non-theta XP at the root of the infinitive  
       - embedded null argument PRO  
       - another argument is merged in matrix clause  
       - consequently, matrix subject has nominative case
- b. *Movement into Theta-Role Positions*  
       - VP-infinitives  
       - trace (instead of PRO)  
       - consequently, matrix subject has inherent case

Consider the structure of the infinitival clause under *segjast* in more detail.

## 5.2. The Inner Structure of the Raising-type Infinitival Clause

Thráinsson (1993) makes the claim that infinitival complements in Icelandic have a more limited set of functional projections than finite complements do. Below, different clauses with *að* are provided: the (a)-example in (40) contains a finite complement, in (40b), we

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<sup>10</sup> Hornstein (1999) proposes another, somewhat more general approach to movement into theta-positions. Unlike Bošković (1994), he not only allows movement schematized in (ia) but also the one in (ib):

- (i) a.       T'       T       T  
       b.       T'       T       T'       T

The representation in (ib) is exemplified by his (19b), somewhat simplified here:

- (ii)       John<sub>i</sub> [ t<sub>i</sub> hopes [ t<sub>i</sub> to [ t<sub>i</sub> leave ] ] ]

Crucially, Hornstein (1999) allows movement through a non-theta-position. Consequently, he cannot rule out (38) by recourse to Improper Movement (for a series of critiques of this kind of proposal and replies in return, see e.g. Culicover & Jackendoff 2001, Boeckx & Hornstein 2003, Landau 2003).

find a control complement, and (40c) shows a modal complement. Now, if we assume that the control infinitival in (40b) (and the modal infinitive in (40c)) contains a null subject, then there does not seem to be an obvious difference between (40a) on the one hand and (40b) and (40c) on the other (his (13)):

- (40) a. Hann segir [ að hún lesi bækur ]  
           he says that she reads books
- b. Hann lofar [ að lesa bækur ]  
           he promises to read books
- c. Hann verður [ að lesa bækur ]  
           he must (to) read books

However, Thráinsson argues that *að* is in different positions in different types of clauses. That is, not only are finite clauses different from infinite ones, infinitival clauses are also different from one another. He assigns the embedded clauses of the sentences in (40) the structures in (41), respectively (his (14) where I left out AgroP but added negation, which is adjoined to VP; SUBJ stands for the subject of modals, which raise):<sup>11</sup>

(41)	C	Spec,AgroP	Agro	Spec,TP	T	neg	Spec,VP	V ...
a.	<b>að</b>	<i>hún<sub>i</sub></i>	<i>lesi<sub>j</sub></i>	<i>t<sub>i</sub></i>	<i>t<sub>j</sub></i>		<i>t<sub>i</sub></i>	<i>t<sub>j</sub> ...</i>
b.			<b>að</b>	<i>PRO<sub>i</sub></i>	<i>lesa<sub>j</sub></i>		<i>t<sub>i</sub></i>	<i>t<sub>j</sub> ...</i>
c.					<b>að</b>		SUBJ	<i>lesa ...</i>

In (41), *að* is in C in finite clauses, in Agro in control complements, and in T in modal complements. Without repeating the details here, these different structures are motivated by the possibility of topicalization in embedded finite clauses (but not in control and modal ones) and the grammaticality of Object Shift in finite clauses and control complements (but not in modal ones). This tripartite distribution of the facts is captured by the three different sizes of the embedded clauses. Thráinsson does not discuss the structure of raising or ECM verbs. In what follows, I would like to suggest that the structure under the negation is more complex. In particular, assuming that negation is in a fixed position, there is some evidence that *að* can also follow the negation in control structures. If we assume that negation is actually adjoined to the phrase this lower *að* projects, then the absence of both negation and *að* in raising infinitivals follows immediately.

Gunnar Hrafnbjargarson points out to me that both negation and other sentential adverbs can also precede *að* in the control infinitive. Crucially, those cases do not involve any kind of (Stylistic) Fronting:<sup>12</sup>

<sup>11</sup> I will not go into an explanation as to why the non-finite verb may move (for different views, see, for instance, Bobaljik & Thráinsson 1998 and Johnson & Vikner 1998).

<sup>12</sup> As above, we could assume that the adverb and the negation are in the matrix clause but take scope over the embedded clause. However, Gunnar Hrafnbjargarson observes further that split infinitives are also possible (although they may not be entirely perfect). This means that *að* in control infinitives

- (42) Ég lofaði alltaf / ekki að lesa bækur  
 I promised always / not to read books  
 ‘I promised {not} to read books {all the time}.’

If these observations are correct, then it seems as if *að* in control predicates can vary with regard to its position. In other words, it can be in Agrs, T (cf. footnote 12) and in a lower position with regard to negation. We conclude then that the VP structure in (41) must be more complex such that *að* is also allowed below negation (a similar conclusion for English is reached by Travis 1994, 2000). I assume that *að* projects its own phrase, which I call  $\alpha$ P here. I assume further that negation is adjoined to  $\alpha$ P (or higher). Recall from above that two of the prominent features of raising infinitivals were that they do not allow the occurrence of *að* and negation. If we assume that raising predicates do not select  $\alpha$ P but the phrase below it, both facts follow immediately. Furthermore, if we assume that this lower phrase does not allow clefting, extraposition, and pronominalization (for some reason), then the other two raising properties of the embedded non-finite clause of *segjast* are also accounted for.<sup>13</sup> To sum up so far, I have suggested that *segjast* selects for a phrase that is below the phrasal adjunction site of negation and other sentential adverbs.

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would presumably be in T (and not always in Agrs). This then opens the possibility suggested here that *að* is not in a fixed position in control infinitives and can also follow negation as assumed in (42). Furthermore, there might be another argument that the size of the infinitival clause of control predicates may vary.

Thráinsson (1979: pp. 297) observes that adjectival predicates in the embedded clause may “optionally” agree with the controller in the matrix or the understood subject (PRO) in the embedded clause (for interesting differences between adjectival and NP predicates, see Maling & Sprouse 1995: pp. 172). This holds for both subject and object control structures (examples from Sigurðsson 2002: 712):

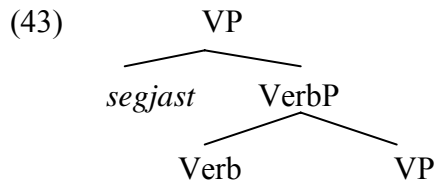
- (i) a. **Henni** fannst gaman [ að PRO verða **fyrst** / \*fyrsta / **fyrstri** ]  
 she(DAT) found fun to PRO(NOM) be first(NOM/\*ACC/DAT)  
 ‘She found it fun to be number one.’  
 b. Við skipuðum **henni** [ að PRO verða **fyrst** / \*fyrsta / **fyrstri** ]  
 we ordered she(DAT) to PRO(NOM) be first(NOM/\*ACC/DAT)  
 ‘We ordered her to be number one.’

One of the guiding principles of this investigation has been the idea that true “optionality” is not possible in a restricted framework. If this is so, then one might suggest that the infinitival clauses in (ia-b) may vary in size to account for the different agreement possibility (without going into detail here). (If it turns out that (42) does not show that *að* can follow negation, then I still assume that the VP is more complex (see below). In that case, the phrase to which negation is adjoined is not projected but only the phrases below it (cf. Sigurðsson 1989: 87, Johnson & Vikner 1994: 71).)

<sup>13</sup> A remark is in order here. It is not clear to me if the impossibility of clefting and extraposition as well as that of pronominalization of the infinitival clause can be reduced to the size of the infinitival itself. Landau (2003: 494 fn. 25) observes that both subject and object control verbs differ with regard to *pre*-posing the complement. He suggests that that may have to do with the different case assigning properties of the matrix verb. (However, he does not consider the possibility that infinitival clauses may vary in size.) The same may be suggested for pronominalization such that pronominalized raising infinitivals cannot “check” the case of the matrix predicate. I put these issues aside here.

### 5.3. The Concrete Derivations

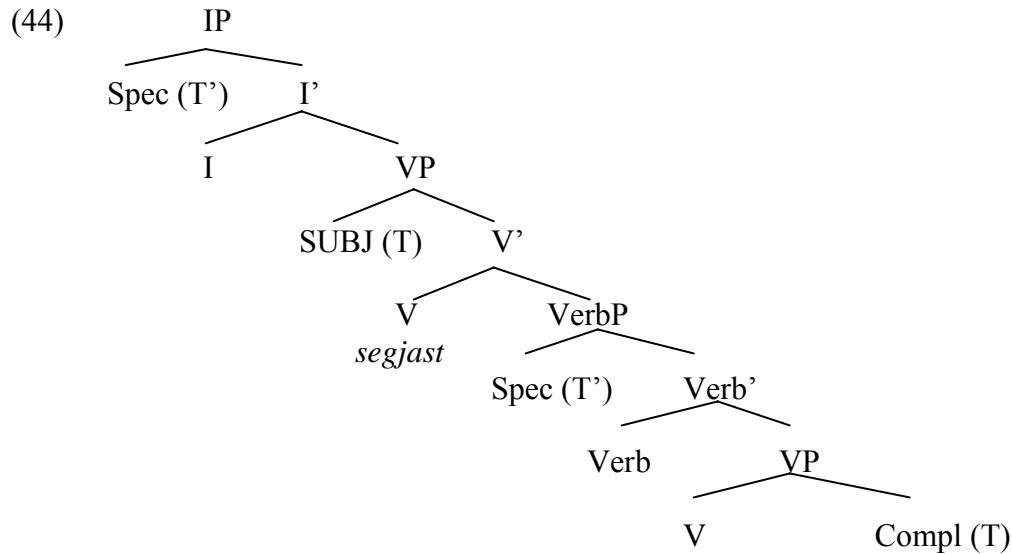
Returning to the main line of argument, I mentioned in section 4.2 that two of my four informants accepted the negation inside the raising-type infinitival.<sup>14</sup> I interpret this fact such that *segjast* can embed different types of infinitives. I would like to suggest next that *segjast* may select three different kinds of phrases. For obvious reasons, the embedded clause must at least contain a VP. Now, Collins & Thráinsson (1996) argue that the VP-internal structure in Icelandic is actually more complex, giving evidence from particle constructions. In the spirit of their proposal, I propose a more fine-grained verb phrase, making the distinction between a theta VP and non-theta VPs. The former contains the main predicate, which assigns its theta roles there; the latter takes the theta VP as its complement and assigns abstract case to PRO. To give it a name, I will simply call the non-theta VP(s) VerbP. We arrive then at the following structure:



(The third type of clause, which allows the presence of negation is irrelevant for the discussion to come as the one informant, who accepted the dative case consistently, did not allow negation.) Given these preliminaries, consider in more detail the account for the variation in morphological case marking on the matrix subject.

I would like to suggest that due to the infrequency of the construction, reflexive middle predicates are treated by some speakers as taking VerbP-infinitival clauses and by others as VP-infinitivals (perhaps as a reflection of the economy on phrasal representation). Expanding the structure in (43), I will assume the following general structure (T' stands for non-theta position, T for a theta position, SUBJ for the subject theta-role position):

<sup>14</sup> In view of the discussion in (42), I have no explanation of why negation is possible for these speakers despite the absence of *að*.



Some remarks are in order here. As noted by a number of authors (e.g. Andrews 1976/1990: 176, Sigurðsson 1989: pp. 198), all quirky subjects are non-agentive. They are typically treated as “ergative” subjects, that is, they are merged in VP (and not  $\nu$ P).<sup>15</sup> Conversely, Sigurðsson (1989: 215, 2002: 692) observes that agentive subjects are always in the nominative (in simple sentences). As the structures under discussion all involve quirky subjects, I assume that a  $\nu$ P is not projected. In other words, VerbP does not stand for  $\nu$ P. Recalling Bošković’s proposal from above, the speakers who analyze these constructions as non-theta infinitives (= VerbP) do not allow movement of an argument from the embedded clause into the matrix subject theta-position whereas the speakers who analyze them as VP-infinitives, do allow such movement. The question then arises what forces that movement in the latter case. Above, I assumed that Spec,VerbP assigns abstract (null) case. Now, if the infinitival is a VerbP, then the embedded subject PRO can check its null case there.<sup>16</sup> With an VP-infinitival,

<sup>15</sup> I put the ergative subject in the complement position in (44). Note that movement to the embedded Spec,VP is presumably not allowed as it is too short (Bošković 1994: 261; cf. Abels 2003).

<sup>16</sup> Chomsky & Lasnik (1993) argue that null case is assigned in Spec,IP of infinitival clauses. Here, I diverge from these authors, assuming that there must (also) be a lower case position for PRO. Furthermore, Icelandic presents the complication that it has morphological case that may differ from its abstract Case. This complication also holds for PRO: in order to account for certain agreement facts, Andrews (1976/1990: 175), Sigurðsson (1989: 188-190, 1991, 2002), and Thráinsson (1979: pp. 282) argue that PRO must have (inherent) dative case (example from Freidin & Sprouse 1991: fn 22):

- (i) a. Barninu batnaði veikin einu.  
the-child(DAT) recovered-from the-disease alone(DAT)  
‘The child recovered from the disease alone.’  
b. Barnið vonast til að [PRO] batna veikin einu.  
the-child(NOM) hopes [prep] PRO(DAT) to-recover-from the-disease alone(DAT)  
‘The child hopes to recover from the disease alone.’

I will abstract away from these complications here (but see the Double-case approach by Beletti 1988, which is critiqued in Sigurðsson 1992.) For some discussion of PRO in the different Scandinavian languages, see Johnson & Vikner 1998.



Spec,VerbP is not projected and case cannot be checked in the embedded clause. In order to check case, the embedded argument must move to the matrix clause. Thus, with a VP-infinitival, movement is not only allowed but forced for case reasons. These assumptions allow an analysis without assuming optionality. To the extent that this is correct, the embedded argument requires case, be it realized as PRO in the infinitival or as an overt noun phrase in the matrix clause. With this in mind, consider the following two derivations.

If speakers analyze *segjast* as taking VerbP as its infinitival complement, then the embedded argument moves to Spec,VerbP to check its abstract (null) case there. Note that if the subject were to move on to the matrix Spec,VP, then this would present a case of Improper Movement from a non-theta position (Spec,VerbP) to a theta-position (Spec,VP), which is illicit (cf. (44)). Now, in order to satisfy the matrix subject theta-role, another argument has to be (pure) merged in Spec,VP. After it receives a theta-role, it moves to Spec,IP to check its nominative case. The example in (45a) has the derivation in (45b):

- (45) a. Drengurinn segist ganga vel við vinnuna  
           the-boy(NOM) says-self to-go well at work  
           ‘The boy<sub>i</sub> says he<sub>i</sub> is doing well at work.’  
       b. [<sub>IP</sub> Drengurinn<sub>k</sub> [<sub>VP</sub> t<sub>k</sub> segist [<sub>VerbP</sub> PRO<sub>i</sub> Verb [<sub>VP</sub> t<sub>i</sub> ganga vel við vinnuna ]]]]

In contrast, if speakers treat *segjast* as selecting VP as its complement, then there is no second phrasal level in the infinitival clause. Furthermore, there is no location for the embedded argument to check case in the embedded clause and it has to move higher. Under Shortest Move, it moves to Spec,VP and is assigned a second theta-role. Finally, it moves to Spec,IP to check its abstract case (or the EPP). The sentence in (46a) has the derivation in (46b):

- (46) a. Drengnum segist ganga vel við vinnuna  
           the-boy(DAT) says-self to-go well at work  
       b. [<sub>IP</sub> Drengnum<sub>i</sub> [<sub>VP</sub> t<sub>i</sub> segist [<sub>VP</sub> t<sub>i</sub> ganga vel við vinnuna ]]]]

Importantly, this derivation presents a case of movement into a theta-position. Finally, I turn to some loose ends and implications.

First, recall that while all speakers allow infinitival clauses with non-inherent case-assigning predicates, some find infinitivals ungrammatical if their embedded predicate assigns an oblique case. Although I have no clear idea at this point how to derive this, it might have to do with the presence or absence of *vP* in the embedded clause, that is, with the assignment of an agentive theta-role. If we were to assume that all these cases involve movement to the matrix clause, then the grammar of some speakers might be more constrained in that these speakers allow only movement from an agentive to an agentive theta-position, while the grammar of others also allows movement from a non-agentive to an agentive theta-position.<sup>17</sup> Second, recall that with the inherent case on

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<sup>17</sup> Thráinsson (1986: 263 fn. 22) points out that “[s]ome speakers find it difficult to accept PRO-subject (or Equi-type control) with verbs that require non-nominative subjects...” In section 6.4, we will see that typical control predicates also show some variation but less substantive. Crucially, all the speakers

the matrix subject, the reported judgments were much clearer. VP-infinitives involve less structure than VerbP-infinitives. I tentatively suggest then that less structure entails fewer intervening factors and thus clearer judgments. Third, Hornstein (1999) reduces control structures to raising constructions, the sole difference being the different theta-role assigning properties of the two matrix predicates. Note that I have given evidence that *segjast* assigns a theta-role to both a nominative and a dative subject. Accounting for this variation involving the same theta-role assignments in both cases then poses another challenge to Hornstein's theory, as it stands (cf. footnote 10). Fourth, Wurmbrand (2001) distinguishes four types of predicates that select for different infinitival complements (for a very handy summary, see page 309): (i) lexical restructuring verbs take a VP, (ii) functional restructuring verbs behave similar to auxiliaries and take an infinitive whose predicate assigns the theta-role to the "matrix" subject, (iii) reduced non-restructuring verbs select for either  $\nu$ P or TP, and (iv) clausal non-restructuring verbs take CP complements. We have seen that *segjast* assigns a subject theta-role to both nominative and dative subjects and as such, it cannot be a functional restructuring predicate (in all cases). Furthermore, we have seen that *segjast* does not take a complement containing *að*. In view of the discussion of the distribution of Icelandic *að* and negation in section 5.2, we concluded that *segjast* selects the phrase that is below the phrasal adjunction site of the negation (recall, however, that two speakers allowed negation despite the absence of *að*). We thus concluded that *segjast* does not take a CP or TP in the cases under discussion. Furthermore, a  $\nu$ P was argued not be projected as quirky subjects are "ergative" in nature. These points suggest that *segjast* is not a reduced or clausal non-restructuring predicate in these cases either. The only remaining candidate is a lexical restructuring predicate. Interestingly, *segjast* is similar to lexical restructuring predicates in that it does not allow negation (for the relevant speaker) and extraposition is ungrammatical (for Wurmbrand, it is "??" but is predicted to get worse the smaller the embedded infinitival, p. 294). However, there seem to be two apparent differences: on the one hand, in order to account for the variation, we argued for the presence of PRO (which lexical restructuring predicates do not have in their infinitival), on the other hand, structural case can be assigned to the object as in (48) below (which lexical restructuring predicates do not assign within their infinitival). In order to solve these apparent problems for Wurmbrand's classification, we could say that in the derivation involving PRO, *segjast* is not a lexical restructuring verb but perhaps a reduced non-restructuring predicate. Note that none of my informants accepted examples with a nominative case on the matrix subject with infinitivals assigning oblique case. It is thus not clear what the actual situation with PRO is, that is, if it allows negation, etc. However, if we were to classify *segjast* with a dative subject as a lexical control verb, then we would have to allow for the presence of an (ergative) subject in and its subsequent movement from the embedded clause, contra to Wurmbrand's argumentation. Perhaps we could appeal here to the special nature of quirky subjects in Icelandic. As for checking accusative case, we could assume that objects move to the matrix clause covertly. To sum up then, a clear

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there accepted infinitives with oblique case marking predicates. This means that all informants finding (12a-d) to be ungrammatical judged the control predicates in section 6.4 as fine. In other words, we cannot reduce the ungrammaticality of (12a-d) to an independent reason (i.e. Thráinsson's speakers who did not accept embedded predicates assigning quirky case). Consequently, the ungrammaticality of sentences such as (12a-d) needs to be accounted for by the analysis.

classification of *segjast* within Wurmbrand's system is not straightforward at this point. Without further informant work, I will leave the matter at this. (Note that these remarks have to be taken with a grain of salt as Wurmbrand explicitly states that her phrasal categories are just labels.) Finally, note that *segjast* is formed by adding the reflexive ending *–st* to *segja*. Above, we have argued that the embedded dative subject may move over the matrix verb and thus *–st*. Now, Rizzi (1986) provides evidence from raising contexts that NPs may not move over the reflexive clitic *si* in Italian. On the face of it, the derivation in (46b) then instantiates just this case:

- (47) a.         $\text{drengnum}_i \text{ segi} + \mathbf{st}_i \text{ t}_i$   
           b. \*      $[\text{NP}_i \mathbf{si}_i \text{ t}_i]$

To reconcile (47a) with (47b), we need to assume that reflexivization by *–st* is a lexical phenomenon such that *–st* becomes part of the (now) complex word *segjast*, which makes *–st* inaccessible to syntactic operations.

## 6. Further Issues

### 6.1. Alternative Analyses

There are (at least) two more competing analyses. One anonymous reviewer suggests that one could imagine a derivation where *segja* 'say / tell' takes an external argument and a direct argument (in addition to a control infinitive). In this scenario, absorption of the subject theta-role by *–st* would then promote the direct object, and since the direct object is not inherently case-marked, it would appear with the nominative case. In other words, what would be raising to the matrix subject position would not be the embedded subject but the matrix object. There is reason to doubt that such a derivation exists.

To the extent that I have been able to establish, *segja* always takes a dative matrix object, which is retained under passivization:

- (48) a.         $\text{Sigga sagði Harald} \quad \text{að elska Svein.}$   
                   Sigga said Harald(DAT) to love Svein(ACC)  
                   'Sigga told Harald to love Svein.'  
           b.         $\text{Haraldi} \quad \text{var sagt að elska Svein}$   
                   Harald(DAT) was told to love Svein(ACC)

Second, note that in each case, the infinitival marker *að* is present. If the reviewer is right, then the addition of the *–st* ending leads to a change in case marking of the object by the verb (from inherent to structural case) and the infinitival marker gets "absorbed" in that process. Interestingly, in middles with a passive interpretation, *–st* may also absorb inherent case, in contrast to periphrastic passives (Sigurðsson 1989: 269 ex. (15)):

- (49) a. Ég týndi úrinu.  
I lost the-watch(DAT)  
'I lost the watch.'
- b. Úrinu var týnt.  
the-watch(DAT) was lost (by someone)  
'The watch was lost.'
- c. Úrið týndist.  
the-watch(NOM) got-lost  
'The watch got lost.'

Note that in addition to the “absorption” of the inherent case in (49c), the subject theta role gets also absorbed. Thus, the process suggested by the reviewer has some independent evidence from true middle predicates (Sigurðsson 1989: 243). Now, if we assume that absorption of inherent case and that of the subject theta-role go hand in hand, then this lexical rule is incompatible with the presence of the subject theta-role of *segjast* as discussed in section 4.1 (but cf. footnote 9).

Another reviewer points out that *segjast* is similar to some aspectual predicates such as *begin*, which are ambiguous with regard to their control and raising properties. I agree with the reviewer that *segjast* seems to be ambiguous. However, there are some important differences. Besides the presence of the infinitival complementizer, *byrja* ‘begin’ allows a non-thematic NP:

- (50) a. Það byrjaði að rigna.  
it began to rain
- b. \* Það sagðist rigna.  
it said-refl to-rain  
'It said it rained.'

In view of these differences, I conclude here that these cases should not be collapsed.

## 6.2. Different Preferences for Inherent Dative and Accusative Case

Andrews (1990: 205) notes that, besides the data under investigation, there is a more general tendency that the dative is more frequently retained than the accusative. On a more speculative note, there are (at least) two ways to account for this phenomenon, each making different and thus interesting predictions.

Studying old Germanic relative clauses, Harbert (1989, 1992) discusses the phenomenon of ‘case attraction’, a term originally coined by Jacob Grimm. Gothic is a language in which the relative pronoun in a free relative clause is always in the most oblique case assigned either by the matrix clause or the relative clause. More concretely, in (51a), the accusative of the matrix clause ‘overrides’ the nominative of the relative clause whereas in (51b) the accusative of the relative clause ‘overrides’ the nominative of the matrix clause:

- (51) a. jah þo-ei                      ist us    Laudeikaion jus ussiggwaid  
and which(ACC)-compl is from Laodicea    you read  
'And read (the one), which comes from Laodicea'  
(Col 4:16, as cited in Harbert 1989: 146 ex. (23a))
- b. þan-ei                      frijos    siuks ist  
whom(ACC)-compl you-love sick is  
'(The one) whom you love is sick'  
(John 11:3, as cited in Harbert 1989: 146 ex. (23b))

To explain this phenomenon, Harbert (1989: 146, 1992: 112) invokes the notion of a 'case hierarchy' (with the most oblique case on the right):

- (52) NOM > ACC > DAT > GEN

Returning to the Icelandic data, it follows from the case hierarchy in (52) that the matrix nominative case is more likely to be "overridden" by a dative than by an accusative case. This makes the prediction that genitives should have an even stronger tendency to appear on matrix subjects. Note that, as formulated, this hierarchy is very strict and, intuitively, may not be the right way to handle tendencies.<sup>18</sup>

There is a second way to explain the different case preferences. The difference between an inherent dative and an inherent accusative is that the former is a clear-cut lexical case whereas the latter is morphologically the same as the structural accusative. In that way the latter is ambiguous. The lower number of accusatives may be due to some "misanalysis" in these complex sentences such that speakers take the inherent accusative to be a "potential" structural (object) case at a later point in the derivation – perhaps similar to passive structures where the "underlying" object gets nominative case. Notice that unlike the approach above, this type of explanation makes no difference between the likelihood in the occurrence of the dative and that of the genitive as both are unambiguously inherent. As I have no data involving inherent genitives vis-à-vis datives, I will leave the final choice between these two potential accounts open here (see also Andrews 1982: pp. 452, 469 for some comments).<sup>19</sup>

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<sup>18</sup> Pittner (1995: fn. 20) points out that Harbert's case hierarchy receives independent motivation from paradigms, namely dative and genitive cases are more marked as nominative and accusative cases often coincide. A second piece of evidence can presumably be derived from the well-known phenomenon of "Dative sickness" in Icelandic.

Friðriksson (2004) reports that inherent accusative case is sometimes replaced by the dative (for concrete numbers, see his study):

- (i) mig / mér langar  
I(ACC) / I(DAT) long (for something)

This follows straightforwardly from the case hierarchy. Note that the genitive is inert with regard to effecting such a change (or being affected by it). This is probably due to its infrequent occurrence in both type and token.

<sup>19</sup> There might be an interfering factor here that may not allow us to check these predictions. Andrews (1976/1990: 174) claims that embedded subjects in the genitive are the most restricted and the least accepted arguments by speakers. If this is true, then it will be difficult to compare the relevant numbers.

### 6.3. A Comparison of Old Icelandic and Modern Icelandic

Barðdal & Eythórsson (2003) argue that there have not been any major changes in raising and control structures from Old to Modern Icelandic. Interestingly, all the examples they provide with *kveðast* have an animate subject. Thus, in the absence of inanimate or expletive subjects, I claim that *kveðast* in Old Icelandic and *segjast* in Modern Icelandic are essentially the same: they assign a subject theta role. Now, Sigurðsson (1993) argues that Old Icelandic is a *pro*-drop language. Furthermore, Old Icelandic is a V2 language that allows topicalization just as Modern Icelandic does. In order to account for the dative on the matrix subject, one could also assume that the embedded subject could move to the matrix Spec,CP, without having moved to the matrix subject theta-position (Spec,VP). This would imply that Old and Modern Icelandic have potentially different derivations. However, as *segjast* is a subject control verb, both the matrix and the embedded subject have the same referential index. Now, as Željko Bošković (p.c.) points out to me, this kind of derivation is illicit as it would lead to a Strong crossover violation under co-indexation of the topicalized embedded subject and matrix *pro*, repeating (10a) here as (53):

- (53)(\*) [<sub>CP</sub> Þórði<sub>i</sub> kvaðst [<sub>IP</sub> *pro*<sub>i</sub> ... [<sub>VP-inf</sub> t<sub>i</sub> þykkja tvennir kostir til ]]]  
 Þórðr(DAT) said-refl seem two choices(NOM) to  
 ‘Þórðr said that he felt that two possibilities existed.’

If this is correct, then the Old Icelandic data do fall under the current analysis. However, it is not possible to compare quantitatively both developmental stages of the language as there are presumably interfering factors in relating results obtained from corpora to those received from native speaker judgments. Be that as it may, the data hints at a phenomenon that is several hundred years old.

### 6.4. Case Fluctuation with Typical Raising and Control Verbs

Interestingly, both the typical raising predicate *virðast* ‘to seem’ and the typical control predicate *vonast til* ‘to hope’ also exhibit some fluctuation but less substantial (Andrews 1990 (39-44)). However, there is a marked difference between them. With raising verbs, case preservation of inherent case is expected. However, the subject bears nominative case in only two (out of 17) instances of inherent accusative. Dative case is always preserved.<sup>20</sup> With control verbs, there is more fluctuation but less than with reflexive middles. Here, no case preservation of inherent case is expected. However, the dative is preserved in six (out of 17) cases, while accusative is retained in two (out of 17). I take this marked contrast between the traditional raising and control predicates to indicate that the current proposal is on the right track. Recall that I have argued that the matrix subject theta-role of the reflexive middle can be satisfied in different ways (by (pure) merge or movement). With movement possible in both raising and control predicates, the

<sup>20</sup> With the exception of *virðast*, there is also some variation with regard to the case realization on the matrix subject of other raising verbs, depending both on the matrix and embedded predicate (Sigurðsson 1989: 96 fn. 31).

difference between these structures consist in the presence of a matrix subject theta-role. If this is true, then it is expected that reflexive middle predicates pattern with (traditional) control predicates and not raising predicates. This is exactly borne out by the data on case fluctuation described above.

Note that it is surprising that case fluctuation occurs with the control predicates at all. Under Bošković (1994), an overt infinitival complementizer *að* would imply the presence of a non-theta phrase in Icelandic, thus raising the question of Improper Movement of the inherently case-marked subject (Andrews' (43c)):<sup>21</sup>

- (54) Drengnum vonast til að ganga vel við vinnuna.  
       the-boy(DAT) hopes to go well at work  
       'The boy hopes to do well at work.'

Under current assumption, we have to assume that the control predicate selects a VP in these cases. In order to account for the presence of *að*, we either assume that some speakers treat *til að* as a complex (prepositional) element or, alternatively, that *að* forms a complex head with the embedded predicate. This makes the strong predication that an inherently case-marked subject with control predicates is incompatible with negation (and thus Object Shift) in the embedded clause. I have not been able to check this prediction.

## 7. Conclusion

This paper discussed case fluctuation on the matrix subject of the reflexive middle verb *kveðast* and *segjast*. While some speakers accepted the nominative case on the matrix subject, other did the inherent case assigned in the embedded infinitival. A third group did not accept either. Old Icelandic provided similar evidence for the first two kinds of judgments. Considering the argument structure of *segjast* next, I concluded that the matrix predicate exhibits only control properties whereas the embedded infinitival shows only raising characteristics. Following that, I discussed the data provided by one of my informants who accepted examples involving inherent case-marking predicates. Crucially, this speaker provided evidence that the dative matrix subject receives a theta-role from *segjast*. If this is true, then in a restricted framework, this presents a case of movement into a theta-role position. Considering the infinitival clause of *segjast* in more detail, I suggested that *segjast* selects for a phrase that is below the one which negation and other sentential adverbs are adjoined to. In order to account for the variation, I

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<sup>21</sup> Note that *hope* is not an ambiguous control predicate such as *promise* or *threaten* (see below). If this is true, then (54) presumably presents another case of movement into a subject theta-role. Turning to *promise* and *threaten*, these predicates are ambiguous between control and raising. The latter is shown in (i):

- (i) a. Your solution promises to be a good one.  
       b. It threatens to rain.

Wurmbrand (2001: 208) states that the control version assigns an agentive theta role and the raising one exhibit an epistemic reading. As such, the embedded subjects in (ia-b) have moved to the matrix non-theta position Spec,IP for case via the embedded non-theta position Spec,IP (as suggested by the presence of *to*). Thus, these cases do not fall under movement into theta-role positions.

proposed that *segjast* of some speakers selects VP and that of others takes VerbP containing VP. Extending Bošković' (1994) proposal to the cases at hand, the variation was accounted for by the different sizes of the infinitival clauses and the corresponding different available landing sites for the embedded subject.<sup>22</sup>

More generally, this paper attempts to contribute to the investigation of the clausal architecture of embedded clauses. Furthermore, giving a principled explanation of case variation allows us to use different morphological cases as an indication as to whether or not movement has taken place in a structure. However, as pointed out by a reviewer, the present discussion (further) weakens the assumption that raising necessarily implies movement into non-theta positions. In other words, in order to determine the presence of a subject theta-role, other tests are necessary (e.g. besides the suggestive argument involving the retention of inherent case on the subject of a root modal, Wurmbrand 2001: pp. 203 gives additional arguments that root modals do not assign a subject theta-role). Another result of the discussion is that we do not have to resort to non-linguistic explanations such as Faarlund's (1999), mentioned in section 3.1, to account for the unexpected case realizations in Old Icelandic. However, due to the sparseness of the relevant data, which involved just one speaker, some of the conclusions here have to remain tentative. However, I hope to have shown that the discussion here warrants gathering these data as they will bear on interesting issues relevant for the construction of a grammar.

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<sup>22</sup> Norbert Hornstein (p.c.) raises the question as to why case fluctuation only seems to be a phenomenon of Icelandic. Although I have no definite answer at this point, note that oblique arguments behave like "true" subjects in Icelandic only. Exploiting this property, there are two ways to proceed. On the one hand, we could assume that only true subjects may move into theta-positions. This option raises questions about the Spanish data in (36). On the other hand, we could speculate that this variation may have to do with the two different layers of case on the subject where abstract Case does not (always) match morphological case (cf. footnote 9), or in Freidin & Sprouse' terminology that case licensing (which is configurational) is in conflict with case assignment (which is lexical). It is perhaps due to this "conflict" that case fluctuation is possible. I will leave the choice open here.



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