# The Perplexity of Dat-Nom Verbs in Icelandic

### Jóhanna Barðdal

Barðdal, J. 2001. The perplexity of Dat-Nom verbs in Icelandic. Nordic Journal of Linguistics, 24, 47-70.

This paper presents data from Modern Icelandic of a small group of Dat-Nom verbs which select for two arguments: a Dative human argument and a Nominative stimulus. When applying independently established subjecthood tests on these arguments it turns out that both pass the tests, i.e. both arguments can behave like subjects and like objects, but not at the same time. An examination of the lexical meanings of these predicates reveals that they can be divided into the following main groups: Emotive verbs, Perception Verbs, Cognition Verbs, Verbs of Attitude and Benefactive verbs. A Construction Grammar analysis is proposed, assuming two different syntactic constructions to exist in Icelandic, i.e. a Dat-Nom construction versus a Nom-Dat construction. It is argued that the occurrence of these predicates in the two constructions follows directly from their conceptual causal structure. Furthermore, the choice of subject seems to be contextually determined, i.e. the more topical argument takes on the subject function. The relation between the two constructions, i.e. the Dat-Nom and the Nom-Dat, seems to be like the relation between an ordinary transitive construction and its topicalization construction, in that when the lower argument is "topicalized" to first position the other construction is activated, hence the ordinary topicalization construction in Icelandic is not as readily available to these verbs as the other construction is

Jóhanna Barðdal, Department of Scandinavian Linguistics, Lund University, Helgonabacken 14, S-223 62 Lund, Sweden. Department of Linguistics, University of Manchester, M13 9PL Manchester, U.K. E-mail: johanna.barddal@nordlund.lu.se or johanna.barddal@man.ac.uk

#### 1. INTRODUCTION

A peculiarity of Icelandic, more or less unnoticed in the syntactic literature, is the special subtype of psych-verbs, which can occur in two syntactic frames, i.e. both as *fear*-verbs and as *frighten*-verbs.<sup>1</sup> A verb's occurrence in two syntactic frames is not particularly noteworthy considering that for instance the verb *give* can occur both as a ditransitive '*I gave him the book*' and with a prepositional variant '*I gave the book to*  $\frac{1}{1-1}$ , 'The transition of the differ radically from such examples since they include reordering of grammatical functions:

- (1) a. Hentar ÞETTA ÞÉR?
  - pleases this (nom-subj) you (dat-obj) 'Does this please you?'
  - b. *Hentar PÉR PETTA?* pleases you (dat-subj) this (nom-obj) 'Are you pleased with this?'<sup>2</sup>

In (1a) the nominative stimuli *þetta* 'this' is the grammatical subject, as is obvious from the fact that it inverts with the verb in questions, while in (1b) it is the dative human argument *þér* 'you' which is the grammatical subject, since it also inverts with the verb in questions (see Thráinsson (1979), Bernódusson (1982), Zaenen, Maling & Thráinsson (1985), Sigurðsson (1989, 1992) and Jónsson (1997–98) on oblique subjects in Icelandic, and Bernódusson (1982), Zaenen, Maling & Thráinsson (1985), Sigurðsson (1990–91) and Maling & Jónsson (1995) on nominative objects in Icelandic). From the examples in (1) we can gather that both arguments of *henta* can occur as a subject and both can occur as an object, though not at the same time, of course.

These verbs were first discovered by Bernódusson in 1982 and have since received scanty attention (see a note in Zaenen, Maling & Thráinsson 1985: 469, and a short mention in Jónsson 1997-98: 14-15. For the theoretical implications of such verbs in historical linguistics, see Allen (1995), Rögnvaldsson (1996a: 65) and Barðdal (1997: 44-45 and 1998). The reason for this may be that most modern syntacticians working on Icelandic have carried out their research within a transformational tradition, in which it is not clear how to account for the behaviour of these psych-verbs in a straightforward way. It is a fact that within most contemporary syntactic theories that a given argument of a predicate is the subject and that it is always the subject, provided that the diathesis has not been altered, but not that subject status can be subject to variation within the active diathesis. However, implementing this fact of the Icelandic language into Construction Grammar entails no complications at all because Construction Grammar has a uniform way of representing all grammatical knowledge, namely as a form-meaning correspondence, i.e. as a *construction* (see section 3 below).

Before I proceed to the main body of this paper, an overview of the constructions Icelandic psych-verbs occur in is in place, and accordingly a closer specification of our research object.

Psych-verbs in Icelandic can be found in the following constructions:

 (2) a. Subj<sub>Nom/hum</sub> V Obj<sub>Acc/stim</sub> Ég hræðist hunda I fear dogs
 b. Subj<sub>Nom/stim</sub> V Obj<sub>Acc/hum</sub> Hundar hræða mig Dogs frighten me
 c. Subj<sub>Acc/hum</sub> V Obj<sub>Acc/stim</sub> Mig dreymdi ömmu I dreamt of grandma
 d. Subj<sub>Acc/hum</sub> V (loc) Mig verkjar í magann I ache in the stomach

e.	Subj <sub>Dat/hum</sub> V Adj <sub>Agr</sub> _(loc)	Mér er illt í maganum
		I am ill in the stomach
f.	Subj <sub>Nom/hum</sub> V Adj <sub>Agr+</sub>	Ég er illur
		I am angry
g.	Subj <sub>Dat/hum</sub> V Obj <sub>Nom/stim</sub>	Mér líkar Guðmundur
		I like Guðmundur
h.	Subj <sub>Nom/stim</sub> V Obj <sub>Dat/hum</sub>	Þetta hentar mér
		This pleases me

These are the most prominent constructions Icelandic psych-verbs occur in. The first is clearly an instance of a more general construction, i.e. the transitive construction, the last two case patterns are also utilized by passives of ditransitive verbs in Icelandic, (f) is common for depictive statives, while the remaining constructions are more or less reserved for psych-verbs. In this paper I discuss only the last two examples: the one with the Dative human argument subject and the Nominative stimulus object and conversely the one with the Nominative stimulus subject and the Dative human argument object.

This paper is organized as follows: In the next section I present the syntactic tests of subjecthood and provide evidence that both arguments of our psych-verbs pass all the relevant tests. In section 3, I present the semantics of the data and argue for a Construction-based analysis of it. Section 4 is a summary.

# 2. SYNTACTIC SUBJECTHOOD

The concepts of *subject* and *object* are not unproblematic concepts. Within traditional grammar the subject has been defined as the argument carrying the nominative case, and the object as the argument carrying the accusative, dative or genitive case of transitive verbs. Modern syntactic theories have emphasized the need to look at the syntactic behaviour of the arguments in question, and not just their morpho-syntactic properties, in order to determine their syntactic status. For Icelandic this has led to a definition of the subject based solely on syntactic properties, since it has been shown that morpho-syntactic properties, such as morphological case and subject-verb agreement, do not correlate with the syntactic properties subjects have in Icelandic, though they correlate with each other (see Sigurðsson 1990-91). Hence, syntactic subjects in Icelandic can carry nominative, accusative, dative and genitive case. Positing a universal category 'subject' seems to be theoretically impossible on grounds of the differences in the behaviour of these arguments in different languages (see Croft 2001: ch. 4). This is even true for closely related languages, such as Icelandic and German, since a comparison of the two languages has revealed that out of 13 tests suggested for the two languages only four tests coincide for both Icelandic and German (see Barðdal, in prep.). These are only some of the problems that follow from the assumption that a universal and a uniform category of subjects exists. Instead, either a language specific category of subjects has to be posited or a more radical solution which would entail the abandonment of the theoretical concept of subjects and objects altogether (see Croft 2001: ch. 4 and Barðdal, in prep.). However, I will not pursue this argument here. For the purpose of this paper it is sufficient that all left-most arguments of transitive verbs in ordinary argument linking constructions in Icelandic show a uniform behaviour in that they pass all the tests that have been used as subject criteria in Icelandic.

For Icelandic, the following have been proposed as subject properties (Sigurðsson 1989, 1992, Rögnvaldsson 1996, Zaenen, Maling & Thráinsson 1985). I refer the interested reader to the above-cited studies for examples showing that objects behave differently from subjects in Icelandic with regard to all the properties in (3):

 (3) 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

I now present data that show that there is a group of psych-verbs in Icelandic of which both arguments pass a number of known tests of subjecthood and thereby fit into the category *subject*.

# 2.1. Word order and distribution

Both arguments of the verb *henta* 'please' can occur in the position preceding the verb, both can invert with the finite verb when something else is topicalized, and both can occupy first position in subordinate clauses:

- (4) a. *PETTA hefur alltaf hentað MÉR*. 'This has always pleased me.'
  - b. MÉR hefur alltaf henta PETTA. me has always pleased this 'I have always been pleased with this.'

- (5) a. *Héðan af mun ÞETTA alltaf henta MÉR*. from now on will this always please me
  - b. Héðan af mun MÉR alltaf henta ÞETTA. from now on will me always please this 'From now on I will always be pleased with this.'
- (6) a. Ég veit að ÞETTA mun henta MÉR. I know that this will please me
  - b. Ég veit að MÉR mun henta ÞETTA.
    I know that me will please this
    'I know that I will be pleased with this.'

Both arguments of henta can be reduced in Conjunction Reduction:

(7) a. *PETTA FYRIRKOMULAG er ágætt og\_mun líka henta MÉR ágætlega.* 

this arrangement (nom) is fine and will also please me (dat) fine

- b.i *MÉR líður vel og\_mun örugglega henta ÞETTA ágætlega*. I (dat) am fine and will surely be pleased with this (nom)
- b.ii ÉG er ánægð og\_mun örugglega henta ÞETTA ágætlega. I (nom) am happy and will surely be pleased with this (nom)

The deleted Dative human argument in (7b.i) is not deleted because it has the same morphological case as the coordinated constituent. In (7b.ii) we find that the dative can also be deleted on identification with a nominative. Accordingly, both arguments of *henta* can behave like subjects when their word order and distributional properties are considered.

# 2.2. Reflexivization

In Icelandic, we find both Clause-bound reflexivization and Long-distance reflexivization, the former is bound within the simple clause and the latter is bound across sentence boundaries. Consider first the Clausebound reflexivization:

- (8) a. HANN<sub>i</sub> hentar KONUNNI SINNI<sub>i</sub> ágætlega. he pleases his wife fine 'He pleases his wife well.'
  b. HONUM<sub>i</sub> hentar FYRIRKOMULAGIÐ SITT<sub>i</sub> ágætlega.
  - honomic preserves and a preserve and a

Regarding Long-distance reflexivization, only the Dative human argu-

ment can function as an antecedent for a reflexive, a property mostly confined to subjects:

- (9) a. HONUM<sub>i</sub> hentar að fyrirkomulagið SITT<sub>i</sub> verði rætt.
   he (dat) suits that arrangement himself become discussed 'It suits him that his arrangement will be discussed.'
  - b. \*HANN hentar að ...
    he (nom) suits that
    'He is suitable that ...'

This is due to the fact that a main clause with the Nominative stimulus as a subject doesn't select for the type of subordinate clause that can contain a reflexive. The same is true for other psych-verbs in Icelandic with a similar argument structure, as for instance *trufla* 'bother', which is an ordinary nom-acc *frighten/please* verb, where only the Nominative stimulus can behave as a syntactic subject:

(10) \**HANN truflar að* ... he (nom) bothers that

The reluctancy of the Nominative stimulus to function as an antecedent for a Long-distance anaphor is therefore expected and cannot disqualify it as a subject.

# 2.3. Raising and control constructions

There are basically two kinds of "raising" constructions which have been used to measure subjecthood, Subject-to-object raising (AcI infinitivals) and Subject-to-Subject raising (D/NcI infinitivals). In the former, the subject of a lower clause is "raised" to the object position of the matrix clause, while in the latter the subject of the lower clause is "raised" to the subject position of the matrix clause. Consider the following examples with our verb *henta*:

- (11) a. Hann telur FYRIRKOMULAGIĐ henta sér.
  he assumes the arrangement (acc) please himself
  'He assumes that the arrangement will be pleasing for him.'
  - b. Hann telur SÉR henta fyrirkomulagið.
    he assumes himself (dat) please arrangement
    'He assumes that he will be pleased with the arrangement.'

- (12) a. FYRIRKOMULAGIĐ virðist henta HONUM ágætlega. the arrangement (nom) seems to please him fine 'The arrangement seems to please him.'
  - b. *HONUM virðist henta FYRIRKOMULAGIÐ ágætlega*. him seems to please the arrangement (nom) fine 'He seems to be pleased with the arrangement'.

Also we find both arguments of *henta* as PRO, or the unexpressed argument, in Control clauses:

- (13) a. Pað er ágætt að henta PETTA.
  it is good to [PRO] suit this (nom)
  'It is good to be pleased with this.'
  - b. Pað er ágætt að henta HONUM.
    it is good to [PRO] suit him (dat)
    'It is good to please him.'

Accordingly, both arguments of the verb *henta*, the Dative human argument and the Nominative stimulus, can occur as the syntactic subject in Control Constructions.

To summarize, in this section I have demonstrated that some psychverbs in Icelandic vary in their syntactic structure in such a way that either of their arguments, the Nominative stimulus or the Dative human argument, can be realized as the syntactic subject and as the syntactic object.<sup>3,4</sup> As far as I know, for the Germanic languages this has only been noticed in Icelandic and Faroese (see Bernódusson 1982: 37–38 for Icelandic and Barnes 1986: 33 ff. for Faroese). There are indications, though, of similar behaviour of psych-verbs in previous stages of Germanic (see Barðdal (1997: 44–45 and 1998) for Old and Middle Scandinavian, and Allen (1995) for Old and Middle English). Since such verbs seem to be more common in (various stages of) Germanic<sup>5</sup> than at first sight, and might be found in other languages of the world, this phenomenon is something that a theory of grammar has to be able to account for. We will now turn to that.

### 3. THE ANALYSIS

#### 3.1. The Data

The verbs exhibiting the dual nature, displayed in section 2, are not a homogeneous group of verbs. After a thorough examination of a list containing most predicates that select for Oblique subjects in Icelandic (see Jónsson 1998), with the two first subjecthood tests in (3) above as a tool,<sup>6</sup> I was able to discern the verbs presented in (14):

(14) berast 'receive', birtast 'appear', bragðast 'taste', duga 'suffice', dyljast 'be not aware of sth', endast 'last', falla vel 'like, please', fara vel 'suit', fylgja 'accompany', gagnast 'be of use to', glatast 'be lost to', greypast 'stuck in sby's mind', henta 'please, suit', hverfa 'be lost to sby', hæfa 'suit', nýtast 'be of use to', nægja 'suffice', opinberast 'appear in a vision', passa 'please, suit', reynast 'prove, turn out to', possibly sárna 'get one's feelings hurt',<sup>7</sup> smakkast 'taste', sóma 'be proper, suit', sækjast vel 'go well/badly', sæma 'be proper, suit', vitrast 'appear in vision', póknast 'please, suit'.

(14) above lists the simple verbs in Icelandic that exhibit the dual nature, while (15) below lists the complex predicates with the same property:

(15) berast í hendur 'receive', falla í geð 'like, please', falla e-ð í skaut 'receive', falla verk úr hendi 'fail to do sth', fara e-ð vel úr hendi 'do sth well', festast í minni 'stick in sby's memory', hrjóta af vörum 'let words slip', hverfa veröldin 'sleep for a while, fit', koma að gagni 'be of use to', koma á óvart 'surprise', koma við 'be of sby's business', koma spánskt fyrir sjónir 'find sth strange', koma í koll 'get in trouble', leika í lyndi 'go well', líða ekki úr hug/minni 'be unable to forget', liggja e-ð á hjarta 'be anxious', ratast á munn 'accidentally speak', renna til rifja 'cut to the quick', renna kalt vatn milli skinns og hörunds 'be terrified', reynast erfitt 'be difficult', standa til boða 'be offered sth', standa fyrir brifum 'hampered by sth', stíga til höfuðs 'go to sby's head', svella í munni 'be exaggerated', vaxa e-ð í augum 'find sth more difficult than it really is', veitast audvelt 'find sth easy', vera audvelt 'be easy', vera auglióst 'be obvious', vera e-ð á móti skapi 'dislike', vera að kostnaðarlausu 'be free', vera allar bjargir bannaðar 'be in a hopeless situation', vera allir vegir færir 'be able to do anything', vera dýrkeypt 'suffer, pay dearly for sth', vera eðlislægt 'sth comes naturally for sby', vera efst i huga 'think of sth more than anything else', vera eiginlegt 'sth comes naturally for sby', vera ekkert að vanbúnaði 'be fully prepared', vera e-ð fjarri skapi 'dislike', vera e-ð fyrir bestu 'be best for sby', vera e-ð fyrir mestu 'be most important for sby', vera erfitt 'be difficult', vera framandi 'be alien to sby', vera frjálst 'be free to', vera hollt 'be healthy for sby', vera hugleikið 'be important to sby', vera í blóð borið 'have a natural talent for sth', vera í fersku minni 'remember vividly', vera (ó)gerlegt 'be (im)possible', vera glatað 'be lost to sby', vera e-ð í lófa lagið 'be easy for sby', vera í sjálfsvald sett 'have permission to decide for oneself', vera kært 'be dear', vera e-ð kærkomið 'be welcome', vera e-ð (mikil) kvöl 'be painful for sby', vera ljóst 'be obvious', vera ljúft 'be a pleasure', vera mikilvægt 'be important for sby', vera minnisstætt 'remember vividly', vera e-ð mótfallið 'be against

sth, dislike', vera e-ð ofraun 'be too difficult', vera ókunnur 'be unknown to sby', vera ofvaxið 'be beyond sby's power', vera ofviða 'be too difficult', vera óheimilt 'be prohibited', vera ókleift 'be impossible', vera ókunnugt 'be unknowing about sth', vera (ó)mögulegt 'be (im)possible for sby', vera óskiljanlegt 'be incomprehensible', vera e-m ráðgáta 'be a mystery to sby', vera tamt 'be natural for sby', vera til ama 'be disturbing', vera til efs 'doubt sth', vera um megn 'be too difficult for sby', vera uppörvun 'be an encouragement', vera velkomið 'be welcome to', vera þvert um geð 'dislike', vera þyrnir í augum 'be a thorn in sby's side/flesh', verða að falli 'cause a downfall', verða að fótakefli 'be a hindrance', verða að góðu 'be good for sby', verða til happs 'be off luck', verða til lífs 'survive', vera til lista lagt 'have a talent', vinnast eð vel 'make good progress'.

Note that the complex predicates are of two types: firstly, the same as the simple verb but followed by an attribute, which is often a locative (or a bodily) specification (16a–b). And secondly, a copula with an adjective in the default form or an attributive complement of some kind (17a–b):

- (16) a. Mér fellur þetta vel. me (dat) falls this (nom) well 'I like this.'
  - b. Mér fellur þetta vel Í GEÐ. me (dat) falls this (nom) well in mind 'I like this.'
- (17) a. Mér er þetta LJÚFT. me (dat) is this (nom) dear This is a pleasure for/to me.'
  - b. Mér er það mjög TIL EFS.
    me (dat) is that (nom) very in doubt 'I doubt that.'

An investigation of the lexical meaning of our verbs reveals that many of them are synonyms or near-synonyms:

(18) like: falla vel, falla í geð
dislike: vera e-ð á móti skapi, vera e-ð fjarri skapi, vera e-ð mótfallið, vera þvert um geð
please, suit, fit: fara vel, henta, hæfa, passa, sóma, sæma, þóknast be(come) hurt: sárna, renna til rifja
be terrified: renna kalt vatn milli skinns og hörunds

be anxious: liggja e-ð á hjarta doubt: vera til efs suffer: vera dýrkevpt surprise: koma á óvart find difficult or painful: reynast erfitt, vera erfitt, vaxa e-ð í augum, vera allar bjargir bannaðar, standa fyrir brifum, vera e-ð ofraun, vera ofvaxið, vera ofviða, vera ókleift, vera ómögulegt, vera um megn, vera dýrkevpt, vera e-ð (mikil) kvöl, vera til ama og leiðinda find easy: leika í lyndi, vera allir vegir færir, veitast auðvelt, vera auðvelt, vera e-ð í lófa lagið, vera ekkert að vanbúnaði be natural for sby: vera eðlislægt, vera eiginlegt, vera í blóð borið, vera tamt, vera í lófa lagið, vera til lista lagt remember: greypast, festast í minni, líða ekki úr hug/minni, vera hugleikið, vera í fersku minni, vera minnisstætt be (un)aware of sth: dyljast, vera framandi, vera ókunnur, vera ókunnugt, vera augljóst, vera ljóst be important/dear/a pleasure: vera e-ð fyrir mestu, vera kært, vera ljúft, vera mikilvægt, vera efst í huga be a problem: koma í koll, vera dýrkeypt, vera þyrnir í augum, verða að fótakefli, verða að falli be strange/incomprehensible: koma spánskt fyrir sjónir, vera óskiljanlegt, vera e-m ráðgáta be good for sby: vera e-ð fyrir bestu, vera hollt, verða að góðu, verða til happs, verða til lífs, vera uppörvun appear (in a vision): birtast, opinberast, vitrast sleep: hverfa veröldin taste: bragðast, smakkast accidentally speak: hrjóta af vörum, ratast á munn receive: berast, berast í hendur, falla e-ð í skaut, vera að kostnaðarlausu be lost: glatast, vera glatað, hverfa e-ð, be free to/offered to: vera frjálst, vera heimilt, vera í sjálfsvald sett, vera velkomið, vera e-ð kærkomið, standa til boða **be sufficient**: duga, endast, nægja accompany: fylgja turn out to be: reynast be of use to: gagnast, koma að gagni, nýtast, make a good/bad progress: sækjast vel, fara e-ð vel úr hendi, falla verk úr hendi, vinnast e-ð vel be of sby's business: koma við go to sby's head: stíga til höfuðs be exaggerated: svella í munni

56

Obviously, our group of verbs is both a semantically defined group and a lexically defined group. It is semantically defined since many of the verbs are synonymous; for instance, all simple verbs in Icelandic meaning 'please, suit' and 'be of use to' seem to be included, and the group is lexically defined since its members cannot be predicted from any general semantic or syntactic rule. It is possible, though, that at one point or another in the history of Icelandic there was a productive syntactic/ semantic rule that generated these examples, but such a rule is certainly not productive in today's Icelandic, and their dual behaviour with respect to choice of syntactic functions is not a general property of all dative-nominative verbs in Icelandic (see example (25) below).<sup>8</sup>

Examining the lexical meanings of our verbs, we find that some of them are typical Experiencer verbs, like the ones with the meanings 'like', 'dislike', 'please', 'be hurt', 'be terrified', 'be anxious' and 'suffer', whereas others, contrary to what is usually assumed for verbs selecting a dative subject, should rather be classified as Cognition verbs, such as the verbs meaning 'remember', 'be (un)aware of sth', and 'appear in a vision'. Verbs meaning 'taste' can be classified as Perception verbs. Yet others denote the attitude of the speaker; for instance, verbs meaning 'find difficult', 'find easy', 'find strange', 'be important', 'be a problem', 'be natural for sby'. Also, some of the verbs should be categorized as Benefactive verbs; for instance, the verbs meaning 'receive', 'appear in a vision', be offered to', 'be of use to', 'be sufficient to' and 'accompany'. On the basis of this I suggest a division of our predicates into the following five classes: Emotive verbs, Cognition verbs, Perception verbs, Verbs of Attitude and Benefactive verbs:

(19) **Emotive verbs**: like, dislike, please, suit, fit, be(come) hurt, be terrified, be anxious, doubt, suffer, surprise.

Cognition verbs: remember, be (un)aware of sth, be incomprehensible.

**Perception verbs**: appear in a vision, taste, disappear for sby's eyes.

**Verbs of attitudes**: find difficult or painful, find easy, be natural for sby, be important/dear/a pleasure, be a problem, be strange/ incomprehensible, be good for sby, accidentally speak, be lost to, be free to, be sufficient, be of use to, make a good/bad progress, be of sby's business, go to sby's head, be exaggerated.

**Benefactive verbs**: receive, be offered to, be sufficient, accompany, be of use to.

Some of the lexical meanings listed in (18) and (19) above are derived

or non-literal meanings. Consider for instance *hverfa veröldin*, which is glossed here as 'sleep', and which intuitively does not fall into any of the five classes above. The dative human argument is hardly an Experiencer, possibly a Perceiver, but definitely not a Beneficiary:

(20) MÉR hvarf VERÖLDIN.

me (dat) disappeared the world (nom) 'The world disappeared for my eyes.' or 'I slept for a while.'

The predicate *hverfa veröldin* is probably a metaphorical extension of other impersonal uses of *hverfa* such as  $e-\delta$  *hvarf* e-m 'disappear for sby's eyes', where the dative human argument probably is a Perceiver:

- (21) a. UMHVERFIÐ hvarf MÉR í smástund. the environment (nom) disappeared me (dat) for a while 'Everything went black for me.'
  - b. SÝNIN hvarf MÉR eitt augnablik. the vision (nom) disappeared me (dat) a moment 'I couldn't see anything for a moment.'
  - c. *HANN hvarf MÉR sjónum smám saman*. he (nom) disappeared me (dat) sight gradually 'Gradually, I lost sight of him'.

To summarize so far, most of our verbs seem to be constructed with the thematic roles of the Experiencer (Emotive verbs and Verbs of Attitude), Perceiver (for Perception verbs), Cognizer (for Cognition verbs) and Beneficiary (for Benefactive verbs). Further, the majority of our verbs are psych-verbs and a small subset comprises Benefactive verbs.

It is not surprising that the dative can also be realized as a Beneficiary dative. That is parallel to passives of ditransitive verbs, of which the morphological dative is also a Beneficiary. Recall from section 1 above that passives of ditransitive verbs also occur with the same case pattern as our group of alternating verbs (see Zaenen, Maling & Thráinsson (1985) for an illustration of the subject properties of the dative and the object properties of the nominative of passives of ditransitive verbs in Icelandic):

- (22) a. JÓNI var gefin BÓKIN.
  Jón (dat-subj) was given the book (nom-obj)
  'John was given the book.'
  - b. BÓKIN var gefin JÓNI.
    the book (nom-subj) was given Jón (dat-obj)
    'The book was given to John.'

Another verb in (14) above, *fylgja* 'accompany', poses a problem since its dative does not immediately suggest itself as any of our four thematic roles above:

- (23) a. VÉLINNI hafa alltaf fylgt LEIÐBEININGAR. the machine have always followed instructions 'The machine has always been accompanied by instructions'.
  - b. *LEIĐBEININGARNAR hafa alltaf fylgt VÉLINNI*. the instructions have always followed the machine 'The instructions have always accompanied the machine.'

However, examples of *fylgja* 'accompany' with the dative being more Beneficiary-like can be found in Icelandic:

- (24) a. *HONUM höfðu alltaf fylgt ÞRÍR VASKIR FYLGDARSVEINAR*. him had always followed three robust followers 'He had always been accompanied by three robust followers.'
  - b. *PRÍR VASKIR FYLGDARSVEINAR höfðu alltaf fylgt HONUM.* 'three robust followers had always followed him 'Three robust followers had always accompanied him.'

And not all verbs selecting for a Dative human argument and a Nominative stimulus submit to the dual assigning class:

- (25) a. MÉR hefur alltaf líkað GUÐMUNDUR. me has always liked Guðmundur
   'I have always liked Guðmundur.'
  - b. GUÐMUNDUR hefur MÉR alltaf líkað. Guðmundur have me always liked 'Guðmundur I have always liked.'
  - c. \**GUÐMUNDUR hefur alltaf líkað MÉR*. Guðmundur has always liked me
  - d. ?*MÉR hefur GUÐMUNDUR alltaf líkað*. me has Guðmundur always liked

Note that the Dative human argument *mér* occurs between the finite and non-finite verb in (25b), which is a subject position (criteria 2 in (3) above), and it cannot occur in the object position following the infinite verb in (25c) (see also footnote 6 above), nor can the Nominative stimulus occur between the two verbs. Thereby we know that *mér* has to be the syntactic subject of *líka* at all times and that *Guðmundur* has to be the syntactic object at all times. Compare this to the following examples of *líka* 'like' from Old Icelandic:

(26) a. [...] bá líkar HON MÉR yfir allar þær er ek hefi fyrr sét ok heyrt then likes she (nom) me (dat) over all those which I have earlier seen and heard
'her I like best of all those I have seen or heard' (Barlaams ok Josaphats saga 1981: 68. 12–13)

b. [...] og líkaði ÞAÐ ÖLLUM vel. and liked it (nom) everyone (dat) well
'[...] and everyone was at ease with that.' (Brennu-Njálssaga 1987: 132)

In (26a) the Nominative stimulus behaves like a subject, since it inverts with the verb when  $\dot{pa}$  'then' is situated in the first position (criteria 2 in (3) above). The same goes for  $\dot{pa}\partial$  in (26b), it follows the verb in V1 clauses (so-called *Narrative Inversion* (see Sigurðsson 1983)). The Dative human argument behaves like an object, in both examples, either situated in front of the infinite verb, which was an object position in Old Icelandic (OV word order within the VP (see Rögnvaldsson 1996b)), or following the finite verb, located after the Nominative stimulus. This can be taken as an indication of the verb *líka* 'like' not behaving in Modern Icelandic as in Old Icelandic, with respect to syntactic realization of arguments (see Barðdal (1997), and the references cited there, for a discussion on subject properties in Old Scandinavian, and Barðdal (2000) for a methodological discussion of the problem). We might therefore suspect that our group of psych-verbs alternating their syntactic structure was larger in Old Icelandic than in Modern Icelandic.<sup>9</sup>

# 3.2. Construction-based Approach

It is not obvious how contemporary syntactic theories would explain the existence of psych-verbs taking either argument as the subject or the object. I can think of two possible ways. The first one is to say that there are two verbs *henta*, with different specifications for grammatical functions. A notational variant would be that there are two senses, or uses, of the verb *henta*, with subsequent differences in grammatical functions. The strongest argument against such an analysis is also the most obvious one. It is strange to assume two verbs *henta* with the same phonological and morphological form and the same semantic meaning. It is also strange to assume two different uses since the uses in example (1) above are not notably different. Also, assuming two verbs *henta* with the same form and the same meaning but a difference in syntactic structure seems highly unmotivated. The only motivation for such an analysis is to

explain the kind of data that generate the analysis, and as such it is circular.

Another possible way to account for our data would be to argue that one of the examples in (1) above is derived from the other by some sort of a transformation or derivation. Such an analysis would, however, have to invoke an invisible transformation/derivation, to my mind a clear disadvantage of the analysis.

However, an earlier version of the present paper has inspired Christer Platzack to try to account for the behaviour of our alternating verbs, formulating it within the Minimalism program (Platzack 1999). That analysis assumes different internal VP structures for verbs like *líka* as opposed to verbs like *henta*. An LFG analysis has also been proposed by Zaenen, Maling & Thráinsson (1985) for the alternation between Dat-Nom and Nom-Dat passives.

The possibility of the verbs in (14) and (15) occurring with either the Dative argument or the Nominative argument as the subject can easily be captured within Construction Grammar, a recent theory, advocated by Goldberg (1995), Fillmore & Kay (1999), Croft (2000, 2001) and others. Such a theory assumes that the *construction* is a basic unit of language and grammar, consisting of syntactic form and semantic (or pragmatic) meaning. Given a definition of the construction as a form and meaning correspondence, the syntactic frames of our dual assigning psych-verbs would qualify as two different constructions:

(27) a. Impersonal Subj<sub>Dat</sub> V Obj<sub>Nom</sub> Mér hentar betta me pleases this 'I'm pleased by this'
b. Transitive Subj<sub>Nom</sub> V Obj<sub>Dat</sub> betta hentar mér 'This pleases me'

The Impersonal construction is different from the Transitive construction since it has a Dative subject and a Nominative object, while the Transitive construction has a Nominative subject and a Dative object. Therefore these have to be considered to be two different constructions. Furthermore, within Construction Grammar all linguistic knowledge is represented as constructions and a network of constructions (Goldberg 1995, Cruse & Croft, in prep.). This is a crucial difference in the definition of constructions between Construction Grammar and other theories, such as traditional grammar and Generative grammar. While in traditional grammar and Generative grammar the label *construction* is used to denote deviations from ordinary argument linking constructions, such as the passive construction or the *Way* construction, Construction Gram-

mar views everything as a construction, i.e. every piece of form and meaning correspondence constitutes a construction of its own. This is an important point to be made for the reader's understanding of the discussion of the present paper, and in fact all discussions within Construction Grammar. Furthermore, it is important to stress that the meaning of constructions can either be general (derivable from the parts of the construction) or specific (not derivable from the constructional parts) (see Cruse & Croft in prep.: ch. 10), but does not necessarily always have to be specific. In other words, within Construction Grammar it is justifiable to invoke an analysis that is dependent on the concept of construction also for data that are *not* idiomatic.

Within Construction Grammar, Goldberg (1995) has advocated a theory of argument linking which runs like the following: Certain semantic relations exist between constructions and groups of verbs, resulting in certain groups of verbs being associated with certain constructions. The lexical entry of each verb only contains encyclopaedic information about the meaning of that particular verb. The construction functions as the tool for mapping information from the lexicon to the syntax, i.e. as the syntax-semantic interface. From the semantics of the verb it follows in which constructions it can occur. Consider for instance the Caused Motion construction (X causes Y to move  $Z_{loc}$ ). On a Constructional approach we expect verbs expressing motion to appear in the Caused Motion construction. We assume, only when it is not predictable from the semantics of the verb, that it is listed *per se* which verbs are associated with which construction.

More specifically on psych-verbs, their argument linking has been discussed by Croft in a number of papers (see at least Croft 1993 and 1998), where he suggests that argument linking in general and of psychverbs in particular can be derived from conceptual causal structure. The important issue here is the relation of the participants of an event to each other. The participant that acts upon another participant is linked to first position, to subject (and nominative), while the participant acted upon is linked to the second position, to object (and accusative), in a transitive construction of a nominative-accusative language. This is a direct consequence of the unidirectional causal structure of the event.

However, certain events, prototypically involving mental experience, do not have a unidirectional causal structure. Such events can therefore be encoded in two ways, i.e. either with the human participant as the subject and the stimulus as an object, or with the stimulus as a subject and the human participant as an object. This is true both cross-linguistically and within the same language. These two conceptualizations of the same event highlight differences in perspective, in that when the human participant is the subject the event is conceptualized as if the human participant directs his/her attention to the stimulus, while when the stimulus is linked to subject the event is conceptualized as if the stimulus is causing an effect on the human participant. This is illustrated in the following example:

(28) a. Ég hræðist hunda. I (nom) fear dogs (acc)
b. Hundar hræða mig. Dogs (nom) frighten me (acc)

The subject is in nominative in both examples and the object is in accusative. Thereby the nominative is used to encode the initiator of the transmitted force, while the accusative is used to encode the endpoint of the transmitted force. Croft (1993) furthermore points out that case languages often have a special way of encoding bidirectional stative events, either by both arguments being encoded with the same (neutral) morphological case, or by using a third case, i.e. neither the nominative nor the accusative, to encode human participants of stative mental events. Both of these are represented in Icelandic:

- (29) a. *MIG dreymdi ÖMMU*.
   I (acc) dreamt grandma (acc)
   'I dreamt of grandma.'
  - b. MÉR líkar vel við Guðmund.
    I (dat) like well with Guðmundur (acc)
    'I like Guðmundur.'

In (29a), both arguments are encoded with the morphological accusative, while the human argument of (29b) is encoded with the morphological dative, thereby morphological case is used to signal lack of the proto-typical causal relation of one entity transmitting force onto another entity. A clear majority of the dual assigning verbs discussed in this paper are stative predicates and some are inchoatives. However, since the human argument of our group of verbs is always encoded with the morphological dative case in Icelandic, it does not come as a surprise that both arguments can behave as subjects and both can behave as objects, neither argument is the initiator of transmitted force.

How would we formally represent our linguistic knowledge of the dual assigning verbs discussed in this paper in a Construction Grammar framework? I opt for the solution that constructions are assumed to exist at different abstract levels, like Croft (2000) and Cruse and Croft (in prep.) assume, following Langacker (1988). On such an account we would assume a more general construction on an abstract level, consist-

ing only of syntactic slots.<sup>10</sup> At a lower level of schematicity we would assume a verb-class specific construction, consisting of syntactic slots and the semantic content (corresponding to (19) above). One level below we would expect to find the verb-subclass specific construction (corresponding to (18) above). At yet a lower level of schematicity we find the verb-specific construction, which is more concrete and lexically filled (corresponding to (14) and (15) above). This can be represented as follows (with eventually more intermediate levels not spelled out):

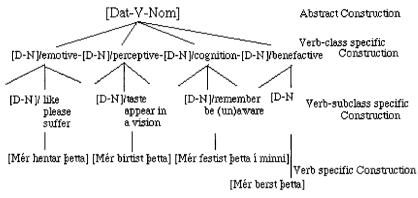


Figure 1. Different levels of schematicity for Dat-Nom verbs.

A similar figure can be drawn for the Nom-Dat construction:

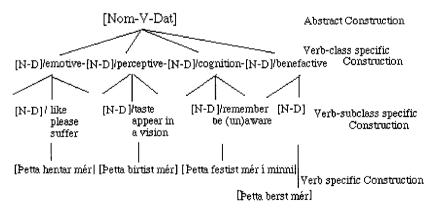


Figure 2. Different levels of schematicity for Nom-Dat verbs.

The relation between the two constructions, i.e. the Nom-Dat and Dat-Nom, or the Transitive and the Impersonal construction, can be graphically illustrated in the following way:

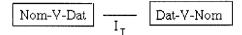


Figure 3. The relation between the Nom-Dat and Dat-Nom constructions.

The difference between the constructions in Figures 1 and 2 is clear. In contexts where the Dative human argument is topical, the Dat-Nom construction is chosen by the speaker, while in contexts where the Nominative argument is topical, the Nom-Dat construction would be used. When uttering a sentence with the Dative argument first the speaker is making a proposition about the human participant while uttering a sentence with the Nominative argument first a proposition is being made about the stimulus. It is therefore extra sentential factors that are crucial and decide upon the grammatical functions of the arguments.<sup>11</sup> The relation between the Impersonal and the Transitive construction, when our alternating verbs occur in them, is the same as the relation between an argument linking construction and its topicalization construction. Hence I have named the network link in Figure 3 between the two constructions  $I_T$ , where I stands for instance and T stands for Topicalization. This can be illustrated by the fact that when one of the arguments is in first position of the clause the other has to follow the infinite verb and is not comfortable with being situated in the intermediate position between the two verbs:

- (30) a. GUÐMUNDI hefði örugglega hentað FYRIRKOMULAGIÐ vel.
   G (dat) had definitely suited the arrangement (nom) fine
  - b. *?FYRIRKOMULAGIÐ hefði GUÐMUNDI örugglega hentað vel.* the arrangement (nom) had G (dat) definitely suited fine
  - c. *FYRIRKOMULAGIÐ hefði örugglega hentað GUÐMUNDI vel.* the arrangement (nom) had definitely suited G (dat) fine
  - d. ?GUÐMUNDI hefði FYRIRKOMULAGIÐ örugglega hentað vel.
     G (dat) had the arrangement (nom) definitely suited fine<sup>12</sup>

Had the arguments been comfortable in the intermediate position between the verbs in examples (30b and d), that would have been an indication of that argument inverting with the verb when something else is topicalized, a clear subject criteria (recall (3) above). These data therefore show that when one of the arguments is the topic, and subsequently the subject, the other argument prefers to be linked to the object position, which means that topic and subject coincide for this group of verbs in Icelandic. Put differently, as soon as the "object" argument of one of the two constructions is topicalized by the speaker the other construction is activated and not the "ordinary" topicalization construction. Let us compare these data to the corresponding data with the verb lika 'like'. Consider again (25) above, with the verb lika, repeated here for the sake of convenience:

- (25) a. MÉR hefur alltaf líkað GUÐMUNDUR. me has always liked Guðmundur
   'I have always liked Guðmundur.'
  - b. *GUÐMUNDUR hefur MÉR alltaf líkað*. Guðmundur have me always liked 'Guðmundur I have always liked.'
  - c. \**GUÐMUNDUR hefur alltaf líkað MÉR*. Guðmundur has always liked me
  - d. ?*MÉR hefur GUÐMUNDUR alltaf líkað*. me has Guðmundur always liked

When the Nominative argument is topicalized to first position, the Dative argument occupies the position between the verbs, hence the Dative argument is the subject and the Nominative argument in first position is a topicalized object, contrary to our group of alternating verbs.

Recall now that some of our predicates are simple verbs and some are complex predicates. Within Construction Grammar, the simple verbs simply occur in the lexically empty Transitive and Impersonal constructions, while the complex predicates would be regarded as lexically filled instances of the basic construction (see Goldberg 1995: 79–81).

In my view, one reason for choosing a Construction-based analysis like the one presented in this paper is that it is simple, in epistemological terms. Construction Grammar was first developed to account for idioms. It turned out that the machinery needed for that, i.e. the construction, also took care of less lexicalized expressions and even simple sentences, without adding any extra machinery to the theory (Goldberg 1995: 6-7; Cruse & Croft in prep.: ch. 10). That machinery, i.e. the construction, can now be used to account for the double mapping of certain Dat-Nom verbs in Icelandic (and other languages). Thereby, the major tools of Construction Grammar, that is the construction, can be added to account for phenomena the theory was not designed to account for in the first place. In that way, Construction Grammar is a good scientific theory. Further, in Lakatos' terminology (Couvalis 1997: 70), in which a distinction is made between the core claim and the auxiliary assumptions of a research program, Construction Grammar accounts for the double mapping of the verbs in question with its core claim and does not need to make use of auxiliary mechanisms.

#### 4. SUMMARY

In this paper I have shown that a certain subgroup of Dat-Nom verbs in Icelandic, with two arguments, a Dative human argument and a Nominative stimulus, shows a variation regarding the realization of syntactic functions. This means that both arguments of these verbs can be realized as the syntactic subject and both arguments can be realized as the syntactic object.

When examining the semantics of this group of verbs it turns out that they can roughly be divided into Emotive verbs, Perception verbs, Cognition verbs, Verbs of attitude and Benefactive verbs. The dual assignment property of those verbs is a result of their conceptual causal structure. Since these verbs denote stative/inchoative events which have a bidirectional causal structure it is possible to view them either as if the human argument is directing his/her attention to the stimulus, or as if the stimulus is causing an effect in the human argument. Case languages often signal the lack of the prototypical causal relation, i.e. of one entity transmitting force onto another entity, with a neutral case, i.e. neither with nominative nor accusative case. This case is often the dative case. This is also true of Icelandic.

A construction Grammar analysis has been proposed where the Dat-Nom and the Nom-Dat categorization frames are viewed as separate but related constructions, existing at different levels of schematicity. The relation between the two constructions seems to be the same or similar to the relation between an ordinary argument structure construction and its topicalization construction, since for these verbs the topicalization construction is not as readily available as the other construction is. For this group of verbs subject and topic seem to coincide.

#### ACKNOWLEDGEMENTS

This paper is a revised and expanded version of a working paper in *WPSS* (see Barðdal 1999). I thank everyone who contributed to the *WPSS* version, and for a discussion of and comments on this version I thank Bill Croft, Thórhallur Eythórsson, Jóhannes G. Jónsson, the editor, an anonymous reviewer of this journal, and the audience at the Linguistics Seminar in Manchester, 12 December 2000, where this work was presented. This research is supported in part by a grant from the Icelandic Research Fund for Graduate Students.

#### NOTES

- 1 Note, though, that ordinary *fear-* and *frighten-*verbs in Icelandic select nominative and accusative case, while the verbs under discussion select for nominative and dative case.
- 2 When translating these examples into English I have consistently used the English active versus passive forms. That is only to maintain the word order between the arguments and should not be taken to imply any diathetic differences.
- 3 In the examples above I have only used pronouns, but full NP's do not differ from pronouns with respect to the subject properties in Icelandic.

- 4 The fact that such double mapping verbs exist has some interesting theoretical consequences. It implies that the relation between the subject and the predicate is not necessarily as "inherent" as it is often assumed to be. It implies that the subject is in some sense a "derived" category. Surely it doesn't mean that subjects don't behave differently from objects, they do, of course, but these data suggest that our *assumptions* on why they behave differently needs to be reconsidered.
- 5 Modern High German has a verb *gefallen* 'please, suit', which behaves very much like Icelandic *henta*. The Dative human argument of *gefallen*, however, is not considered a subject in German. That is partly due to different criteria being used as subject criteria in German and Icelandic. In German the subject is considered to be the nominative argument, thereby position is excluded as a subject criterion. It is a fact, though, that impersonal verbs in German pass some of the tests traditionally associated with subjecthood (see Seefranz-Montag (1983) and a discussion thereof in Barðdal (1997) and Barðdal in prep.). The literature on subjecthood in German usually does not mention this fact.
- 6 To illustrate that those two tests are reliable subject tests, consider the following Icelandic examples:
  - i. Ég hef keypt hana/bókina. I have bought it/the book
  - ii. Bókina/Hana hef ég keypt. the book/it have I bought
  - iii. \*Bókina/\*Hana hef keypt ég. the book/it have bought I
  - iv. ?Ég hef bókina/hana keypt. I have the book/it bought

These examples show that position is a reliable subject test in Icelandic.

- 7 Speakers vary in their judgements on *sárna*. Bernódusson (1982: 38) gives *sárna* as an example of such verbs with varying syntactic structure, but in my language it can only have the Dative human argument as a subject.
- 8 However, Jónsson (1997–98: 35) has noticed that the copula construction together with an adjective might still exhibit a mild degree of productivity in Modern Icelandic, and I agree with him.
- 9 A note of warning though: Example (26a) is taken from *Barlaams ok Josaphats saga* (1981), a saga belonging to the genre "Late Medieval Romances". Firstly, the saga is Old Norwegian and not Old Icelandic, and secondly, and more importantly, *Barlaams ok Josaphats saga* is a translation from Latin. It is certainly a free translation, but nevertheless it cannot be excluded that the construction is due to Latin influence. The order of the constituents in (26b) can be due to "quantifier floating". Note that the Dative human argument is a quantifier. These examples are therefore not conclusive examples of the subjecthood of the Nominative stimulus. Furthermore, example (26b) is not altogether bad in Modern Icelandic.
- 10 Psycholinguistic research (Barðdal, in press) has confirmed the existence of Nom-Acc construction at this highest level, but corresponding evidence did not emerge for the Dat-Nom construction. It is therefore not clear whether this highest abstract level of the Dat-Nom and the Nom-Dat constructions is psychologically real in the mind of Icelandic speakers.
- 11 About subject choice, Croft says (1991: 151):
  - (i) Most discourse analysts agree that, when a choice for subject is involved, topicality governs the choice, and that, when a choice is not involved, the NP that is grammatically required to fill the subject slot is a "natural topic".
- 12 There seems to be some variation between speakers as to the (non-)grammaticality of these and similar examples. This needs to be further investigated.

#### REFERENCES

- Allen, C. L. 1995. Case Marking and Reanalysis. Grammatical Relations from Old to Early Modern English. Oxford: Clarendon Press.
- Barðdal, J. 1997. Oblique Subjects in Old Scandinavian. Working Papers in Scandinavian Syntax 60: 25–50 [also in NOWELE 37: 25–51, 2000].
- Barðdal, J. 1998. Argument Structure, Syntactic Structure and Morphological Case of the Impersonal Construction in the History of Scandinavian. *Scripta Islandica* 49: 21–33.
- Barðdal, J. 1999. The Dual Nature of Icelandic Psych-Verbs. Working Papers in Scandinavian Syntax 64: 78–101.
- Barðdal, J. 2000. The Subject is Nominative. On Obsolete Axioms and their Deeprootedness. In Lindberg, C.-E. & Nordahl Lund, S. (eds), *17th Scandinavian Conference of Linguistics*. Odense: Institute of Language and Communication, pp. 93–117.
- Barðdal, J. (in press) Case Assignment of Nonce Verbs in Icelandic. SKY Journal of Linguistics 13.
- Barðdal, J. (in prep.) The Dative Experiencer First Construction in Icelandic and German. Ms. Lund University/University of Manchester.
- Barlaams ok Josaphats saga. 1981. Magnus Rindal (ed.) for the Kjeldeskriftfondet, Oslo.
- Barnes, M. 1986. Subject, Nominative and Oblique Case in Faroese. *Scripta Islandica* 37: 13–46.
- Bernódusson, H. 1982. Ópersónulegar setningar. [Impersonal Clauses] Master's thesis. University of Iceland, Reykjavík.
- Brennu-Njálssaga. 1987. In Halldórsson, B., Torfason, J., Tómasson, S. & Thórsson, Ö. (eds), *Íslendingasögur og þættir*. Fyrsta bindi. Reykjavík: Svart á hvítu.
- Couvalis, G. 1997. The Philosophy of Science. Science and Objectivity. London: Sage Publications.
- Croft, W. 1991. Syntactic Categories and Grammatical Relations. The Cognitive Organization of Information. Chicago and London: University of Chicago Press.
- Croft, W. 1993. Case Marking and the Semantics of Mental Verbs. In Pustejovsky, J. (ed.), *Semantics and the Lexicon*. Dordrecht: Kluwer Academic Publishers, pp. 55–72.
- Croft, W. 1998. Event Structure in Argument Linking. In Butt, M. & Geuder, W. (eds), The Projection of Arguments: Lexical and Compositional Factor. Stanford: CSLI, pp. 21–63.
- Croft, W. 2000. Lexical Rules vs. Constructions: A False Dichotomy. In Cuyckens, H., Berg, Th., Dirven, R. & Panther, Kl.-U. (eds), *Motivation in Language: Studies in Honour of Günter Radden*. Amsterdam: John Benjamins.
- Croft, W. 2001. Radical Construction Grammar: Syntactic Theory in Typological Perspective. Oxford: Oxford University Press.
- Cruse, A. & Croft, W. (In prep.) *Cognitive Linguistics* [to appear in the Cambridge Textbooks in Linguistics series].
- Goldberg, A. E. 1995. Constructions. A Construction Grammar Approach to Argument Structure. Chicago and London: University of Chicago Press.
- Jónsson, J. G. 1997–98. Sagnir með aukafallsfrumlagi. [Verbs selecting for Oblique Subjects]. *Íslenskt mál og almenn málfræði* 19–20: 11–43.
- Jónsson, J. G. 1998. A List of Predicates That Take a Quirky Subject in Icelandic. Ms. Reykjavík: University of Iceland.
- Kay, P. & Fillmore, Ch. 1999. Grammatical Constructions and Linguistic Generalizations: the What's X Doing Y? Construction. *Language* 75: 1–34.
- Langacker, R. W. 1988. A Usage-Based Model. In Rudzka-Ostyn, B. (ed.), *Topics in Cognitive Linguistics*. Amsterdam/Philadelphia: John Benjamins Publishing Company, pp. 127–161.
- Maling, J. & Jónsson, J. G. 1995. On Nominative Objects in Icelandic and the Feature [+Human]. Working Papers in Scandinavian Syntax 56: 71–79.
- Platzack, Ch. 1999. The Subject of Icelandic Psych-Verbs: a Minimalistic Account. Working Papers in Scandinavian Syntax 64: 103–115.
- Rögnvaldsson, E. 1996a. Frumlag og fall að fornu. [Subject and Case in Icelandic Middle Ages]. *Íslenskt mál og almenn málfræði* 18: 37–69.
- Rögnvaldsson, E. 1996b. Word Order Variation in the VP in Old Icelandic. Working Papers in Scandinavian Syntax 58: 55–86.

- Seefranz-Montag, A. v. 1983. Syntaktische Funktionen und Wortstellungsveränderung. Die Entwicklung 'subjektloser' Konstruktionen in einigen Sprachen. Studien zur Theoretischen Linguistik 3. München: Wilhelm Fink Verlag.
- Sigurðsson, H. Á. 1983. Um frásagnarumröðun í forníslensku [On Narrative Inversion in Old Icelandic]. Master's thesis. University of Iceland.
- Sigurðsson, H. Á. 1989. Verbal Syntax and Case in Icelandic. Doctoral dissertation, University of Lund.
- Sigurðsson, H. Á. 1990–91. Beygingarsamræmi [Agreement]. Íslenskt mál og almenn málfræði 12–13: 31–77.
- Sigurðsson, H. Á. 1992. The Case of Quirky Subjects. Working Papers in Scandinavian Syntax 49: 1–26.
- Thráinsson, H. 1979. On Complementation in Icelandic. New York: Garland Publishing
- Zaenen, A., Maling, J. & Thráinsson, H. 1985. Case and Grammatical Functions: The Icelandic Passive. *Natural Language & Linguistic Theory* 3: 441–483.