The Alternating Predicate Puzzle:
A Sign-Based Construction Grammar Account*

Jóhanna Barðdal, Thórhallur Eythórsson & Tonya Kim Dewey
University of Bergen, University of Iceland & University of Bergen

Abstract:
A long-standing divide between Icelandic and German in the literature takes for granted that there are non-nominative subjects in Icelandic, while corresponding arguments in German have been analyzed as objects (Zaenen, Maling & Thráinsson 1985, Sigurðsson 1989). This is based on two differences between these languages, a) differences with regard to control and conjunction reduction, and b) an apparent subject behavior of the nominative in Dat-Nom constructions in German. This article focuses on the latter, introducing into the discussion the concept of alternating predicates, that is, Dat-Nom predicates that systematically alternate between two diametrically-opposed argument structure constructions, Dat-Nom and Nom-Dat. A comparison between Icelandic and German shows that Icelandic Dat-Nom predicates are of two types, a non-alternating *líka* type and an alternating *falla í geð* type, whereas German seems to exhibit only the alternating type. On this assumption, the apparent subject behavior of the nominative in German is easily explained, since such occurrences in fact involve the Nom-Dat construction and not the Dat-Nom construction. Therefore, the subject behavior of the nominative does not invalidate a subject analysis of the dative in Dat-Nom constructions in German. The analysis is couched in the framework of Sign-Based Construction Grammar (Sag 2012).

1.   Introduction

In traditional grammar the nominative has been equated with grammatical subject, irrespective of argument structure and perceived neutral word order. This includes nominatives of "inverse" predicates such as *líka* 'like' in Icelandic, which select for a Dat-Nom case frame. However, beginning in the 1960s with the general theorizing of grammatical structure, behavioral properties of subjects were identified (Comrie 1973, Anderson 1976, Keenan 1976, Sasse 1978). This led to the recognition that behavioral subjects could be non-canonically case marked, for instance in the accusative, dative and the genitive (Andrews 1976, Masica 1976). In Icelandic the perceived neutral word order coincides with the order of the arguments in the argument structure of predicates. This means that with predicates like *líka*, which select for a Dat-Nom case frame, the dative behaves as a grammatical subject and the nominative behaves as an object. This has been established beyond doubt by earlier research, starting with Andrews (1976) and Thráinsson (1979), followed up by Zaenen, Maling & Thráinsson (1985) in a seminal article on argument linking and grammatical relations in Icelandic and German, where the long-standing divide between these two languages was first

proposed. This alleged contrariety between Icelandic and German is in particular based on two factors:

a) different behavior of the dative with regard to conjunction reduction and control infinitives across the two languages
b) the apparent subject behavior of the nominative argument in German

In previous research, we have investigated conjunction reduction and control infinitives in Icelandic and German and shown that subject-like datives in German can, in fact, be omitted in such structures, although only marginally (Barðdal & Eythórsson 2003, 2006, Eythórsson & Barðdal 2005, Barðdal 2006). There is no doubt that there are more severe restrictions on the occurrence of oblique subject predicates in control constructions and conjunction reduction in German than in Icelandic (cf. Barðdal 2006), although such utterances exist and are being produced by native speakers of German. We have dealt with this topic extensively elsewhere and will focus, in this article, on the second difference between Icelandic and German, i.e. the apparent subject behavior of the nominative argument in German Dat-Nom constructions. For that purpose we introduce additional data relevant to subjecthood and non-nominative case marking, data that have not received proper attention in the earlier literature and are vital for a deeper understanding of the overarching problem. These data involve alternating predicates, which behave in such a way that either argument, the dative or the nominative, may take on subject properties. We will henceforth refer to these as *alternating predicates* and to the classical *líka* 'like' verbs as *non-alternating predicates*.

The earlier discussion in the literature of potential non-nominative subjects in German has reached an impasse, as the behavior of the nominative with such predicates appears to raise an obstacle against analyzing the dative as a subject (Bayer 2004: 25ff., Wunderlich 2008). By considering the relevant predicates in German as alternating between two argument structure constructions, this obstacle is overcome. Hence, the ultimate goal of this article is to introduce the concept of alternating predicates into the discussion of theoretical syntax. This novel concept is not only of importance for analyzing the range of data relevant to the debate on non-nominative subjects, but it is also potentially efficacious for linguistic theory.

The structure of this article is as follows: The next section is dedicated to an investigation of the behavior of the two types of predicates in Icelandic, methodically examining them against the bulk of established subject tests for that language. We establish that there are two types of Dat-Nom predicates in Icelandic, the *líka* 'like' type which is consistently Dat-Nom, and the *falla í geð* 'like, be to sb's liking, please' type, which alternates systematically between two diametrically-opposed argument structure constructions, Dat-Nom and Nom-Dat. In Section 3, we investigate the syntactic behavior of German *gefallen* 'like, be to sb's liking, please' and show that it indeed patterns with *falla í geð* in Icelandic and not with *líka*. We conclude that German Dat-Nom predicates are also alternating predicates. This, in turn, explains the difference in behavior, noted in the literature, between German *gefallen* 'like, be pleasing to, please' and the well-known Icelandic *líka* type. Section 4 contains a formalization of both types of predicates, carried out within the framework of Sign-Based Construction Grammar (Michaelis 2010, 2012, Sag 2012, Kay & Sag 2012, and Webelhuth 2012). We suggest that alternating predicates do not involve two different verbs, and hence not two different lexical entries, but have one lexical entry which interacts with the two diametrically-opposed argument structure constructions. We suggest an unordered list of the arguments in the Attributed Value Matrix, with the order of the arguments being defined by the argument structure constructions themselves, i.e. the Dat-Nom and Nom-Dat constructions. Non-alternating predicates, in contrast, only interact with the Dat-Nom construction. Hence, the order of arguments, in our formalization, is not defined in terms of

lexical entries, but is captured through the interaction of predicates and their respective argument structure constructions. Section 5 contains a summary of the content and conclusions of this article.

2. Non-Canonically Case-Marked Subjects in Icelandic

2.1 Subjecthood

The subject tests that have been used in Icelandic include the following (Andrews 1976, Thráinsson 1979, Zaenen, Maling & Thráinsson 1985, Sigurðsson 1989, Jónsson 1996, Barðdal 2001, inter alia):

- First Position in Declarative Clauses
- Subject-Verb Inversion
- First Position in Subordinate Clauses
- Conjunction Reduction
- Clause-Bound Reflexivization
- Long-Distance Reflexivization
- Subject-to-Object Raising
- Subject-to-Subject Raising
- Control Infinitives

In addition to the existence of non-nominative subjects, it has also been demonstrated that the nominative argument of predicates selecting for Dat-Nom, behaves as an object in all respects except for case and agreement. It is well known from several languages that it is in fact the nominative argument, be it the subject or the object, that controls agreement on the finite verb (Barnes 1986, Sigurðsson 1990–91, Thráinsson et al. 2012).

In Icelandic it has been shown that oblique subjects pass all the subject tests listed above, of which the control test has been taken as the most conclusive one (Andrews 1976, Thráinsson 1979, Zaenen, Maling & Thráinsson 1985, Sigurðsson 1989, Jónsson 1996, Eythórsson & Barðdal 2005). Syntactic control causes the subject of an infinitive to be left unexpressed, typically on identity with an argument from the matrix clause, but it does not affect objects; in control constructions the object behaves in the same way as it does in an ordinary finite clause. This is shown in (1) below for *vera kalt/heitt* 'be cold/warm', *dreyma* 'dream' and *þykja* 'think, consider':

(1a) Það   er ekki gott **að ___**   **vera kalt** og **heitt** á sama tíma.
      it.EXPL is not good to PRO.DAT be.INF cold and warm on same time
      'It is not good to freeze and feel warm at the same time.

(1b) Sagt er að það   boði gróða **að ___**   **dreyma**   skít.
      said is that it.EXPL bodes profit to PRO.ACC dream.INF shit.ACC
      'It is said that dreaming about shit forebodes profit.'

(1c) Það   þykir   kúl **að ___**   **þykja** Eurovision   hallærisleg!
      it.EXPL is.considered cool to PRO.DAT find.INF European.Song.Contest.NOM lame
      'It is considered cool to think that the European Song Contest is lame!'

In contrast, the object cannot be left unexpressed in control constructions, nor can the subject be expressed. This shows that control constructions can be used to distinguish between subjects and objects. To illustrate this, consider the following examples which show very clearly that a) the accusative subject of *dreyma* 'dream' must be left unexpressed in a control infinitive, b) the dative subject of *þykja* must also be left unexpressed in such a construction, c) the accusative object of *dreyma*, i.e. *skít* 'shit' (nominative *skítur*), must be overt, and d) the nominative object of *þykja*, i.e. *Eurovision*, must also be overt:

(2) Sagt er að það   boði gróða að *(mann) dreyma *(skít).
     said is that it.EXPL bodes profit to   one.ACC dream.INF shit.ACC

(3) Það   þykir   kúl að *(manni) þykja *(Eurovision) hallærisleg!
     it.EXPL is.considered cool to   one.DAT find.INF ESC.NOM   lame

Moreover, the results of the control test coincide with perceived neutral word order for these structures. That is, the subject-like oblique of *vera kalt/heitt*, *dreyma* and *þykja* in (1a) is the first argument of the argument structure, and hence the grammatical subject, while the accusative in (1b) and the nominative in (1c) are second arguments, and hence grammatical objects. To illustrate this, compare the word order properties of the verb *líka* 'like' in Icelandic, which subcategorizes for the Dat-Nom argument structure:

(4a) ***Mér***   *hafði aldrei líkað* ***þessi   bók***.
      me.DAT had never fallen this.NOM book.NOM
      'I had never liked this book.'

(4b) ***Þessi   bók***   *hafði* ***mér***   *aldrei líkað*.
      this.NOM book.NOM had me.DAT never liked
      'This book I never liked.'

(4c) ****Þessi   bók***   *hafði aldrei líkað* ***mér***.
      this.NOM book.NOM had never liked me.DAT

The neutral word order for *líka* is the one given in (4a), with the dative in first position and the nominative immediately following the nonfinite verb at the end of the sentence. If the nominative occurs in first position, as in (4b), the dative must occur immediately following the finite verb, *hafði* 'had', but cannot follow the nonfinite one, *líkað* 'liked', as shown in (4c). This shows that the nominative in (4b) is a topicalized object in first position, while the dative occurs in a position reserved for subjects. Thus, the structure in (4b) involves topicalization and subject-verb inversion, while (4a) does not.

For predicates that select for the Dat-Nom case frame, such as *líka*, it might appear quite counterintuitive, given the presuppositions of traditional grammar, that the subject is in the dative case and the object in the nominative case. Rather, one would expect the subject to be in the nominative and the object to be in the dative. The discussion of subjecthood in the seventies and the eighties was centered around this issue and conclusive evidence for the Dat-Nom analysis was offered for several languages, although for some languages such evidence remains elusive. In Modern Icelandic, Modern Faroese, Tibeto-Burman, and some modern Indic languages, the subject status of oblique subjects is uncontroversial, while opinions are more divided regarding languages like German (Zaenen, Maling & Thráinsson 1985, Sigurðsson 1989, Bayer 2003, Haider 2005, 2010), Lithuanian (Holvoet 2013), and Russian

(Moore & Perlmutter 2001). See also articles in Serzant & Kulikov (2013) on various languages.

The situation, however, is even more complicated. In addition to the existence of Dat-Nom predicates in languages like Icelandic, where the dative is unambiguously the subject and the nominative is unambiguously the object, there also exist so-called *alternating predicates*. These are predicates which alternate between two inverse argument structures, i.e. they can occur as Dat-Nom predicates as well as Nom-Dat predicates (Bernódusson 1982, Jónsson 1997–98, Barðdal 2001, Eythórsson & Barðdal 2005, Rott 2013). Both represent an equally "neutral" word order, meaning that one is not a topicalization of the other. One such predicate is *falla í geð* 'like, be to sby's liking'.

(5a) **Mér** *hefur alltaf fallið* **þessi bók** *vel í geð.*
      me.DAT has always fallen this.NOM book.NOM well in liking
      'I have always liked this book.'

(5b) **Þessi bók** *hefur alltaf fallið* **mér** *vel í geð.*
      this.NOM book.NOM has always fallen me.DAT well in liking
      'This book has always been to my liking.'

The example in (5a) corresponds exactly to the example in (4a), showing that the dative is the subject and the nominative the object, as the dative occurs in first position, while the nominative occurs in postverbal position, immediately following the nonfinite verb. It is the example in (5b), however, which is surprising, because on a Dat-Nom analysis, this example should be ungrammatical, exactly like the example with *líka* in (4c) above. In (5b) it is the nominative that occurs in subject position, while the dative occurs in object position. The grammaticality of (5b) thus shows that the nominative is the subject and the dative the object in this particular example. This alternation between two diametrically-opposed case frames, here the Dat-Nom and Nom-Dat, is in fact the defining characteristic of alternating predicates, to be further discussed in the next section.

This comparison shows that the Nom-Dat order of *líka* in (4b) involves topicalization of the nominative object of the Dat-Nom construction, whereas the Nom-Dat order of *falla í geð* in (5b) is an instance of neutral subject-initial word order. This, in essence, means that Icelandic has two types of Dat-Nom predicates, the *líka* type which can only occur in the Dat-Nom case frame and the *falla í geð* type which alternates between the Dat-Nom and Nom-Dat case frames.

Our aim in this article is to compare the behavior of these two types of predicates in Icelandic, and further compare them with potentially parallel predicates in German, like *gefallen* 'like, be to sby's liking', *misslingen* 'fail', and others. Such predicates have traditionally been assumed to be Nom-Dat predicates with a more-or-less obligatory topicalization of the dative (Helbig & Buscha 1988: 51, Bayer 2004: 25ff., Wunderlich 2008. More recently, however, it has been acknowledged that these predicates in German are Dat-Nom predicates, deviating from the general pattern that the subject is the first argument of the argument structure. Instead, with these predicates the subject is uniquely taken to be the second (nominative) argument, since the dative argument in German fails certain subject tests (cf. Haider 2005, 2010, Wunderlich 2008). Through comparison with Icelandic, we demonstrate that the first argument of these predicates in German is indeed the grammatical subject, contradicting the standard analysis of modern German scholarship. A follow-up question which arises is whether these predicates are of the *líka* type or the *falla í geð* type, an issue to be dealt with in Section 3 below.

We opened this section by presenting the subject properties that have generally been assumed to be applicable in Icelandic. No definition of subject was given, only the properties

were listed. When generalizing across these subject properties, it turns out that it is always the first argument of the argument structure that is targeted by the subject tests. This fact has prompted us to suggest a subject definition, based on the order of the argument of the argument structure (cf. also Eythórsson & Barðdal 2005):

(6)   The subject is the first argument of the argument structure of a predicate

By the term *first argument*, we refer to the internal order of the arguments within the subcategorization frame of a given predicate. We further assume that the internal order of the arguments is determined by the force-dynamics between the two (cf. Croft 2012). Given the general fact that grammatical relations, including subjecthood, lie at the core of grammar, they must be adequately captured on all approaches. Our definition in (6) above may be regarded as framework independent; this is intended since it is relevant in order for it to be useful as a working hypothesis across theoretical frameworks.

2.2   Dat-Nom/Nom-Dat Predicates in Icelandic

In the preceding section we introduced the subject tests assumed for Icelandic, and discussed the first one on the list, first position in declarative clauses, in connection with alternating predicates. We will now continue with a discussion of the remaining tests. In clauses with subject-verb inversion, such as questions, commands and topicalizations, the subject systematically inverts with the verb. In the examples in (7) below, only the dative experiencer of *líka* inverts with the verb (7a), while the nominative stimulus does not show such syntactic behavior (7b). The ungrammaticality of (7b), therefore, shows that *líka* cannot occur in a Nom-Dat argument structure construction.

(7)   ***Non-Alternating Dat-Nom***
(7a)   *Hefur **þér**   alltaf líkað **þessi   bók**   vel?*   Dat-Nom
        has   you.DAT always liked this.NOM book.NOM well
        'Have you always liked this book?'

(7b)   **Hefur **þessi   bók**   alltaf líkað **þér**   vel?*   *Nom-Dat
         has   this.NOM book.NOM always liked you.DAT well
        'Has this book always been to your liking?'

(8)   ***Alternating Dat-Nom/Nom-Dat***
(8a)   *Hefur **þér**   alltaf fallið **þessi   bók**   vel í geð?*   Dat-Nom
        has   you.DAT always fallen this.NOM book.NOM well in liking
        'Have you always liked this book?'

(8b)   *Hefur **þessi   bók**   alltaf fallið **þér**   vel í geð?*   Nom-Dat
        has   this.NOM book.NOM always fallen you.DAT well in liking
         'Has this book always been to your liking?'

In (8a), in contrast, we see that the dative experiencer of *falla í geð* inverts with the verb, while the nominative stimulus inverts with it in (8b). In both cases, the other argument is in postverbal position, the nominative in (8a) and the dative in (8b). This supports the analysis that there are two equivalent argument structures involved, and that one of the surface orders is not a topicalization of the other.

Notice that the examples in (4–5) and (7–8) all show that there is an asymmetry in the syntactic behavior of *líka* and *falla í geð*. While *líka* can only instantiate the Dat-Nom construction, evidenced by the ungrammaticality of (4c) and (7b), *falla í geð* clearly occurs in two different argument structure constructions, Dat-Nom and Nom-Dat.

We now turn to conjunction reduction, in which the subject of a second conjunct is left unexpressed on identity with the subject of the first conjunct. Notice that *líka* and *falla í geð* again show the aforementioned asymmetry. The example in (9a) shows that the dative experiencer of *líka* in the second conjunct may be omitted on identity with the nominative subject of the first conjunct, while (9b) shows that the nominative of *líka* cannot be omitted in conjoined clause:

(9)   ***Non-Alternating Dat-Nom***
(9a)   *Ég kynntist   fólkinu,   og   ___   hefur líkað **það**   vel.*   Dat-Nom
       I   got.to.know people.the and pro.DAT has liked it.NOM well
       I got to know the people and have liked them.'

(9b)   **Svona verkefni   eru   nauðsynleg og   ___   hafa líkað **okkur** vel.*   *Nom-Dat
        such projects are necessary and pro.NOM has liked us.DAT well
       'Such projects are necessary and have been to our liking.

(10)   ***Alternating Dat-Nom/Nom-Dat***
(10a)   *Ég kynntist   fólkinu,   og   ___   hefur fallið **það**   vel   í   geð.*   Dat-Nom
       I   got.to.know people.the and pro.DAT has   fallen it.NOM well in liking
       I got to know the people and have liked them.'

(10b)   *Svona verkefni   eru   nauðsynleg og   ___   hafa   fallið **okkur** vel   í   geð.*   Nom-Dat
       such projects are necessary and pro.NOM have fallen us.DAT well in liking
       'Such projects are necessary and have been to our liking.

In contrast to (9b), the nominative stimulus of *falla í geð* in (10b) may be left unexpressed in conjoined clauses on identity with the nominative subject of the first conjunct. The same is true for dative (10a). The well-formedness of both examples in (10) supports the analysis that the dative is the subject in (10a) and the nominative in (10b). Again, there is an asymmetry in the syntactic behavior of the arguments of *falla í geð* and *líka*.

Yet another syntactic test of subjecthood involves clause-bound reflexivization. It is generally assumed in the literature that only subjects may bind reflexives within their minimal clause. Below we see that only the dative experiencer of *líka* can bind a reflexive (11a), while the nominative stimulus cannot (11b):

(11)   ***Non-Alternating Dat-Nom***
(11a)   ***Konunni**ᵢ   hefur líkað bókin   **sín**ᵢ   vel.*   Dat-Nom
       woman.the.DAT has liked book.the.NOM hers.NOM well
       'The woman has liked her book.

(11b)   ****Hann**ᵢ hefur líkað konunni   **sinni**ᵢ vel.*   *Nom-Dat
        he.NOM has   liked wife.the.DAT his.DAT well
       Intended meaning: 'He has been to his wife's liking.'

(12) ***Alternating Dat-Nom/Nom-Dat***

(12a) **Konunni**$_i$ *hefur fallið bókin*   **sín**$_i$ *vel í geð.*   Dat-Nom
woman.the.dAT has   fallen book.the.NOM hers.NOM well in liking
'The woman has liked her book.

(12b) **Hann**$_i$ *hefur fallið konunni*   **sinni**$_i$ *vel í geð.*   Nom-Dat
he.NOM has fallen wife.the.DAT his.DAT well in liking
'He has been to his wife's liking.'

The facts are different with *falla í geð*, as can be seen in (12) above. In (12a) the dative experiencer of *falla í geð* binds the nominative reflexive possessive *sín* 'self's', while the nominative stimulus binds the dative reflexive possessive *sinni* in (12b). These facts corroborate the hypothesis that the dative experiencer is the syntactic subject in (12a), while the nominative stimulus takes on the subject role in (12b). Again, the by now well-known asymmetry between *líka* and *falla í geð* is manifested in these examples.

However, the facts of clause-bound reflexivization are not so simple as presented above. It has been noted in the literature that objects may also bind reflexives (Hyams & Sigurjónsdóttir 1990, Kiss 2003: 163). True though this may be, objects still exhibit different behavior than subjects with respect to reflexive binding, meaning that reflexivization can in fact be employed to distinguish between subjects and objects. Whereas subjects must bind reflexives within their minimal clause, objects do so only optionally. This is shown in (13) below, where the subject *hann* 'he' must bind the reflexive *sér* 'self' and cannot bind the anaphor *honum* 'him' (13a). In contrast, the object *honum* 'him' can either bind the reflexive *sér* 'self' or the anaphor *honum* 'him' in (15b).

(13a) **Hann**$_i$ *heyrði sögur*   *af* **sér**$_i$/   **honum**$_i$ Subject Binding
he.NOM heard stories.ACC of himself.DAT/him.DAT
'He heard stories of himself.'

(13b) *Ég*   *sagði* **honum**$_i$ *sögurnar*   *af* **sér**$_i$/   **honum**$_i$ Object Binding
I.NOM told him.DAT stories.the.ACC of himself.DAT/him.DAT
'I told him stories of himself.'

Let us now compare the binding facts of the dative and the nominative with *líka* and *falla í geð* in Icelandic. With *líka*, only the dative in (14a) obligatorily binds a reflexive, thus behaving syntactically as a subject. The nominative in (14b), in contrast, cannot bind the reflexive, showing that it is a non-subject argument.

(14) ***Non-Alternating Dat-Nom***

(14a) **Konunni**$_i$ *hefur líkað bókin*   *um* **sig**/ *hana   vel.*   Dat-Nom
woman.the.DAT has liked book.the.NOM on self.ACC/her.ACC well
'The woman has liked the book about herself.'

(14b) ***Hann** hefur líkað konunni*   **sinni**/ *hans   vel.*   *Nom-Dat
he.NOM has liked wife.the.DAT self.DAT/his.DAT well
Intended meaning: 'He has been to his wife's liking.'

(15) ***Alternating Dat-Nom/Nom-Dat***

(15a) **Konunni**$_i$ *hefur fallið bókin*   *um* **sig**$_i$/   Dat-Nom
woman.the.DAT has fallen book.the.NOM on self.ACC/

*hana_i   vel í   geð.
  her.ACC well in liking
'The woman has liked the book about herself.'

(15b) **Hann_i** *hefur fallið konunni*   **sinni_i**   Nom-Dat
       he.NOM has fallen wife.the.DAT self.DAT/
       /*hans_i*   *vel* *í*   *geð.*
         his.DAT well in liking
       'He has been to his wife's liking.'

In contrast, the examples in (15) with *falla í geð* show that the first argument, be it the dative or the nominative, must obligatorily bind a reflexive, while binding of anaphors is excluded. Therefore, both arguments of *falla í geð* behave syntactically as a subject, the dative when the it is the first argument and the same goes for the nominative, while this does not hold for objects. Again, the asymmetry between *líka* and *falla í geð* is manifested in these examples.

A further important subject test in Icelandic is Long-Distance Reflexivization. It entails that a subject in a main clause binds a reflexive in a subordinate clause. Such examples are easily construable with *líka* and *falla í geð*.

(16b) **Henni** *líkar vel að staða*   **sín** *sé rædd.*
       she.DAT likes well that position.NOM hers be discussed
       'She likes the fact that her position is being discussed.'

(16a) **Henni** *fellur vel í geð að staða*   **sín** *sé rædd.*
       she.DAT falls well in liking that position.NOM hers be discussed
       'She likes the fact that her position is being discussed.'

Since Long-Distance Reflexivization is only found with human arguments, this test cannot be applied to the Nom-Dat alternant of *falla í geð*.

The next subject test to be discussed is Subject-to-Subject Raising. Consider the examples in (17) below, where the verb *líka* is embedded under *virðast* 'seem'. As (17a) shows, the dative experiencer of *líka* behaves syntactically as the subject of *virðast*. The nominative stimulus, however, does not take on the subject role of *virðast* at all (17b), showing that *líka* can only instantiate the Dat-Nom construction and not the Nom-Dat construction. The verb *virðast* 'seem' here behaves similarly to an auxiliary in that it does not take a subject of its own, but engages the subject of the lower verb for this purpose. The example in (17a) shows that only the dative with *líka*, and not the nominative (17b), takes on the behavioral properties of subjects:

(17)   **Non-Alternating Dat-Nom**
(17a) **Henni** *virðist hafa*   *líkað* **bókin**   *vel.*   Dat-Nom
       she.NOM seems have.INF liked book.the.NOM well
       'She seems to have liked the book.

(17b) ***Bókin**   *virðist hafa*   *líkað* **henni** *vel.*   *Nom-Dat
         book.the.NOM seems have.INF liked herself.DAT well
       Intended meaning: 'The book seems to have been to her pleasing.'

(18)   **_Alternating Dat-Nom/Nom-Dat_**
(18a)   **_Henni_** _virðist hafa   fallið_ **_bókin_**   _vel   í   geð._   Dat-Nom
    she.NOM seems have.INF fallen book.the.NOM well in liking
    'She seems to have liked the book.

(18b)   **_Bókin_**   _virðist hafa   fallið_ **_henni_**   _vel   í   geð._   Nom-Dat
    book.the.NOM seems have.INF fallen herself.DAT well in liking
    'The book seems to have been to her pleasing.'

For _falla í geð_, the examples in (18) show that either the dative experiencer of the Dat-Nom alternant or the nominative stimulus of the Nom-Dat alternant take on the role of the subject of the verb _virðast_ 'seem' in the matrix clause. Hence, the asymmetry between _líka_ and _falla í geð_ is again evident with Raising-to-Subject in Icelandic.

    Subject-to-Object Raising is also one of the established subject tests in Icelandic. In (19a) below, the dative experiencer of the Dat-Nom alternant of _líka_ behaves as the syntactic object of the matrix verb _telja_ 'assume'. This is evident from the placement of the adverb _aldrei_ 'never', demarcating the left edge of the verb phrase, showing that the "raised subject" _sér_ 'self' really is the object of _telja_ 'assume'. The reflexive form of _sér_ 'self' further shows that the dative experiencer is an object in this construction, since reflexives cannot be subjects. Notice that the dative case of the subject of the lower verb is maintained in Raising-to-Object constructions, as is well known from Icelandic. Only the dative experiencer in (19a) below may be "raised" to object with this verb. The ungrammaticality of (19b), however, is expected on the assumption that _líka_ cannot instantiate the Nom-Dat construction

(19)   **_Non-Alternating Dat-Nom_**
(19a)   _Hún   taldi_   **_sér_**   _aldrei hafa   líkað_ **_bókin._**   Dat-Nom
    she.NOM assumed herself.DAT never have.INF liked book.the.NOM
    'She assumed that she never liked the book.'

(19b)   *_Hún   taldi_   **_bókina_**   _aldrei hafa   líkað_ **_sér._**   *Nom-Dat
    she.NOM assumed book.the.ACC never have.INF liked herself.DAT
    Intended meaning: 'She assumed that the book was never to her liking.'

(20)   **_Alternating Dat-Nom/Nom-Dat_**
(20a)   _Hún   taldi_   **_sér_**   _aldrei hafa   fallið_ **_bókin_**   Dat-Nom
    she.NOM assumed herself.DAT never have.INF fallen book.the.NOM
    vel   í   geð.
    well in liking
    'She assumed that she never liked the book.'

(20b)   _Hún   taldi_   **_bókina_**   _aldrei hafa   fallið_   Nom-Dat
    she.NOM assumed book.the.ACC never have.INF fallen
    sér   _vel   í   geð._
    herself.DAT well in liking
    'She assumed that the book was never to her liking.'

In (20a) above, it is evident that the dative experiencer of _falla í geð_ behaves in the same way as the dative experience of _líka_ in (19a) above. The nominative, occurring in the object position, is preserved. In (20b) it is in fact the nominative of _falla í geð_ that behaves as the subject, evident from the fact that it receives accusative case from the matrix verb _telja_ 'assume'. The

differences in grammaticality between the examples in (19) and (20) confirms again the above-established asymmetry between *líka* and *falla í geð*.

The last subject test we would like to discuss for Icelandic involves control infinitives, already introduced in Section 2.1 above. It is a well-known fact from earlier research that only subjects of finite clauses must be left unexpressed in control infinitives, while objects are obligatorily expressed. Consider the examples below with the verb *líka*; (21a) shows that the dative experiencer may be left unexpressed in a control infinitive, while (21b) shows that the nominative of *líka* cannot be left unexpressed.

(21)   ***Non-Alternating Dat-Nom***
(21a)   *maður   þarf að vera haldinn þrælslund   til **að** __   **líka***   Dat-Nom
one.NOM must to be   held   severe.servility for to PRO.DAT like.INF
slík   fásinna.
such craziness.NOM
'one must be be equipped with severe servility to like such craziness'

(21b)   **Umræður … geta verið erfiðar vegna   löngunar til **að** __*   **Nom-Dat
  discussions can be   difficult because.of longing for to PRO.NOM
***líka**   félögunum*
like.INF friends.the.DAT
Intedend meaning: 'Discussions … can be difficult because of their need to be to their peers' liking'

(22)   ***Alternating Dat-Nom/Nom-Dat***
(22a)   *maður   þarf að vera haldinn þrælslund   til **að** __   **falla***   Dat-Nom
one.NOM must to be   held   severe.servility for to PRO.DAT fall.INF
***í geð** slík   fásinna.*
in liking such craziness.NOM
'one must be equipped with severe servility to like such craziness'

(22b)   *Umræður … geta verið erfiðar vegna   löngunar til **að** __   **falla***   Nom-Dat
discussions can be   difficult because.of longing for to PRO.NOM fall.INF
*félögunum   **í geð**.*
friends.the.DAT in liking
'Discussions … can be difficult because of their need to be to their peers' liking'

In contrast, either argument of *falla í geð* can be left unexpressed in control constructions. In the attested example in (22a), the dative experiencer of the Dat-Nom alternant of *falla í geð* has been left unexpressed on identity with an indefinite nominative subject in the matrix clause. The same is true for the nominative stimulus of the Nom-Dat alternant in (22b), which is omitted on identity with an inanimate nominative subject. These examples therefore show that either the nominative or the dative, one at a time, is left unexpressed in control infinitives with *falla í geð*, again confirming the analysis that the predicate *falla í geð* may instantiate two different argument structure constructions, both Dat-Nom and also Nom-Dat.

To summarize the discussion so far, the data presented in this section show that alternating Dat-Nom/Nom-Dat predicates, like *falla í geð*, behave systematically such that the first argument takes on the syntactic behavior of subject, be it the dative of Dat-Nom or the nominative of Nom-Dat. In contrast, non-alternating Dat-Nom predicates, like *líka*, behave such that only the dative argument takes on the syntactic behavior of subject. Crucially, the

nominative argument of *líka*, can, under no circumstances, take on the syntactic behavior of subject.

Having shown that Icelandic exhibits two types of Dat-Nom predicates, alternating and non-alternating ones, we now proceed to a discussion of Dat-Nom predicates in German. Our aim is to establish that Dat-Nom predicates in German are more similar to the *falla í geð* type in Icelandic than to the *líka* type.

3. Non-Canonically Case-Marked Subjects in German

Like Icelandic, German also exhibits structures in which the subject-like argument is not in the nominative case, but in the accusative or the dative case. The examples below illustrate three different structures, intransitive Dat-only (23a), transitive Dat-Nom (23b) and Acc-PP (23c).

(23a) ***Uns***   *ist bange, aber wir   verzagen nicht.*
us.DAT is scared but we.NOM despair not
'We are afraid but we don't despair.'

(23b) ***Mir***   *schwebt* ***der   Gedanke***   *vor.*
me.DAT hovers the.NOM thought.NOM for
'I have the thought in mind.'

(23c) ***Mich***   *hungert*   ***nach Macht***.
me.ACC hungers for   power.DAT
'I hunger for power.'

According to the standard story, there is a categorical difference between Icelandic and German, in that Icelandic has oblique subjects, while German does not (Zaenen, Maling & Thráinsson 1985, Sigurðsson 1989, Fischer & Blaszczak 2001, Haspelmath 2001, Fanselow 2002, Bayer 2004, Haider 2005, 2010, Wunderlich 2008). Elsewhere we have taken issue with the standard story, showing that non-nominative subject-like arguments in German do in fact exhibit more subject properties than is generally assumed in the literature (Barðdal & Eythórsson 2003, Eythórsson & Barðdal 2005, Barðdal 2006, Barðdal & Eythórsson 2006). This includes the ability of the first argument to be left unexpressed in both conjunction reduction and control infinitives, the two major subject tests that German oblique subject predicates have been claimed not to pass. In the next section, we present German examples of both conjunction reduction and control infinitives with verbs that appear to be of the alternating type. Thereafter, we present additional examples of control infinitives with Dat-only verbs and Dative passives, documenting that non-nominative subject-like arguments in German do in fact occur in control infinitives with the non-nominative subject-like argument left unexpressed, exactly as nominative subjects do.

It has been regarded as a problem for the oblique subject analysis for German that the nominative of Dat-Nom predicates may exhibit some subject properties in that language (Wunderlich 2008). This raises the question of whether German Dat-Nom predicates may actually involve alternating predicates, i.e. that Dat-Nom predicates in German are of the *falla í geð* type rather than the *líka* type, an idea that we have mentioned in passing in previous work (Eythórsson & Barðdal 2005). We will examine this question in the next section.

3.1   Dat-Nom/Nom-Dat Predicates in German

In the following we provide data from German suggesting that Dat-Nom predicates in that language are in fact alternating Dat-Nom/Nom-Dat predicates.

Starting with first position in declarative clauses, either the dative experiencer or the nominative stimulus may occupy first position in German, and both orders are equally neutral.

(24)   ***Alternating Dat-Nom/Nom-Dat***
(24a)   **Mir**   *hat* **das**   **Hotel** *gut   gefallen.*   Dat-Nom
      me.DAT has this.NOM hotel   well *ge*.fallen
      'I always liked this hotel.'

(24b)   **Dieses Haus** *hat* **mir**   *letztes Jahr schon   so gut   gefallen.*   Nom-Dat
      this.NOM house has me.DAT last   year already so well *ge*.fallen
      'This house was already to my liking last year.'

That both word orders are equally neutral has been noted by Lenerz (1977) and Primus (1994: 40ff., 2012: 396) among others. In this sense, German *gefallen* 'like, be to sby's liking' is more like *falla í geð* than *líka* in Icelandic.

The next subject behavior to be discussed is subject-verb inversion:

(25)   ***Alternating Dat-Nom/Nom-Dat***
(25a)   *Hat* **dir**   *denn* **das**   **Hotel** *gut   gefallen?*   Dat-Nom
      has you.DAT then this.NOM hotel   well *ge*.fallen
      'Did you like this hotel then?'

(25b)   *Hat* **dieses Haus dir**   *letztes Jahr schon   so gut   gefallen?*   Nom-Dat
      has this.NOM house you.DAT last   year already so well *ge*.fallen
      'Was this house already to your liking last year?'

Either argument, the nominative or the dative, inverts with the verb in constructions involving subject-verb inversion in German. Again, German *gefallen* patterns with Icelandic *falla í geð* and not *líka*.

In this connection it should be noted that German is different from Icelandic with respect to the order of arguments in the middle field. For instance, weak pronouns, such as nominative *es* 'it', as a rule, precede other arguments in German:

(26a)   *Hat* **es**   **dir**   *denn gut   gefallen?*
      has it.NOM you.DAT then good *ge*.fallen
      'Has this then been to your liking.'

(26b)   ***Hat* **dir**   **es**   *denn gut   gefallen?*
      has you.DAT it.NOM then good *ge*.fallen

This fact may appear as a counterargument to our claim that both word orders, Dat-Nom and Nom-Dat, are equally neutral. However, there is a rule in German restricting the occurrence of weak nominative pronouns in the middle field (Hawkins 1986, Primus 1994: 43). This rule is independent of the order of the arguments in any argument structure

construction and thus has no bearing on our claim that *gefallen* is an alternating predicate of the *falla í geð* type.

The best kind of examples to illustrate our claim would be with two nouns which are both animate, in order to control for animacy and heaviness. Two such example pairs are presented below:

(27a) *Offenbar   haben* **den   Leuten die   Kinder** *gefallen.*
  obviously have the.DAT people   the.NOM children *ge*.fallen
  'The people obviously liked the children.'

(27b) *Offenbar   haben* **die   Kinder den   Leuten** *gefallen.*
  obviously have the.NOM children the.DAT people *ge*.fallen
  'The children were obviously to the people's liking.'

(28a) *Eigentlich haben* **den   Professoren die   Studenten** *nicht so gut   gefallen.*
  actually have the.DAT professors   the.NOM students   not so well *ge*.fallen
  'Actually, the professors didn't like the students.'

(28b) *Eigentlich haben* **die   Studenten den   Professoren** *nicht so gut   gefallen.*
  actually have the.NOM students   the.DAT professors   not so well *ge*.fallen
  'Actually, the students weren't to the professors' liking.'

Native German speakers whom we have consulted agree that both orders are equally fine, although there seem to be some individual speaker preferences. A scrambling analysis is also excluded, since there are no perceivable semantic or pragmatic differences between the two word orders. That is to say, facts of word order in the middle field also support our analysis that *gefallen* in German may instantiate two different argument structure constructions, exactly like *falla í geð* in Icelandic, and unlike *líka*.

Turning now to Conjunction Reduction, consider the following examples:

(29) ***Alternating Dat-Nom/Nom-Dat***
(29a) *Doch   wer wird siegen,   wer wird überleben,* **und ___ wird es gelingen***?* Dat-Nom
  though who will conquer who will survive   and   will   it succeed
  'Though who will conquer, who will survive, and (who) will succeed with it?

(29b) *dass er ein falsches Spiel   mit   der Familie … getrieben hat* **und __ wird es gelingen**
  that he a false   game with the family … ran   has and   will   it succeed
  'that he's been running a scam … on the family and is getting away with it.' Dat-Nom

(29c) *Das   Zimmer ist gross und ___* **hat mir   gut gefallen***.*   Nom-Dat
  the.NOM room   is big   and   has me.DAT well *ge*.fallen
  'The room is big and has been to my liking.'

The last example (29c) shows that the nominative stimulus may be left unexpressed on identity with a nominative subject of the first conjunct. This is expected. What is more surprising, however, given the standard story, is that the dative experiencer can also be left unexpressed in conjunction reduction. In (29a) the dative experiencer of Dat-Nom *gelingen* 'succeed' is left unexpressed on identity with the nominative indefinite pronoun *wer* 'who' in the first conjunct. In (29b) the dative experiencer is again left unexpressed, this time on identity with the nominative 3rd person pronoun *er* 'he' in the first conjunct. These examples therefore show

that the Dat-Nom predicate *gelingen* in German may instantiate two different argument structure constructions, Dat-Nom and Nom-Dat, exactly like *falla í geð* in Icelandic and not like *líka*.

Proceeding to clause-bound reflexivization, recall from Section 2 above that there is an asymmetry in the binding properties of subjects and objects in Icelandic, in that subjects must bind reflexives within their minimal clause, while objects do so only optionally. The same pattern is found in German, as shown in (30a–b) below:

(30a) **Er**$_i$ hat Geschichten   über **sich**$_i$/   *ihn*$_i$ gehört.   Subject Binding
   he.NOM has stories.ACC of   himself.ACC/him.ACC heard
   'He heard stories of himself.'

(30b) *Ich*   *habe* **ihm**$_i$ *Geschichten*   *über* **sich**$_i$/   **ihn**$_i$ *erzählt.*   Object Binding
   I.NOM have him.DAT stories.ACC of   himself.ACC/him.ACC told
   'I told him stories of himself.'

Let us now consider how *gefallen* behaves with respect to binding.

(31) ***Alternating Dat-Nom/Nom-Dat***
(31a) **Ihm**$_i$ *gefallen Geschichten über* **sich**$_i$/   **ihn**$_i$.   Dat-Nom
   him.DAT *ge*.fall stories   about self.ACC/*him.ACC
   'He likes stories about himself.'

(31b) **Er**$_i$ *gefällt* **sich**$_i$/   *ihm*$_i$.   Nom-Dat
   he.NOM *ge*.falls self.DAT/*him.DAT
   'He's pleased with himself.'

The German examples in (31a–b) clearly show that both the dative experiencer and the nominative stimulus of *gefallen* can only bind a reflexive within their minimal clause and not an anaphor. In this respect, either argument of *gefallen* behaves syntactically like a subject, exactly as with *falla í geð* in Icelandic and unlike *líka*.

We now turn to data relevant to Raising-to-Subject in German:

(32) ***Alternating Dat-Nom/Nom-Dat***
(32a) **Den   Grundeln und den   Garnelen** *scheint* **es** *gut*   *zu gefallen.*   Dat-Nom
   the.DAT gobys.DAT and the.DAT prawns.DAT seem it good to *ge*.fall
   'The gobys and the prawns seem to be pleased with it.

(32b) **Das   kalte Spielzeug** *scheint* **ihm**   *gut*   *zu gefallen.*   Nom-Dat
   the.NOM cold   toy.thing   seems him.DAT good to ge.fall
   'The cold toy seems to be pleasing to him.'

As evident from the examples in (32) either argument of *gefallen* can take on the subject behavior of the raising-to-subject verb *scheinen* 'seem' in German, exactly as with *falla í geð* in Icelandic, and in contrast to *líka*. These facts, thus, corroborate our analysis that *gefallen* is an alternating predicate in German, which can instantiate two inverse argument structures, Dat-Nom and Nom-Dat.

When it comes to Raising-to-Object, or on some analyses Clause Union or Restructuring (Haider 2003, Wurmbrand 2003), German behaves differently from both English and the Scandinavian languages, in that *believe*-type verbs and verbs of saying are

excluded from the construction. Causatives in German, however, select for infinitive clauses, so let us compare 'let' causatives in Icelandic and German instead:

(33)   ***Alternating Dat-Nom/Nom-Dat***
(33a)   *Ich   lasse **mir   den**   nicht gefallen.*   Dat-Acc
         I.NOM let   me.DAT it.ACC not   *ge*.fall.INF
         'I won't put up with that.'

(33b)   *Ich lasse **den mir** nicht gefallen.*   Acc-Dat
         I.NOM let it.ACC me.DAT not *ge*.fall.INF
         'I won't put up with that.'

(34)   ***Icelandic***
(34a)   *Hann   lætur **sér**   ekki nægja   **venjulegan   síma**.*   Dat-Nom
         he.NOM lets self.DAT not suffice.INF ordinary.ACC phone.ACC
         'He doesn't let it suffice with an ordinary phone.

(34b)   *Hann   lætur **venjulegan   síma**   ekki nægja   **sér**.*   Acc-Dat
         he.NOM lets ordinary.ACC phone.ACC not suffice.INF self.DAT
         'He doesn't let it suffice with an ordinary phone.

We are aware of the fact that there is a major debate going on within German linguistics of the status of *lassen* 'let' and its complements in the grammar. Several different analyses have been proposed (cf. Reis 1973, 1976, Höhle 1978), corresponding with different meanings, but at this stage no consensus exists as of how to analyze sequences with *lassen*. Irrespective of how one choses to analyze the structure of the German examples with *lassen* in (33) above, the main point is that the German examples show the same pattern as the Icelandic examples with regard to the distribution of the two arguments in the infinitive clause, although the nominative in non-causatives shows up as an accusative with 'let' causatives. This, however, applies equally to Icelandic and German. In other words, *gefallen* in German behaves as *falla í geð* in Icelandic and not as *líka* in constructions involving 'let' causatives.

The standard German analysis of examples like these would assume that it is in fact the nominative that is the subject of *gefallen*, which receives accusative case in 'let' causatives, and that in Dat-Acc orders like in (33a), the dative experiencer has been scrambled to the left across the original subject. Given that the alternating word order is also found in Icelandic, and the nominative of finite clauses also shows up in the accusative in that language, a different analysis is also possible. Scrambling, for instance, is not a part of Icelandic syntax, so a scrambling analysis for Icelandic is excluded. The most natural analysis for Icelandic is that we are here dealing with two distinct argument structure constructions, and given the validity of such an analysis for Icelandic, it may also be a viable analysis for German. An alternating analysis, however, has not been suggested for German due to a general lack of knowledge in the syntactic community of the existence of such predicates.

Since the Icelandic examples of Raising-to-Object in Section 3 above did not involve 'let' causatives, consider now how the non-alternating *líka* behaves in this respect. Exactly as with *gefallen* and *falla í geð*, the nominative object of finite *líka* shows up in the accusative case when *líka* is embedded under the causative *láta* (cf. Barðdal 2011, Wood 2011).

(34a)   *Þór Saari lætur **sér**   vel   líka **glundroða- og geðþóttastjórnina**.*   Dat-Acc
         Þór Saari lets self.DAT well like chaos-   and arbitrary.ruling.ACC
         'Þór Saari takes liking in chaos and arbitrary decisions.'

(34b) *_Þór Saari lætur **glundroða- og geðþóttastjórnina** vel líka **sér**._ Acc-Dat
　　　Þór Saari lets chaos-　　　and arbitrary.ruling.ACC well like self.DAT

(35a) _Hann lætur **sér** ekki líka **venjulegan síma**._ Dat-Acc
　　　he.NOM lets self.DAT not like.INF ordinary.ACC phone.ACC
　　　'He doesn't like an ordinary phone.

(35b) *_Hann lætur **venjulegan síma** ekki líka **sér**._ Acc-Dat
　　　he.NOM lets ordinary.ACC phone.ACC not like.INF self.DAT
　　　'He doesn't like an ordinary phone.

Observe that the word order distribution found with _líka_ in (34–35) shows the same asymmetry as was documented between _líka_ and _falla í geð_ in Section 3, again confirming that _líka_ is a non-alternating Dat-Nom verb.

　　　Since _líka_ is not an alternating predicate, but can only instantiate the Dat-Nom construction, it is excluded that the assignment of the accusative to the nominative argument is based on a potential subject status of the nominative. Where, then, does the accusative in (34–35) come from? An obvious possibility is that the accusative is assigned by the causative 'let' construction itself, so that a nominative of a finite clause shows up as an accusative in this type of infinitives, irrespective of grammatical relations. The same would also hold for German. On such an analysis, 'let' causatives would not involve Raising-to-Object. For our purposes, this is immaterial, as our goal is first and foremost to show that _gefallen_ in German behaves in the same way as _falla í geð_ in Icelandic and not as _líka_. We have documented such a behavior here with 'let' causatives rather than with Raising-to-Object constructions.[1]

　　　The final and most important test of subjecthood is control infinitives. Consider the following German examples of the Dat-Nom verbs _gefallen_ und _misslingen_ 'fail':

(36) **_Alternating Dat-Nom/Nom-Dat_**
(36a) _Also tut er es, um ___ ihr **zu gefallen**._ Nom-Dat
　　　therefore does he it in.order PRO.NOM her.DAT to _ge_.fall.INF
　　　'So he does it to please her.'

(36b) _Seit wann geht es **um** ___ **etwas** **"zu gefallen"**? Vielmehr_ Dat-Nom
　　　since when is it about PRO.DAT something.NOM to _ge_.fall rather
　　　ist doch die Frage, was wollen die und wofür!
　　　is though the question what want they and why
　　　'Since when has the issue been about "liking" something? The question is much rather what do they want and why!'

---

[1] Fischer (1990) has argued that only 'let' is original with small clauses of this type in the history of English, and that verbs of saying, believing and perception entered the construction later due to Latin influence, despite the fact that both Gothic and Old Norse-Icelandic allow a wide variety of verb classes in small clauses of this type (cf. Harbert 2007 for Gothic and Kristoffersen 1996 for Old Norse-Icelandic). However, the difference documented here between _telja_ 'consider' and _láta_ 'let' in Icelandic may support Fischer's assumption.

(36c) *Ich will wohlerwogene   Risiken eingehen, um   darüber   zu träumen*   Dat-Nom
I   will well.considered risk   in.come in.order there.about to dream
und darauf   zu bauen, **um**   __   **zu mißlingen** *und erfolgreich zu sein.*
and there.upon to build in.order PRO.DAT to   fail.INF   and successful to be
'I will arrive at well-considered risks, dream about them and build upon them, in order to fail and become successful.'

In (36a) the nominative of *gefallen* is left unexpressed on identity with the nominative subject *er* 'he' in the matrix clause. This is expected on the analysis that the nominative is the subject. However, in example (36b), it is the dative experiencer that is left unexpressed, as is evident from the fact that the nominative *etwas* 'something' is present. There is no antecedent in the preceding context; given the generic reading of the whole clause, the antecedent is retrievable from the context. The fact that the dative is left unexpressed in (36b) is only compatible with a subject analysis of the dative, again corroborating our claim that *gefallen* is an alternating predicate like Icelandic *falla í geð*, and unlike *líka*. The example in (36c) contains the verb *mislingen* 'fail' and not *gefallen*. Here the dative argument is left unexpressed on identity with a nominative subject *ich* 'I' in the matrix clause. These three examples suggest that either the nominative of Nom-Dat (36a) or the dative of Dat-Nom (36b–c) may be left unexpressed in control infinitives in German, and hence that Dat-Nom predicates in German alternate between two inverse argument structures, exactly like *falla í geð* in Icelandic. Recall that examples like (36b–c), with the dative experiencer being left unexpressed in control infinitives, are generally taken to be the most conclusive evidence for the subject status of non-nominative subjects by the linguistic community.

To summarize the content of this section, we have presented German data involving word order, reflexivization, raising-to-subject, 'let' causatives, and control, which all point to the behavior of these predicates in German as being parallel to that of Icelandic alternating predicates, i.e. predicates of the *falla í geð* type, as opposed to the *líka* type. The recognition of this fact is important because it helps to explain the deviant behavior of such predicates in German, which neither behave properly as Nom-Dat predicates, nor as Dat-Nom predicates. Of course, if one takes the word order distributions, involving both Dat-Nom and Nom-Dat surface structures in German, to reflect only one argument structure, predicates like *gefallen* clearly seem to exhibit anomalous behavior. On an alternating analysis, however, this apparent anomaly is accounted for.

Despite the consensus that Dat-Nom is neutral word order for predicates like *gefallen*, many scholars have rejected the hypothesis that there are dative subjects in German, partly on the basis of the fact that the nominative may be left unexpressed in control infinitives in German, of the type given in (36a). Cole et al. (1980: 727), for instance, give the following examples as evidence for the subject status of the nominative as opposed to the dative, as suggested by the fact that the nominative is left unexpressed in control constructions (37a) and the dative is not (37b):

(37a) *Ich   versuchte,* __   *diesen   Damen*   **zu gefallen**.
I.NOM tried   PRO.NOM these.DAT ladies.DAT to *ge*.fall.INF
'I tried to please these ladies.'

(37b) **Ich   versuchte,* __   *diese   Damen*   **zu gefallen**.
I.NOM tried   PRO.DAT these.NOM ladies.NOM to *ge*.fall.INF
Intended: 'I tried to like these ladies.'

Since the nominative takes on the behavioral properties of subject with *gefallen*, as shown in (37a), an analysis of the dative as being subject has been excluded by the Germanic linguistics community. In general, the argument structure of these predicates is regarded as being Dat-Nom, but yet subject status has been assigned to the second-ranked argument of the argument structure rather than the first argument. This stipulation applies to no other verb class in German, where it is otherwise always the first argument of the argument structure that is analyzed as a subject.

By assuming an alternating analysis as we have done here, we can dispense with the stipulation that the subject is the second-ranked argument for this verb class and this verb class only, and we can analyze the first argument of the argument structure as a subject, regardless of case marking. The data presented in this section corroborate an alternating analysis, namely that predicates like *gefallen* may instantiate either the Dat-Nom case frame or the Nom-Dat case frame. As a consequence, neither the Dat-Nom word order nor the Nom-Dat word order involves a topicalization of the other; instead Dat-Nom and Nom-Dat count as two related but independent argument structure constructions in German. Such an analysis also invalidates the view that the subject properties of the nominative exclude the possibility of German having oblique subjects, as has been the dominant view (cf. Cole et al. 1980, Wunderlich 2008)

One might now object that it is considerably easier to omit the nominative in control infinitives than the dative (cf. 37b). This objection, hower, does not qualify as an argument against a subject analysis of the dative, since dative-subject-like arguments can be left unexpressed, although with restrictions. The examples in (36b–c) are by no means our only examples of dative subject-like arguments being omitted in control constructions. Below we present four additional examples.

(38)   Shermer deutete auf die Rohre in einem Brause-Raum im Mauthausen Lager hin, das Touristen als eine Hinrichtungs-"Gaskammer" vorgeführt wird. Indem er behauptete, daß durch diese Rohre Dampf geleitet wurde, um den Raum zu heizen, warf er die Frage auf: "Was kann es anderes (anderes als Tötungsabsichten) bedeuten? Warum würden Sie ein Brausebad wärmen wollen?" *Nun, wie wäre es damit, um vielleicht jemanden, der sich duschen wollte, davor zu bewahren,* **kalt zu ___ werden** oder weil derjenige, der die Installationen anbrachte, sich nicht um Ästhetik kümmerte und die Rohre sichtbar ließ oder unzählige andere vernünftige Gründe.

'Shermer pointed at the pipe in a shower room in the Mauthausen camp, which is presented to tourists as an execution 'gas chamber'. Claiming that steam was lead through this pipe in order to heat up the room, he raised the question: 'What else can it mean (than an intention to kill)? Why would you want to warm up a shower cabin?' *Well, how about maybe in order to prevent somebody who would like to take a shower from* **feeling cold**, or because the person who fitted the installation did not care about aesthetics and let the pipeline be visible, or countless other sensible reasons.' (http://www.zundelsite.org/german/artikel/RevDeb.html)

In this example it is the predicate *kalt sein* 'to feel cold' which selects for a dative subject-like argument, that occurs in a control infinitive with the dative omitted. The context shows that this is not the homophonous *kalt sein* with a nominative used about actual temperature as opposed to experienced temperature. Hence, there is no doubt that the unexpressed argument is a dative, and not a nominative.

In our next example, it is the predicate *übel werden* 'feel sick' that occurs in a control infinitive, and it is also clear from the context that a dative subject-like argument has been left

unexpressed and not a nominative argument, since the meaning is clearly 'feel sick' and not 'be evil'.

(39)   Hier sind wir noch halb sinnlich, und es ist äusserst naturwidrig, hier alles verleugnen wollen, was Gott dem physischen Menschen zum Labsal und zur Erfrischung hie und da am Pfade unserer Wallfarth aufgetischt hat: aber den Lebensweg darum pilgern, um an diesen Erquickungsorten zu schmausen, *das ist so verächtlich, daß man das Auge davon abwenden muß,* **um ___ nicht übel zu werden.**

Here we are still half sensuous, and it is very much against nature to abstain from everything here that the Lord has served the physical person for comfort and refreshment here and there on the path of our pilgrimage: but to take a pilgrimage on the path of life in order to feast at these rest places, *that is so disgusting that one has to turn (the eye) away* **in order not to feel sick**.'
(home.t-online.de/home/dr.erich.mertens/STILLIN2.htm, *1789*)

Consider next example (40), where the passive *assistiert werden* 'be assisted' occurs in a control infinitive, with the dative subject-like argument being omitted.

(40)   Häufig ist die gesamte Alltagsbewältigung behinderter Menschen auf Assistenz angewiesen, vom Aufstehen, Waschen, Anziehen über Essen und Bewegen. Die Betroffenen bauen fast immer ein Vertrauensverhältnis zu ihren Betreuern auf. Potenzielle Täter nutzen das freundschaftliche Verhältnis häufig aus, um gezielt die Bedürfnisse des behinderten Menschen auszuforschen. Je größer die Abhängigkeit, umso größer ist die Gefährdung. Wie soll man Berührungen auch vermeiden, wenn auch die intimsten Handlungen nicht alleine bewerkstellig werden können? *Ein Recht für geistig wie körperlich behinderte Frauen, ___* **nur** *von Frauen bei intimen Handlungen* **assistiert zu werden**, gibt es in der Bundesrepublik ... nicht.

'In coping with their everyday life, disabled people are often forced to seek assistance, from the moment they get up, wash, get dressed and with eating and moving around. These people almost always build up a relationship of trust with their carers. Potential offenders often take advantage of this friendly relationship with the specific aim to gather information about the needs of the disabled person. The greater the dependency, the greater the threat. How is one supposed to avoid contact, if even the most personal activities cannot be performed in privacy? *The right for mentally and physically disabled women* **to only be assisted** *by women* when engaged in private activities does not exist ... in Germany.'
(www.freitag.de/2002/45/02450402.php, *2002*)

Our last example is also a passive, in this case *widersprochen werden* 'be contradicted', with the dative subject-like argument unexpressed.

(41)   Denn ein Teil dieser Erkenntnisse, die mathematischen, ist im alten Besitze der Zuverlässigkeit, und gibt dadurch eine günstige Erwartung auch für andere, ob diese gleich von ganz verschiedener Natur sein mögen. *Überdem, wenn man über den Kreis der Erfahrung hinaus ist, so ist man sicher, ___ durch Erfahrung nicht* **widersprochen zu werden**.

'Because a part of this knowledge, the mathematical one, has always possessed reliability, and by means of this it provides a favorable expectation for others, even though these may be of a quite different nature. *Besides, if one has left the sphere of experience, one can be certain not **to be contradicted** by experience.*'
(www.gutenberg2000.de/kant/krva/krva003.htm, *1781*)

The examples in (38–41) above demonstrate that attested utterances exist in which a subject-like dative has been left unexpressed in a control infinitive in the German language. The examples above are all documented examples, they all stem from speakers who use these predicates with dative subject-like arguments, and three out of four producers of these examples (39–41) are academics. Of these, the last example is from Immanuel Kant's *Critique of Pure Reason*, example (40) is from a contemporary gender researcher, and example (39) is from Prof. Jung-Stilling's revised version of *Rede über den Werth der Leiden* (Lecture on the significance of suffering).

More examples of this type have been reported in Barðdal & Eythórsson (2003b, 2006), Eythórsson & Barðdal (2005) and Barðdal (2006). However, all the examples we reported on in our previous work are either passives (*widersprochen/assistiert werden*) or compositional predicates with the verb 'be' and an adjective (*übel/kalt sein*). The example in (36b) adds a Dat-Nom predicate to this list.

There is no doubt that the omissibility of oblique subjects in control constructions in German is significantly more restricted than that of nominative subjects. We would like to emphasize that examples of this type are few and far between. They are certainly marginal and not accepted by all speakers. We refer the reader to our own acceptability judgment studies, reported on in Eythórsson & Barðdal (2005), Barðdal (2006) & Barðdal & Eythórsson (2006), where we show that speakers vary a great deal in their internal rating of examples like these. Interestingly, this is also true for Modern Icelandic, where there is more variation in speakers' judgments than is often discussed in the literature. The question is whether the marginality of these examples is relevant or not. What is important here, we believe, is that the German and Icelandic speakers who have uttered and accepted these strings treat the dative of Dat-Nom predicates in the same way as they treat canonical nominative subjects.

There may be different reasons for why the omission of nominative subjects is easier in control constructions than the omission of oblique subjects. One possibility is that oblique subjects are a marked alternative in the grammar, while nominative subjects are unmarked. That may, in turn, result in different restrictions on the omissibility of nominative vs. oblique subjects (Bayer, Bader & Meng 2001, Barðdal 2006). If so, then the restricted nature of the omissibility of oblique subjects in German is not an argument against a subject analysis. It then follows that the difference between Icelandic and German is not categorical but gradient, contrary to the standard story (Zaenen, Maling & Thráinsson 1985, Sigurðsson 1989, Fanselow 2002, Bayer 2004, Wunderlich 2008) that Icelandic has oblique subjects and German does not. The great Icelandic–German divide, therefore, does not exist.

At this juncture, we would like to draw the reader's attention to the fact that alternating predicates of the type described above are not limited to Icelandic and German, even though our discussion so far has been focused on these languages. They are also well known in Modern Faroese (Barnes 1986), and their existence has been argued for in the history of English (Allen 1995) and the history of the Mainland Scandinavian languages (Barðdal 1998). As such, alternating predicates may have to be reconstructed for Proto-Germanic, and their roots may go even further back than that as we have encountered potential examples of such predicates in Lithuanian, Latin, Ancient Greek and Sanskrit.

Having demonstrated in this section that Dat-Nom predicates in German like *gefallen* show the same syntactic behavior as Icelandic *falla í geð* and not as Icelandic *líka*, we now turn

to the relationship between Dat-Nom and Nom-Dat argument structures for these predicates, and how they may be modeled in the grammars of Icelandic and German.

4.   Sign-Based Construction Grammar Account

The earliest work on alternating predicates in the syntactic literature was purely descriptive. Bernódusson (1982) was the first to discuss these predicates in Modern Icelandic, and the issue was subsequently taken up by Barnes (1986) for Faroese, Allen (1995) for Old English, and Barðdal (1998) for the history of the Scandinavian languages. It is not obvious how to account theoretically for this alternating behavior of one and the same predicate. In addition to earlier descriptive accounts, some theoretical suggestions have been made, which we will review in the following, including the accounts of Barðdal (1999, 2001), Platzack (1999), and Wood & Sigurðsson (2014). We conclude this section by presenting our own analysis, couched within the framework of Sign-Based Construction Grammar (Sag 2012, Michaelis 2010, 2012, Boas & Sag 2012).

A default option would be to assume homophony, i.e. two verbs with the same phonetic form but two different syntactic behavioral patterns. Barðdal (1999, 2001) argued against such an account, proposing instead a constructional analysis of the phenomenon, in which only one entry in the lexicon is needed, and the difference in behavior is accounted for by assuming the existence of two complementary diametrically-opposed argument structure constructions. In a response to this account, Platzack (1999) suggested a minimalist analysis which assumes that the argument structure of these predicates is a lexical property peculiar to them. He assumes that alternating predicates have a different structure than Dat-Nom predicates of the *líka* type, since his analysis of the *líka* type excludes Nom-Dat structures. Unfortunately, this proposal reduces the problem to a stipulation, and cannot be considered to have any explanatory value.

A more recent analysis is suggested by Wood & Sigurðsson (2014) who also deal with the two types of Dat-Nom predicates discussed here, under the label *symmetric* and *asymmetric* predicates (first suggested by Barðdal 2011). They claim that there are empirical differences between the two types of Dat-Nom predicates, both with respect to syntactic behavior and event structure. Starting with the differences in event structure, they propose that non-alternating predicates express an experience, state or activity, while alternating predicates highlight a property of the nominative argument. This, in turn, results in differences in syntactic behavior, namely that alternating predicates can occur in an argument structure without the dative, while non-alternating predicates do not have this option. Wood & Sigurðsson point out that there are some exceptions to this. The two exceptions that they mention are, first, that the verb *líka* may marginally occur without the dative, and, second, that verbs like *hugnast* 'like' and *ofbjóða* 'be shocked at' are alternating predicates, and not non-alternating predicates, as predicted on Wood & Sigurðsson's own account.

With regard to *líka*, we maintain that the argument structure without the dative is indeed felicitous in Icelandic, and not in any way marginal, as Wood & Sigurðsson claim. We provide three attested examples below to corroborate this and more are readily found on the World Wide Web:

(42a) *Ef **þetta   líkar vel** er þetta nánast bylting   fyrir frystihúsin.*
       if this.NOM likes   well is this almost revolution for fish.factories
       'If this turns out well, it will almost be a revolution for the fish factories.'
                                                                    (Dagur, 14.07.1986)

(42b)   *Það   er búið að skrifa handritið   og   prufuþáttur í   undirbúningi*
        it.EXPL is done to write manuscript.the and demo   in preparation
        *og   ef **hann   líkar vel** þá   fer   þetta í framleiðslu.*
        and if he.NOM likes   well then goes this in production
        'The manuscript has been written and a demo is being prepared, and if it turns out
        well, this goes into production.' (*Vísir*, 20.10.2010)

(42c)   **Þetta   líkar vel** *og   hefur selst.*
        this.NOM likes   well and has sold.REFL
        'This has been a success and has sold well.'
                        (http://flateyri.wordpress.com/page/14/, 15.12.2009)

This behavior is not at all special for the verb *líka*; there are several other non-alternating Dat-Nom predicates, which consistently occur in the argument structure without the dative, contra Wood & Sigurðsson. Two such predicates are *ganga vel/illa* 'be un/successful' and *þykja* 'be considered'. The examples below are all taken from the Icelandic press:

(43a)   **Snjómokstur   gengur vel** *á   Ísafirði.*
        snow.ploughing.NOM goes   well in Ísafjörður
        'The snow ploughing is working well in Ísafjörður.' (Morgunblaðið, 15.04.2013)

(43b)   **Jólaverslunin   gengur ágætlega**.
        Christmas.shopping.NOM goes   well
        'The Christmas shopping is going well.' (Vísir 22.12.2012)

(43c)   **Hann þykir**   *hafa staðið sig   vel   sem utanríkisráðherra.*
        he.NOM is.considered have stood himself well as foreign.minister
        'He is considered to have done a good job as foreign minister.' (Pressan 15.11.2012)

In addition, there are several alternating Dat-Nom predicates that should occur in the argument structure without the dative, according to the predictions of Wood & Sigurðsson, contrary to fact. Below is a list of a few such alternating predicates taken from Barðdal (2001: 53–55):

> *berast í hendur* 'receive', *falla e-ð í skaut* 'receive', *falla verk úr hendi* 'fail to do sth', *hrjóta af vörum* 'let words slip', *hverfa veröldin* 'sleep for a while, *koma við* 'be of sby's business', *koma í koll* 'get in trouble', *liggja e-ð á hjarta* 'be anxious', *ratast á munn* 'accidentally speak', *renna til rifja* 'cut to the quick', *standa fyrir þrifum* 'hampered by sth', *vaxa e-ð í augum* 'find sth more difficult than it really is', *vera ofvaxið* 'be beyond sby's power', *verða til lífs* 'survive', *vera til lista lagt* 'have a talent'

The examples in (44) illustrate, for three predicates, that they cannot occur without the dative:

(44a)   **Sannleikurinn ratast   alltaf   á munn.*
         truth.NOM   finds.way always on mouth

(44b)   **Þetta   varð   til lífs.*
         this.NOM became to life

(44b) *Margt   var til lista lagt.
       much.NOM was to skill put

As is evident from the list of predicates above, these are not predicates that modify the theme, (using the terminology of Wood & Sigurðsson), but rather predicates that modify a state/experience/activity. The proposal of Wood & Sigurðsson that there is a semantic distinction between the two types of verbs thus appears to be without any empirical foundation.

     With regard to the second exception that Wood & Sigurðsson bring up, i.e. the word order distribution of verbs like *hugnast* 'like' and *ofbjóða* 'be shocked at', these predicates should be non-alternating according to their analysis, again contrary to fact, as they acknowledge. The problem with their analysis is that they assume that a semantic distinction goes hand in hand with syntactic behavior, whereas in reality it does not. It is on this distinction that their theoretical analysis is based, an analysis that is not tenable, as we have shown here.

     Instead, we would like to suggest a constructional approach, in terms of Sign-Based Construction Grammar. In contrast to Wood & Sigurðsson, we do not assume that there is a semantic difference between the two types of verbs, alternating vs. non-alternating predicates. An important reason is that there are several synonymous predicates found across the two classes. One pair is *líka* and *falla í geð* which both mean 'like', another is *geðjast* and *hugnast* also meaning 'like', *svíða* and *sárna*, which both mean 'feel hurt' in addition to the near synonyms *áskotnast* 'acquire' and *berast* 'receive' and *gremjast* 'be annoyed' and *vera fjarri skapi* 'dislike'. This shows that whether a Dat-Nom verb is alternating or not is a lexical idiosyncrasy. This is confirmed by the fact that historically there is a porous boundary between the two classes; *líka*, for instance, may have been an alternating predicate in Old Icelandic (cf. Barðdal 2001: 60), which is possibly the Proto-Germanic situation with this verb, as suggested by the evidence for the corresponding verb in Old English (Fischer & van der Leek 1983). Observe that we are not claiming that there cannot be a semantic difference between the different subclasses of alternating and non-alternating predicates, but rather that there is substantial enough semantic overlap between the two types to invalidate Wood & Sigurðsson's analysis.

     Therefore, we do not suggest that the syntactic difference between the two types of predicates is stipulated in the lexical entry. Instead, we propose that the difference is accounted for through the interaction between the lexical entry and the argument structure constructions a predicate may instantiate. Non-alternating predicates may only instantiate the Dat-Nom argument structure construction, while alternating predicates may instantiate either the Dat-Nom or the Nom-Dat argument structure construction. This means that from the perspective of a modular theory, we move the locus of the explanation from the lexicon to the syntax. As Construction Grammar is a non-modular, monostratal, theory, the difference between the two types of predicates is accounted for through different networks and hierarchies of constructions.

     More technically, we would like to suggest a formalization of the lexical entry, as in the Attributed Value Matrix (AVM) in Figure 1 for *falla í geð*. Notice that the lexical entry for German *gefallen* would be identical except for the FORM. First, the curly brackets in the argument structure list (ARG-ST) indicate that this is an unordered list; the ordering of the arguments is determined by the argument structure construction (see Figures 2–3 below). Second, the tag indicated by the boxed numeral on the agreement (AGR) value and the nominative marked argument NP-Nom$_j$ indicates that the verb will agree in person and number with the nominative-marked argument, regardless of whether this is the left-most argument (subject) or not.

```
lexeme

FORM      <falla í geð>

SYN       ARG-ST {NP-Dat_i, [1] NP-Nom_j}
          AGR [1]

SEM                        experiencer-fr
          FRAMES           EXPERIENCER i
                           STIMULUS j
```

Figure 1: Lexical Entry for *falla í geð*

The entries for the two argument structure constructions, Dat-Nom and Nom-Dat, are given in Figures 2–3. Note that the ARG-ST lists are now ordered, indicated by the angled brackets.

```
argument structure cxt

SYN       ARG-ST <NP-Dat_i, [1] NP-Nom_j>
          AGR [1]

SEM                   experiencer-fr
          FRAMES      EXPERIENCER i
                      STIMULUS j
```

Figure 2: Dat-Nom Argument Structure Construction

```
argument structure cxt

SYN       ARG-ST <[1] NP-Nom_j, NP-Dat_i>
          AGR [1]

SEM                   experiencer-fr
          FRAMES      EXPERENCER i
                      STIMULUS j
```
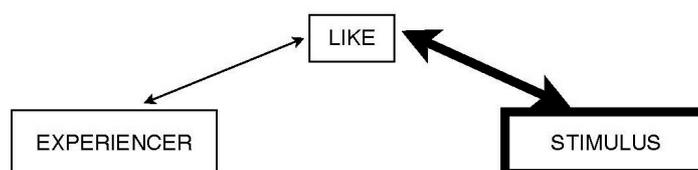
Figure 3: Nom-Dat Argument Structure Construction

The difference between the two argument structures does not relate to lexical semantics, i.e. there are not two separate lexical entries for *falla í geð* or *gefallen*, one meaning 'like' and another meaning 'please'. Instead, each argument structure construction foregrounds one aspect of the event denoted by the lexeme (see below); the event structure for the two argument structure constructions is identical, as indicated by their identical SEM entries. The difference between the two argument structures is rather that different elements of the semantic frame are foregrounded: In the Dat-Nom argument structure construction, it is the

dative experiencer that is foregrounded, shown in Figure 4, while in the Nom-Dat argument structure construction, it is the nominative stimulus that is foregrounded, see Figure 5.
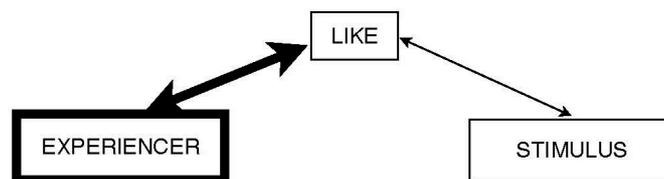
Figure 4: Foregrounding of the Experiencer in the Dat-Nom Construction

Figure 5: Foregrounding of the Stimulus in the Nom-Dat Construction

The difference between the two argument structure constructions is thus similar to the difference suggested by Langacker (1991: 154–156) for different uses of the predicate *be near*, which he analyzes in terms of foregrounding:

(45a)   John is near Mary.
(45b)   Mary is near John.

The relation between the two arguments of *be near*, in this case, John and Mary, is static. Hence, this relation can be expressed either by foregrounding John or by foregrounding Mary, depending on the speaker's stance, and depending on which of the two arguments the speaker choses to zoom in on.

The situation with alternating predicates and their ability to enter into two diametrically-opposed argument structure constructions is parallel to the situation with *be near*. The speaker has a choice as to which of the two arguments s/he foregrounds. In the following examples, it is the referent of the nominative argument that is foregrounded in (46a–b), while the referent of the dative argument is foregrounded in (47a–b). In (46a–b and 47a) the subject is also linked by the immediate context, while in (47b) it is linked by the wider context.

(46a)   *Norðursigling notar gamla íslenska eikarbáta … við starfsemi sína. **Það** fellur gestum vel í geð.*
'The Northern Cruise uses old Icelandic oak boats … in their business. This is very much to their guests liking.' (Morgunblaðið, 02.05.2013)

(46b)   *Stytting náms er nú til skoðunar hjá menntamálaráðuneytinu en **hugmyndin** fellur ekki öllum í geð.*
'The shortening of the study program is now under consideration at the Ministry of Education, although the idea is not to everybody's liking.' (DV, 22.06.2013)

(47a)   *Greinilegt var á undirtektum tónleikagesta að **þeim** féll vel í geð bæði efnisval og flutningur á þessum tónleikum.*

'It was obvious from the applauses of the concert guests, that they really liked both the choice of songs and the performance at this concert.'
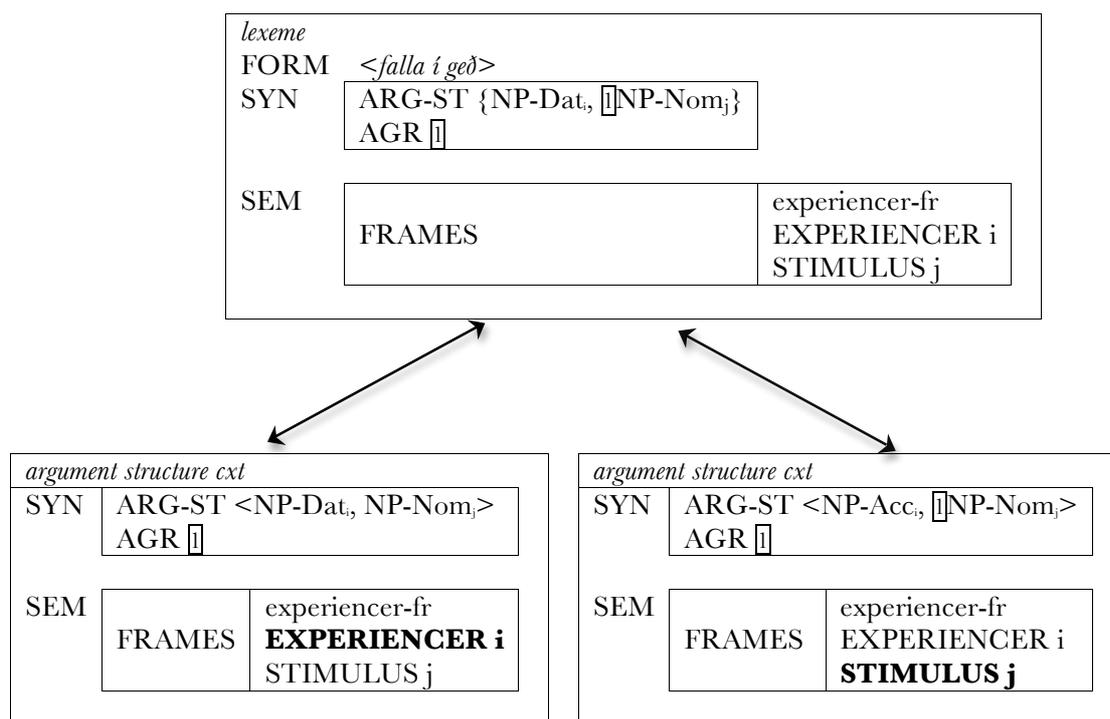
(47b) *Þannig var oft á tíðum nokkuð margt í eldhúsinu, sem eflaust sumir hefðu amast við, en **Ástu** féll þetta vel í geð.*
'In those days, there were often a lot of people in the kitchen, which some people might doubtless have been unhappy about, but Ásta quite liked this.
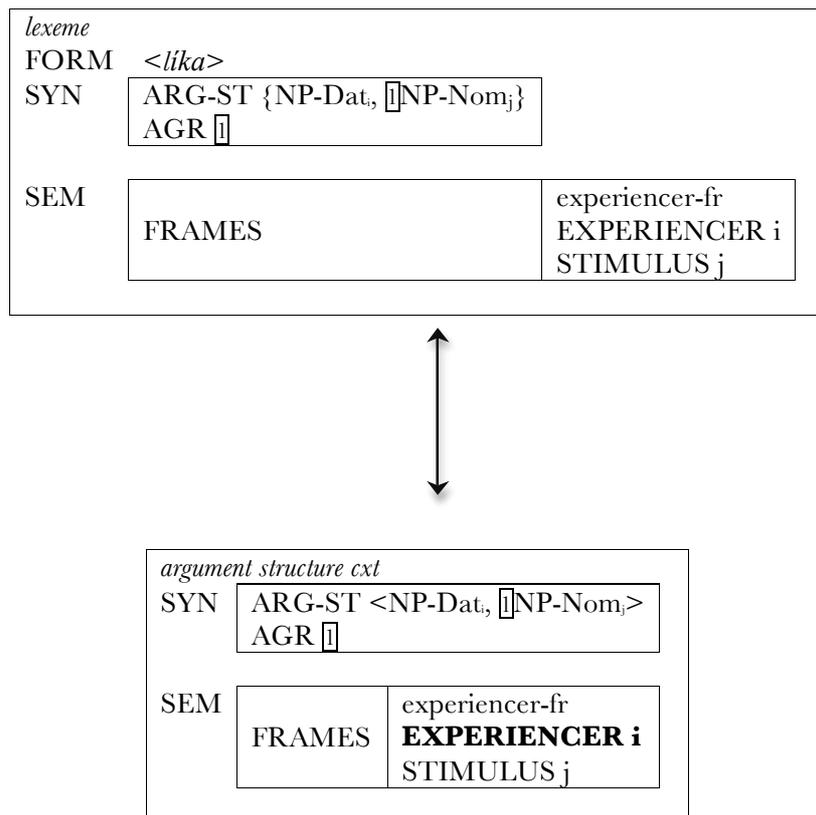
(Morgunblaðið, 21.05.1994)

Returning to the SBCG formalism, the lexical entry for *líka* would be identical to the lexical entry for *falla í geð*, except for the FORM field. The difference between the two predicates lies in the fact that *líka* only instantiates the Dat-Nom argument structure construction in Figure 2, and not the Nom-Dat argument structure construction in Figure 3. This results in a different network for alternating and non-alternating predicates, with reciprocal links between the lexical entries and the argument structure constructions, again emphasizing the non-modular property of Construction Grammar.

Figure 6 represents the constructional network for alternating predicates like *falla í geð* with links between the lexical entry and the two argument structure constructions, while Figure 7 represents the constructional network for non-alternating predicates like *líka* with reciprocal links between the lexical entry and only the Dat-Nom argument structure construction.

Figure 6: Constructional Network for Alternating Predicates

lexeme		
FORM	*<líka>*	
SYN	ARG-ST {NP-Dat$_i$, [1]NP-Nom$_j$}	
	AGR [1]	
SEM	FRAMES	experiencer-fr
		EXPERIENCER i
		STIMULUS j

argument structure cxt		
SYN	ARG-ST <NP-Dat$_i$, [1]NP-Nom$_j$>	
	AGR [1]	
SEM	FRAMES	experiencer-fr
		EXPERIENCER i
		STIMULUS j

Figure 7: Constructional Networks for Non-Alternating Predicates

Returning to the issue of ordered vs. non-ordered lists of arguments within the lexical entry, three theoretical possibilities may be entertained:

1) All predicates have an ordered list of arguments
2) All predicates have an ordered list of arguments, except alternating predicates which have an unordered list of arguments
3) All predicates have an unordered list of arguments

Starting with the first option, it is problematic for two reasons. First, if there is an ordered list of arguments in the lexical entry, the argument structure construction has simply been moved into the lexical entry, and thus becomes redundant as a construction of its own. Second, it has already been established for a number of languages that argument structure constructions are needed independently of lexical entries, recall the classical discussion about English *kick* which can occur in several different argument structure constructions (cf. Goldberg 1995: 11). On a modular approach that operates with lexicon and syntax as two separate modules, this amounts to moving the argument structure into the lexicon. To continue the analogy with the preposition *near*, it would appear as theoretically unsatisfactory to assume two different lexical entries for the English *near* depending on whether Mary is near John or John is near Mary.

The second option might seem attractive, with an unordered list for alternating predicates only, and an ordered list for all other predicates. The argument against this option is partly the same as against the first option; we would still be moving the argument structure into the lexical entry for all predicates, except for alternating ones. This would also not be adequate for verbs like English *kick*, as already mentioned. Furthermore, assuming that the arguments of alternating predicates are listed in an ordered list in the argument structure construction amounts to stipulation for one particular class of predicates, and thereby

eliminates the possibility of consistency within the structure of the lexicon. It also entails that the argument structure constructions for all predicates become redundant, as they have been moved into the lexical entry, except with alternating predicates, where the argument structure has not been moved into the lexical entry, hence resulting in differences in the structure of the constructional network for different predicates. We also believe that this second option runs counter to the cognitive reality in the minds of speakers; as has been shown by Goldberg & Bencini (2005) and Allen et al. (2012), argument structure constructions are independent cognitive entities that must be assumed to exist irrespective of the verbs instantiating them, and ongoing work further corroborates this assumption.

The third option, that all predicates have an unordered list of arguments in their lexical entries, appears as conceptually adequate based on the data under investigation here. The order of the arguments is instead found in the argument structure construction itself. The existence of alternating predicates demands a solution like the present one, where the list of arguments is unordered in the lexical entry. If not, there would have to be two lists in the lexical entry for these predicates, which amounts to moving the argument structure into the lexical entry, an option that we have already argued against above. In other words, for alternating predicates, we assume a link with two argument structure constructions, while for non-alternating ones, there is only a link to one of the two argument structure constructions. This way, we achieve consistency throughout the constructional network across different types of predicates.

Note that it is, of course, not only predicates like *kick* that may instantiate several argument structure constructions, also some of the oblique subject predicates discussed above can occur in several argument structure constructions, without the dative, like *líka* in (42) above which may occur in intransitives without the dative, and multiple argument structure constructions are found for several other predicates. In fact, this may be the rule rather than the excpetion. These additional argument structure constructions are also reciprocally linked to the lexical entry of each predicate, but are not located in the lexical entry itself.

One variant of this last option is to assume an unordered list and a "shuffle operator" that orders the arguments in the ARG-ST list (cf. Müller 2012). The problem with this variant is that through this shuffling operation, two lexical entries arise, exactly as on the traditional account. This outcome is, in our view, unappealing, given the arguments against assuming separate lexical entries for the two argument structure constructions of alternating predicates. Furthermore, the shuffle operator would not account for additional argument structure constructions that a verb may instantiate, like intransitive variants of *líka* 'like' and *henta* 'suit' without the dative. Hence, a shuffle operator would, anyway, only account for a subset of the argument structure constructions a predicate can occur in.

5. Summary

Icelandic is well known for being one of the languages of the world where syntactic subjects do not have to be canonically marked in the nominative, but may occur in the accusative, dative or genitive case. One subtype of oblique subjects in Icelandic is the standard Dat-Nom argument structure construction, where the subject is in the dative case and the object in the nominative case. This is the argument structure that we find with the well-known verb *líka* 'like' in Icelandic. However, as we have shown above, Icelandic has an additional type of Dat-Nom predicates, which alternates systematically between two diametrically-opposed argument structures, namely Dat-Nom and Nom-Dat. This pattern is found with *falla í geð* 'like, be to sb's liking, please', and a detailed comparison between the two word orders shows that one is not a topicalization of the other, but that these are in fact two distinct, but related argument

structure constructions. The subject behavior used to establish this involves word order, binding, raising, reduction of coordinated subjects, and control. When the word order is Dat-Nom, the dative takes on the behavioral properties of subjects, whereas with the Nom-Dat word order, the nominative shows exactly the same behavioral subject properties.

One of the reasons that the dative of Dat-Nom predicates in German, like *gefallen* 'like, be to sb's liking, please', have not been analyzed as a syntactic subject in that language is the fact that the nominative shows some behavioral properties of subjects. This appears as a major paradox. However, on an alternating analysis, this behavior is expected. Therefore, we have by means of a systematic comparison analyzed the syntactic behavior of verbs like *gefallen* in German and found that they pattern in the same way as Icelandic *falla í geð*, and not like Icelandic *líka*. Either the dative or the nominative show the word order distribution of subjects, either argument shows the word order distribution of objects, either argument may be left unexpressed in conjunction reduction and control infinitives, either one can be raised to subject, and either one behaves as ordinary nominative subject do with regard to binding. The subject behavior of the nominative is found with the Nom-Dat word order, while the subject behavior of the dative is found with the Dat-Nom word order. This correlation between subject behavior and word order corroborates our analysis that these are in fact two distinct, although related, argument structure constructions.

We have also presented additional examples of non-nominative subjects being left unexpressed in control infinitives in texts from different periods of German, with the compositional predicates *kalt sein* 'feel cold' and *übel sein* 'feel sick', and the passives *assistiert werden* 'be assisted' and *widersprochen werden* 'be contradicted'. We are well aware of the fact that not all German speakers find such examples felicitous. However, these examples are attested in texts produced by native speakers, which testifies to the fact that these speakers treat the dative as the syntactic subject in control infinitives. We have, in connection with earlier work, carried out grammaticality judgement tests among native speakers of German, which show that the examples are accepted by a proportion of the population, although certainly not by everybody. Parallel surveys, conducted among Icelandic speakers show similar results in that not all attested examples are accepted by the whole population. There is thus no doubt that examples of this type are marginal, but they exist and are being produced by native speakers. This fact cannot be ignored by the scholarly community, and examples of this type must be included in the description of the languages where they are found, as well as being coherently accommodated within any theoretical framework.

We have here opted for an account within Sign-Based Construction Grammar, in which we assume only one lexical entry for alternating predicates, exactly as with non-alternating ones, the difference being that the *líka* type can only instantiate the Dat-Nom argument structure construction, while the *falla í geð/gefallen* type can occur in either the Dat-Nom or the Nom-Dat argument structure construction. The lexical entry consists of an unordered list of arguments, while in the argument structure constructions the list is ordered. We have favored this analysis over having an ordered list in the lexical entry, since this would in essence mean that the argument structure has been moved into the lexical entry, and thus becomes redundant as a construction of its own. Empirical evidence, however, supports the existence of argument structure constructions as cognitive entities. In our model, the *falla í geð/gefallen* type is linked with reciprocal links to both argument structure constructions, Dat-Nom and Nom-Dat, while the *líka* type is only linked with the Dat-Nom construction. We have also argued that the choice between the Dat-Nom and Nom-Dat constructions with the *falla í geð/gefallen* type is based on which of the two arguments is foregrounded by the speaker, and is thus analogous to the situation with English *be near*, where the speaker has to make a choice with regard to the relative positioning of one of the referents to the other.

Alternating predicates of the type discussed in this article are found in Icelandic and Faroese, and have been argued to exist in the history of the Scandinavian languages and Old English. The existence of alternating predicates is, however, not well known in the field of theoretical syntax, and hence the behavior of predicates like German *gefallen* 'like, be to sb's liking, please', appears as paradoxical. On an alternating analysis, this paradoxical behavior finds a natural explanation; the dative shows behavioral properties of subjects when *gefallen* occurs in the Dat-Nom construction, whereas the nominative behaves as subject when *gefallen* occurs in the Nom-Dat construction. This explains one major discrepancy between Icelandic and German discussed in the literature, on which basis Icelandic has been deemed as having oblique subjects and German not. The data presented here invalidate this alleged major divide believed to hold between these two closely related languages, showing that no such fundamental difference between Icelandic and German exists. Rather, the difference is that German, in contrast to Icelandic, only has alternating Dat-Nom predicates, while Icelandic has both alternating and non-alternating predicates. Without an understanding of the nature of alternating predicates, the difference between Icelandic and German cannot be fathomed. There are reasons, moreover, to believe that alternating predicates are not confined to Germanic, but are also found in other Indo-European languages, and perhaps even further afield.

References:

Allen, Cynthia L. 1995. *Case Marking and Reanalysis: Grammatical Relations from Old to Early Modern English*. Oxford: Clarendon Press.

Allen, Kachina, Francisco Pereira, Matthew Botvinick & Adele E. Goldberg. 2012. Distinguishing Grammatical Constructions with fMRI Pattern Analysis. *Brain and Language* 123: 174–182.

Anderson, Stephen R. 1976. On the Notion of Subject in Ergative Languages. In *Subject and Topic*, ed. by Charles Li, 1–23. New York: Academic Press.

Andrews, Avery. 1976. The VP complement analysis in Modern Icelandic. *North Eastern Linguistic Society* 6:1–21.

Barðdal, Jóhanna. 1998. Argument Structure, Syntactic Structure and Morphological Case of the Impersonal Construction in the History of Scandinavian. *Scripta Islandica* 49: 21–33.

Barðdal, Jóhanna. 1999. The Dual Nature of Icelandic Psych-Verbs. *Working Papers in Scandinavian Syntax* 64: 78–101.

Barðdal, Jóhanna. 2001. The Perplexity of Dat-Nom Verbs in Icelandic. *Nordic Journal of Linguistics* 24:47–70.

Barðdal, Jóhanna. 2006. Construction-Specific Properties of Syntactic Subjects in Icelandic and German. *Cognitive Linguistics* 17–1:39–106.

Barðdal, Jóhanna. 2011. Alternating Dat-Nom/Nom-Dat Verbs in a Germanic Context. Talk delivered at the 33rd Annual Conference of the Deutsche Gesellschaft für Sprachwissenschaft, Göttingen, 23–25 February.

Barðdal, Jóhanna & Thórhallur Eythórsson (2003a). The Change that Never Happened: The Story of Oblique Subjects. *Journal of Linguistics* 39(3): 439–472.

Barðdal, Jóhanna & Thórhallur Eythórsson (2003b). Oblique Subjects: A Germanic Inheritance. *Working Papers in Scandinavian Syntax* 71: 145–202.

Barðdal, Jóhanna & Thórhallur Eythórsson (2006). Control Infinitives and Case in Germanic: 'Performance Error' or Marginally Acceptable Constructions (with Thórhallur Eythórsson). In *Case, Valency and Transitivity* [Studies in Language Companion Series 77]. Eds. L. Kulikov, A. Malchukov and P. de Swart, 147–177. Amsterdam: John Benjamins.

Barnes, Michael. 1986. Subject, Nominative and Oblique Case in Faroese. *Scripta Islandica* 38: 3–35.

Bayer, Josef. 2004. Non-nominative subjects in comparison. In Non-nominative subjects 1, ed. by Peri Bhaskararao & Karumuri Venkata Subbarao, 31–58. Amsterdam: John Benjamins.

Bayer, Josef, Markus Bader & Micheal Meng. 2001. Morphological Underspecification meets Oblique Case: Syntactic and Processing Effects in German. *Lingua* 111: 465–514.

Bernódusson 1982,

Boas, Hans C. & Ivan A. Sag. 2012. *Sign-Based Construction Grammar*. Stanford: CSLI Publications.

Comrie, Bernard. 1973. The Ergative: Variations on a Theme'. *Lingua* 32: 239–253.

Eythórsson, Thórhallur & Jóhanna Barðdal. 2005. Oblique Subjects: A Common Germanic Inheritance. *Language* 81–4: 824–881.

Fanselow, Gisbert. 2002. Quirky subjects and other specifiers. *More than words: A festschrift for Dieter Wunderlich*, ed. by Ingrid Kaufmann & Barbara Stiebels, 227–250. Berlin: Akademie Verlag.

Fischer, Olga, 1990. *Syntactic Change and Causation: Developments in Infinitival Constructions in English*, Ph.D.Dissertation, University of Amsterdam.

Fischer, Olga & Frederike C. van der Leek. 1983. The Demise of the Old English Impersonal Construction. *Journal of Linguistics* 19(2): 337–368.

Fischer, Susann & Joanna Blaszczak . 2001. Diachronic Perspective of Quirky Subjects. In P. Bhaskararao (ed.), *International Symposium on "Non-nominative Subjects"*, organized by ILCAA, Tokyo, 18-21 December 2001. Working Papers, 42-56.

Goldberg, Adele E. 1995. *Constructions. A Construction Grammar Approach to Argument Structure*. Chicago: University of Chicago Press.

Goldberg, Adele E. & Giulia M. L. Bencini. 2005. Support from Language Processing for a Constructional Approach to Grammar. *Language in Use: Cognitive and Discourse Perspectives on Language and Language Learning*, ed. by Andrea Tyler et al., 3–18. Georgetown University Round Table on Languages and Linguistics.

Haider, Hubert. 2005. How to turn German into Icelandic—and derive the OV–VO contrast. *Journal of Comparative Germanic Syntax* 8: 1–53.

Haider, Hubert. 2003. V-Clustering and Clause-Union: Causes and Effects. *Verb Constructions in German and Dutch*, ed. by P.A.M. Seuren & G. Kempen, 91–126. Amsterdam: John Benjamins.

Haider, Hubert. 2010. *The Syntax of German*. Cambridge: Cambridge University Press.

Haspelmath, Martin. 2001. Non-canonical marking of core arguments in European languages. In Aikhenvald, Alexandra Y., R. M. W. Dixon and Masayoki Onishi (eds.), Non-Canonical Marking of Subjects and Objects. Amsterdam: John Benjamins, 53–83.

Harbert, Wayne, 2007. *The Germanic Languages*. Cambridge: Cambridge University Press

Hawkins, John A. 1986. *A Comparative Typology of English and German: Unifying the Contrasts*. London: Croom Helm.

Helbig, Gerhard & Joachim Buscha. 1998. *Deutsche Grammatik: Ein Handbuch für den Ausländerunterricht*. 11th edn. Leipzig: VEB Verlag Enzyklopädie.

Hennig, Joachim Dieter. 1957. Studien zum Subjekt impersonal gebrauchter Verben im Althochdeutschen und Altniederdeutschen unter Berücksichtigung gotischer und altwestnordischer Zeugnisse. Göttingen: Georg-August Universität PhD dissertation.

Holvoet, Axel. 2013. Obliqueness, Quasi-Subjects and Transitivity in Baltic and Slavonic. *The Diachronic Typology of Non-Canonical Subjects*, ed. By Ilja A. Serzant & Leonid Kulikov, 257–282. Amsterdam: John Benjamins.

Höhle, Tilman N. 1978. *Lexikalistische Syntax: die Aktiv-Passiv-Relation und andere Infinitivstrukturen im Deutschen*. Tübingen: Niemeyer.

Hyams, Nina & Sigríður Sigurjónsdóttir. 1990. The Development of 'Long-Distance Anaphora': A Cross-Linguistic Comparison with Special Reference to Icelandic. *Language Acquisitio*n 1: 57–93.

Jackendoff, Ray 1972. *Semantic Interpretation in Generative Grammar*. Cambridge, MA: MIT Press.

Jónsson, Jóhannes Gísli. 1996. *Clausal Architecture and Case in Icelandic*. Department of Linguistics, University of Massachusetts, Amherst.

Jónsson, Jóhannes Gísli. 1997–98. Sagnir með aukafallsfrumlagi [Verbs with quirky subjects]. *Íslenskt mál og almenn málfræði* 19–20:11–43.

Kay, Paul & Ivan A. Sag. 2012. Cleaning up the Big Mess: Discontinuous dependencies and complex determiners. In Hans C. Boas and Ivan A. Sag (eds.): *Sign-Based Construction Grammar*, 229–256. Standford, CA: CSLI Publications.

Kiss, Tibor. 2003. Die Genese der Ausnahmeanapher. Arbeiten zur Reflexivierung, ed. by Lutz Gunkel, Gereon Müller & Gisela Zifonun, 157–88. Tübingen: Niemeyer.

Kristoffersen, Kristian E.1996. Infinitival Phrases in Old Norse: Aspects of their Syntax and Semantics. Ph.D. dissertation, University of Oslo.

Langacker, Ronald W. 1991. *Foundations of Cognitive Grammar*. Stanford, CA: Stanford University Press.

Lindqvist, Axel M. Förskjutningar i förhållandet mellan grammatiskt och psykologiskt subjekt i svenskan. Lund: Gleerup.

Masica, Colin P. 1976. *Defining a Linguistic Area: South Asia*. Chicago: University of Chicago Press.

Michaelis, Laura A. 2010. Sign-Based Construction Grammar'. In The Oxford Handbook of Linguistic Analysis, ed. by B. Heine & H. Narrog, 155–176. Oxford: Oxford University Press.

Michaelis, Laura A. 2012. Making the Case for Construction Grammar. In Sign-based Construction Grammar, 31–68, ed. by Hans C. Boas & Ivan A. Sag. Stanford, CA: CLSI Publications.

Moore, John & David M. Perlmutter. 2000. What Does it Take to Be a Dative Subject? *Natural Language and Linguistic Theory* 18: 373–416.

Müller, Stefan. 2012. On the Copula, Specificational Constructions and Type Shifting. Ms. Freie Universitet Berlin

Platzack, Christer. 1999. The subject of Icelandic psych-verbs: A minimalistic account. *Working Papers in Scandinavian Syntax* 64: 103–116.

Primus, Beatrice. 1994. Grammatik und Performanz: Faktoren der Wortstellungsvariation im Mittelfeld. *Sprache und Pragmatik* 32: 39–86.

Primus, Beatrice. 2012. *Semantische Rollen*. Heidelberg: Carl Winter.

Reis, Marga. 1973. Is There a Rule of Subject-to-Object-Raising in German? *Chicago Linguistic Society* 9: 519–529.

Reis, Marga. 1976. Reflexivierung in deutschen A.c.I.-konstruktionen: Ein transformationsgrammatisches Dilemma. *Papiere zur Linguistik* 9: 5–82.

Rott, Julian A. 2013. Syntactic Prominence in Icelandic Experiencer Arguments: Quirky Subjects vs. Dative Objects. *STUF – Language Typology and Universals* 66(2): 91–111.

Sasse, Hans-Jürgen. 1978. Subjekt und Ergativ: Zur pragmatischen Grundlage primärer grammatischer Relationen. *Folia Linguistica* 12: 219–252.

Serzant, Ilja A. & Leonid Kulikov. 2013. *The Diachronic Typology of Non-Canonical Subjects*. Amsterdam: John Benjamins.

Sigurðsson, Halldór Ármann. 1989. *Verbal Syntax and Case in Icelandic*. Doctoral dissertation. Lund: Department of Scandinavian Languages.

Sigurðsson, Halldór Ármann. 1990–91. Beygingarsamræmi [Agreement]. *Íslenskt mál og almenn málfræði* 12–13: 31–77.

Thráinsson, Höskuldur. 1979, *On Complementation in Icelandic*. Outstanding Dissertations in Linguistics. New York: Garland.

Thráinsson, Höskuldur, Hjalmar P. Petersen, Jógvan í Lon Jacobsen and Zakaris S. Hansen. 2012. *Faroese: An Overview and Reference Grammar*. Second edition. Tórshavn: Føroya Fróðskaparfelag.

Webelhuth, Gert. 2012. The Distribution of that-clauses in English: An SBCG Account. In Hans C. Boas & Ivan A. Sag (Eds.): *Sign-Based Construction Grammar*, 203–227. Stanford: CSLI Publications.

Wood, Jim. 2011. Icelandic *Let*-Causatives and Case. *Working Papers in Scandinavian Syntax* 97: 1–44.

Wood, Jim & Halldór Ármann Sigurðsson. 2014. Let-Causatives and (A)Symmetric DAT-NOM Constructions. To appear in *Syntax*.

Wunderlich, Dietrich. 2008. The force of lexical case: German and Icelandic compared. The Nature of the Word: Essays in Honor of Paul Kiparsky, ed. by Kristin Hanson & Sharon Inkelas, 587–620. Cambridge, MA: MIT Press.

Wurmbrand, Susanne. 2003. *Infinitives: Restructuring and Clause Structure*. Berlin: Walter De Gruyter.

Zaenen, Annie, Joan Maling & Höskuldur Thráinsson 1985, Case and Grammatical Functions: The Icelandic Passive. *Natural Language and Linguistic Theory* 3: 441–483.