

# Reconstructing Constructional Semantics: The Dative Subject Construction in Old Norse-Icelandic, Latin, Ancient Greek, Old Russian and Lithuanian\*

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## Abstract:

As the historical linguistic community is well aware of, reconstructing semantics is a notoriously difficult undertaking. Such reconstruction has so far mostly been carried out on lexical items, like words and morphemes, and has not been conducted for larger and more complex linguistic units, which intuitively lends itself as more intricate, especially given the lack of methodological criteria and guidelines within the field. In order to meet this challenge, we present an attempt at reconstructing constructional semantics, more precisely the semantics of the Dative Subject Construction for an earlier stage of Indo-European. For this purpose we employ lexical semantic verb classes in combination with the semantic map model (Barðdal 2007, Barðdal, Kristoffersen & Sveen 2011), showing how incredibly stable semantic fields may remain across long time spans, and how reconstructing such semantic fields may be accomplished.

**Keywords:** Semantic Reconstruction, Constructional Semantics, Lexical Semantic Verb Classes, Dative Subject Construction, Indo-European

## 1. Introduction

Constructional meaning is considerably more abstract than lexical meaning, and hence more difficult to study. Using introspection to study constructional meaning may be an adequate procedure within synchronic linguistics, where the aim is to study one's own variety of language. However, introspection is impossible as an analytical tool when studying abstract constructional meaning in dead languages or earlier language stages. In the present article we lay out how constructional meaning may be studied historically, within the framework of Cognitive Construction Grammar, based on the lexical semantics of the predicates instantiating an argument structure construction, in combination with the Semantic Map Model (Croft 2001, Haspelmath 2003, Cysouw, Haspelmath & Malchukov 2010)

Our goal is to compare the semantic fields occupied by dative-subject predicates in Old Norse-Icelandic, Ancient Greek, Latin, Old Russian, and Lithuanian. Systematic investigation of the semantic scope of the Dative Subject Construction in each of these Indo-European languages will be carried out, as a part of a larger Indo-European comparison, aiming at throwing light on the relation between verbal semantics and non-canonical case marking. A secondary goal is to study the development of the Dative Subject Construction in Indo-European and whether the construction may be reconstructed for Proto-Indo-European. We

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will here concentrate on the semantics of the construction irrespective of the different forms found for different subconstructions of the Dative Subject Construction in the Indo-European languages under investigation (see Section 2).

It is a general view in the literature on non-canonical subjects in the Indo-European languages (Zaenen, Maling & Thráinsson 1986, Sigurðsson 1989, Falk 1997, Haspelmath 2001, *inter alia*), that such non-canonical subject marking is associated with EXPERIENCER and BENEFACTIVE predicates.<sup>1</sup> As shown by Barðdal (2004), in her comparative study of Modern Icelandic, Modern Faroese and Modern High German, this is an oversimplification, and several dative-subject predicates in Modern Icelandic are neither experiencer nor benefactive predicates, but denote some sort of non-volitional events, here referred to as HAPPENSTANCE events. The same is true for Modern Faroese and Modern German, although there are fewer happenstance predicates in those languages than in Modern Icelandic. It remains to be documented whether the situation is similar in, for instance, Old Norse-Icelandic, the predecessor of Modern Icelandic, and in the other ancient and archaic Indo-European languages, although a preliminary comparison between Old Norse-Icelandic and Modern Icelandic reveals that the use of happenstance predicates in the Dative Subject Construction seems to have gone down drastically in comparable texts (Barðdal 2011).

It has often been assumed that while the Dative Subject Construction is robust in Modern Icelandic, that the same is not true for the older stages of Germanic or the Indo-European languages. Hoch (1990) documents only a few potential predicates for Sanskrit and so does Luraghi (2010) for Hittite. However, our results reveal a high number of common sememes across the Indo-European language branches investigated here, as well as a major overlap in the semantic fields occupied by the construction across Germanic, Romance, Greek, Slavic and Baltic, which may suggest an Indo-European inheritance. For this purpose, we will develop a method to reconstruct a common semantic space, on the basis of existing lexical semantic verb classes across related languages, a method which can generally be used to reconstruct constructional semantics for earlier language stages and dead languages.

In Section 2 we give a definition of our notion of the DATIVE SUBJECT CONSTRUCTION, illustrated with examples of the various subconstructions of the construction. In Section 3 we review and discuss some of the problems with reconstructing semantics, and suggest a method for reconstructing constructional semantics on the basis of narrowly-defined lexical semantic verb classes and the Semantic Map Model. In Section 4 we compare the predicates instantiating the Dative Subject Construction in all five Indo-European language branches under investigation and suggest a classification of the relevant predicates into narrowly-circumscribed semantic classes. We also discuss the different kind of semantic overlaps expected depending on whether a category is inherited or not, whether the inheritance is early or recent, and whether the construction has been productive or not in the history of these languages. We then, in Section 5, attempt a comparison of the semantic space of the Dative Subject Construction across the five Indo-European branches under investigation, and on the basis of that put forward a reconstruction of the semantics of the Dative Subject Construction for an earlier Indo-European proto-stage. In Section 6 we summarize the content and conclusions of this article.

## 2. The Dative Subject Construction

With the term DATIVE SUBJECT CONSTRUCTION, we refer to argument structure constructions instantiated by predicates, where the highest argument is in the dative case and

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<sup>1</sup> One exception to this is Jónsson (1997–98, 2003).

not in the canonical nominative case (cf. Eythórsson & Barðdal 2005). Examples are given in (1a–e) below:

- |      |  |                     |
|------|--|---------------------|
| (1a) | <b><i>honum</i></b> <i>er nauðsyn</i><br>him.DAT is need<br>'he has a need'                | Old Norse-Icelandic |
| (1b) | <b><i>mihi</i></b> <i>necesse est</i><br>me.DAT necessary is<br>'I have a need'            | Latin               |
| (1c) | <b><i>emoi</i></b> <i>dei</i><br>me.DAT needs<br>'I need'                                  | Ancient Greek       |
| (1d) | <i>noužda by</i> <b><i>jemou</i></b><br>need be.SUBJ him.DAT<br>'he would have a need'     | Old Russian         |
| (1e) | <b><i>iiėmus</i></b> <i>reikalėngi būvo</i><br>them.DAT necessary was<br>'they had a need' | Lithuanian          |

As argued by Eythórsson & Barðdal (2005: 827–832), who discuss several subject properties in the Germanic languages, the common denominator of the arguments which pass the subject tests in these languages is that they are the highest or leftmost argument of their verbs' argument structure. They follow Croft (1998) in assuming that the internal order of the arguments is determined by the causal conceptual structure of each predicate and the force-dynamic relations holding between the participants of the event denoted by the predicate (cf. Croft 1998, Barðdal 2001a–b). Clearly, for one-place predicates, the only argument of such an argument structure will automatically be its highest argument.

As the syntactic subject properties of the ancient and archaic Indo-European languages have only been investigated to a limited degree (Hock 1990 on Sanskrit, Eythórsson & Barðdal 2005 on Early Germanic, Fedriani 2009 on Latin, Grillborzer 2010 on Old Russian), it is impossible at this stage to make substantiated claims for a non-controversial subject status of these dative subject-like arguments, based on their syntactic behavior relative to any subject tests. There is no doubt, however, that these subject-like datives are the highest or leftmost arguments of their verbs' argument structure constructions, and as such one may regard them as the S argument of intransitives, in Dixon's (1994) alignment typology, where A is the subject of a transitive predicate, O its object, and S the subject of an intransitive predicate. Hence, our notion of subject in this work refers to the status of subject-like datives as being the S argument of intransitive predicates. We also include in our definition and our discussion the subject-like dative of so-called TRANSIMPERSONAL predicates, in the sense of Donohue 2008, Malchukov 2008, Mithun 2008 and Nichols 2008). These are predicates which are formally two-place predicates but where the subject-like argument is not in the nominative case, and the second object-like argument may be a nominative (2a), a genitive (2b), a prepositional object (2c) or simply a subordinate clause (2d), as is shown below with one example from four of the five Indo-European language branches under investigation:

- (2a) lac mihi non ... **novum** ... defit (Dat-Nom) Latin  
 milk.NOM me.DAT not new.NOM lack  
 ‘I do not ... lack new milk’ (Vergil)
- (2b) a molodomu **česti** dobyť (Dat-Gen) Old Russian  
 but young.DAT honor.GEN creates  
 ‘but the young receive honor’ (Sl. O Zaton)
- (2c) honum líkaði **til Sighvats** vel (Dat-PP) Old Norse-Icelandic  
 him.DAT liked to Sighvatur.GEN well  
 ‘he liked Sighvatur well’ (Fm. IV, 89<sup>10</sup>)
- (2d) Ar nedera man **ką noriu darit** (Dat-S) Old Lithuanian  
 does not-suit me.DAT what want do.INF  
 ‘Is it not appropriate for me what I want to do?’ (DP 93 13)

There is thus no doubt that a wide array of Dative Subject Constructions are found across several of the ancient and archaic Indo-European languages. Since we will be showing later in this article that argument structure constructions with a dative subject pivot are not confined to experiencer and benefactive predicates, we do not regard these as having the status of E (for Experiencer), as is done in Nichols (2008), but believe that the notion of S is more accurate, following Andrews (2001) and Onishi (2001). However, we will neither refer to these as S or E here, but continue to refer to these as DATIVE SUBJECTS in the remainder of this article.

Observe also that the predicate in (2a) selects for the Dat-Nom case frame, and we believe that several, if not all, such predicates could alternate between two argument structure constructions, Dat-Nom and Nom-Dat. In other words, we believe that the two word orders do not represent a basic word order and a topicalization of the basic word order, but rather two different basic word orders. The evidence for this is comparative, as such alternating predicates exist in Modern Icelandic (Bernóðusson 1982, Jónsson 1997–98, Barðdal 2001a) and Modern Faroese (Barnes 1986), and have been argued to exist in the history of English (Allen 1995), Icelandic (Barðdal 2001a), German (Eythórsson & Barðdal 2005) and Mainland Scandinavian (Barðdal 1998). The hypothesis that both word orders are basic is also confirmed by the fact that in Modern Lithuanian, both arguments show some subject properties (Hoelvot 2009), and in the old languages, the Dat-Nom word order does not seem to be motivated by any specific information structural properties, although this clearly needs further investigation. Therefore, at this point in our research, we take both word orders to be basic, which means that we include in our investigation predicates which are traditionally listed as Nom-Dat predicates in dictionaries and traditional reference grammars, provided of course that they show properties of basic word order variation. The same is true for Acc-Nom and Gen-Nom predicates.

Before we commence with the comparison of the semantics of dative-subject predicates across Germanic, Romance, Greek, Slavic and Baltic, a few words on the problems associated with reconstructing semantics are in place.

### 3. Reconstructing Semantics

More or less all semantic reconstruction within historical linguistics is focused on reconstructing the semantic content of lexical items or morphemes (cf. Dyen & Aberle 1974, Blust 1987, Fortson 2003, Zorc 2004, Fox 2005, Urban 2011), while little or no effort has been put into reconstructing the semantics of larger and more complex constructions, like

argument structure constructions. The reason is presumably that while scholars do not agree on how to reconstruct semantic content, still working on uncovering the mechanisms and directionality of semantic change, they will of course not embark on the even more complicated undertaking of reconstructing the semantics of units larger than words. This, however, can be dealt with on a cognitive construction grammar approach where the semantics of argument structure constructions is regarded as being derived from the semantics of the predicates instantiating it.

In this article, therefore, we attempt to approach the problem of reconstructing the semantics of larger units than words, in this case argument structure constructions, with the aid of Cognitive Construction Grammar and the Semantic Map Model (Croft 2001, Haspelmath 2003, Cysouw, Haspelmath & Malchukov 2010). On a constructional approach, all linguistic units are regarded as form–function correspondences, and this includes larger and more complex units like argument structure constructions. Like all other constructions, argument structure construction can be divided into two semantic types, i.e. SEMANTICALLY SPECIFIC and SEMANTICALLY GENERAL constructions (Tomasello 1998, Croft & Cruse 2004: 253–254, Barðdal 2001a, 2004, 2007, 2008, Barðdal & Eythórsson 2011, Barðdal, Kristoffersen & Sveen 2011), also sometimes referred to in the literature as SEMANTICALLY NON-COMPOSITIONAL and SEMANTICALLY COMPOSITIONAL (cf. Goldberg 1995: 13–16, Croft 2001: 180–184, Wulf 2008). The difference between the two is that the semantics of the first type is not a sum of the semantics of the parts, while the semantics of the latter one is. Or, in other words, the first type is semantically irregular, where the meaning part has to be idiosyncratically attributed to the form part on a construction-specific basis, while the second is semantically regular with the meaning of the whole being derivable from the meaning of the parts.

It is the second type of construction that we will be dealing with here, where the semantics is taken to be derived from the lexical verbs instantiating a construction (Goldberg 1995, Barðdal 2008, 2011). In this respect, the notion of verb classes becomes important, as different subclasses of verbs instantiating an argument structure construction may be regarded as representing different subconstructions of a construction (Croft 2003, Barðdal 2004, 2006, 2007, 2008, 2011, Barðdal, Kristoffersen & Sveen 2011). This is why a comparison of the lexical semantic verb classes which instantiate an argument structure construction across related languages is useful for semantic reconstruction. The lexical semantic verb classes function as the unit of COMPARANDA, and on the basis of presence or absence of such verb classes, mapped onto semantic space, a reconstruction can be carried out. It is thus semantic fields, mapped across different regions in semantic space, which are reconstructed for earlier proto-stages. This is how Cognitive Construction Grammar, in combination with the Semantic Map Model, aids in the reconstruction of larger, more complex and abstract units like argument structure constructions for proto-stages, more specifically in the reconstruction of their semantics. Such a reconstruction has already been successfully carried out for the Ditransitive Construction in Germanic (Barðdal 2007).

We now proceed to a comparison of the lexical semantic verb classes which instantiate the Dative Subject Construction in the five Indo-European language branches under investigation.

#### **4. Comparison of the Semantics of the Dative Subject Construction in Old Norse-Icelandic, Archaic/Classical Latin, Ancient Greek, Old Russian, and Lithuanian**

Our database with dative-subject predicates has yielded 258 different sememes across Old Norse-Icelandic, Classical Latin, Ancient Greek, Old Russian and Lithuanian, which we list in

Appendix, together with one predicate from each of the languages where a verb with that meaning is attested. Several of the verbs are synonymous, in which case we list only one. This means that the Appendix does not list all predicates in our database, but only one instantiation of each sememe in the languages where it is attested.

Table 1 gives the type frequency of the dative-subject predicates found in each of the five Indo-European language branches. The predicates have been extracted through searches in dictionaries and reference grammars for each language, both electronically and manually. The Lithuanian database includes both attested Old Lithuanian predicates as well as predicates from the modern language. Since Old Lithuanian texts are so few, and only documented back to the 16th century, we have included predicates from Modern Lithuanian.

**Table 1:** Type frequency of dative-subject predicates

	<i>Type Frequency</i>
Old Norse-Icelandic	379
Archaic/Classical Latin	116
Ancient Greek	143
Old Russian	145
Lithuanian	116

For Icelandic, however, we have not included predicates from Modern Icelandic in our Old Norse-Icelandic database, unless they are also attested in Old Norse-Icelandic texts. Notice that there are twice as many predicates documented in Modern Icelandic than in Old Norse-Icelandic. As an earlier comparison of the use of dative-subject predicates in Old Norse-Icelandic and Modern Icelandic texts suggests that such predicates are less used in Modern Icelandic than in Old Norse-Icelandic (cf. Barðdal 2008: 19, 2011 Barðdal & Eythórssón 2009), it is possible that more predicates existed in Old Norse-Icelandic than those documented in the texts. As the vocabulary of the Icelandic Sagas is quite limited in number, and the texts are confined to specific themes and narratives, this is a most likely scenario.

Let us now consider the most common sememes, i.e. those which are found across three or more branches. These are listed below, first the ones documented in all five branches, then the ones found in four branches, and finally the ones found in three branches:

***Sememes found in five branches (ten types):***

- **be pleased:** finnast (ON-I), arestōs einai (Gr), malonu būti (Lith), v’sladěti (OR), libere (Lat)
- **be of smb’s business/concern:** res esse (Lat), méteimi (Gr), bėda būti (Lith), nadob’nyi (OR)
- **be sufficient/suffice:** duga (ON-I), satis esse (Lat), exarkein (Gr), kakti (Lith), dov’lati (OR)
- **suit, become:** sama (ON-I), addecere (Lat), prepō (Gr), derėti (Lith), prijět’nyi byti (OR)
- **occur to one’s mind:** hugsast (ON-I), succurrere (Lat), epierchomai (Gr), dingtelėti (Lith), priiti v’ um’ (OR)
- **succeed:** takast (ON-I), succedere (Lat), symbainō (Gr), gerai eiti (Lith), ougoditsę (OR)
- **lack:** bila (ON-I), deesse (Lat), dei (Gr), stıgti (Lith), lixyi byti (OR)
- **need:** vera þörf á (ON-I), oportere (Lat), dei (Gr), reikėti (Lith), nadobě buty (OR)
- **seem:** virđast (ON-I), videri (Lat), dokėō (Gr), atrodyti (Lith), javitise (OR)
- **appear:** birtast (ON-I), apparere (Lat), paristėmi (Gr), rodyti (Lith), doz’rėti (OR)

***Sememes found in four branches (14 types):***

- **like:** falla í geð (ON-I), areskō (Gr), patikti (Lith), ougažati (OR)
- **dislike:** leiðast (ON-I), displicere (Lat), handánō (Gr), nepatikti (Lith)
- **enjoy:** filós einai (Gr), contingere (Lat), linksma būti (Lith), radost'nyi (OR)
- **be of good:** bene esse (Lat), lysiteleō (Gr), sveika būti (Lith), blago byti (OR)
- **be difficult:** acerbus esse (Lat), argaleon einai (Gr), sunku būti (Lith), v'stoužiti byti (OR)
- **be in pain:** algeinōs einai (Gr), skaudėti (Lith), z'lo byti (OR), dolori esse (Lat)
- **be dear:** carus esse (Lat), brangu būti (Lith), č'st'nyi byti (OR), entimos einai (Gr)
- **find (un)important for sby:** skipta máli (ON-I), levis esse (Lat), lyō (Gr), svarbu būti (Lith)
- **be proper for sby:** sama (ON-I), oportere (Lat), eika (Gr), godě byti (OR)
- **benefit:** aflast (ON-I), prodesse (Lat), kerdiōn einai (Gr), pol'za (OR)
- **get, receive:** áskotnast (ON-I), piptō (Gr), tekti (Lith), imati (OR)
- **feel warm:** hitna (ON-I), karšta būti (Lith), teplo buty (OR), thermē (Gr)
- **know:** vera (ó)kunnleiki á (ON-I), ignotus esse (Lat), vedemo byti (OR), gnōston (Gr)
- **happen:** accedere (Lat), apo-bainō (Gr), pataikyti (Lith), loučitisja (OR)

### *Sememes found in three branches (19 types):*

- **have interest for:** vera hugur (ON-I), interesse (Lat), įdomu būti (Lith)
- **be(come) happy:** charizō (Gr), džiugu būti (Lith), oudob'nyi byti (OR)
- **have fear/agony:** ofbjóða (ON-I), baisėtis (Lith), tethnasi deei (Gr)
- **be in danger:** standa mein að (ON-I), molestus esse (Lat), kindunos (Gr)
- **find strength in sth:** vera styrkur að (ON-I), firmus esse (Lat), pora byti (OR)
- **become at ease:** hægjast um (ON-I), solacium esse (Lat), lengva būti (Lith)
- **be easy:** facilis esse (Lat), oudobyi byti (OR), anesis (Gr)
- **have problems with sth:** vandræðast (ON-I), laboriosuses esse (Lat), metež'no (OR)
- **find (im)possible:** hlýðast (ON-I), adynatēō (Gr), moč'no byti (OR)
- **be in sorrow:** empiptō (Gr), liūdna būti (Lith), pečal' byti (OR)
- **be shameful:** pudor esse (Lat), gėda būti (Lith), vina byti (OR)
- **have use of sth:** verða gagn að (ON-I), lysiteleō (Gr), usui esse (Lat)
- **have a wish:** optatus esse (Lat), polyarētos einai (Gr), dobiti (OR)
- **be allowed:** licere (Lat), exeimi (Gr), l'zě byti (OR)
- **feel disgusted:** a(w)ēdia (Gr), fastidio esse (Lat), bjauru būti (Lith)
- **expect:** vera von (ON-I), expectatio esse (Lat), epanamenō (Gr)
- **be of surprise:** thauma einai (Gr), dyvéti (Lith), divovatisha (OR)
- **feel honored by sth:** vera höfuðburður at (ON-I), garbė būti (Lith), honori esse (Lat)
- **have to/must:** ofeilō (Gr), likti (Lith), priiti (OR)

The 258 sememes may be divided into the following 51 narrowly-defined lexical semantic verb classes (see Appendix), some of which can be subsumed under wider semantic category labels, given in boldface below:

#### **Verbs denoting Emotions:**

1. Verbs of liking/being pleased
2. Verbs of dislike
3. Verbs of longing
4. Verbs of enjoyment/happiness
5. Verbs of feeling/experiencing
6. Verbs expressing fear/danger

#### **Verbs of Bodily States:**

31. Verbs expressing bodily temperature
32. Verbs of getting better/worse (of illness)
33. Verbs of getting younger/older
34. Verbs of sleeping/being unconscious
35. Verbs of swallowing/choking

7. Verbs denoting suffering/distress
8. Verbs expressing anger/irritation
9. Verbs of boredom/tiredness
10. Verbs expressing relieve/ease
11. Verbs expressing burden/load
12. Verbs of sorrow/sadness
13. Verbs of pain
14. Verbs of bitterness/hate
15. Verbs of shame
16. Verbs of care
17. Verbs expressing hope/wish

**Verbs of Gain:**

18. Verbs of benefit
19. Verbs of permission
20. Verbs of growing

**Verbs of Hindrance:**

21. Verbs of hindrance
22. Verbs of dying
23. Verbs of failing
24. Verbs of slipping/losing

**Verbs of Ontological States:**

25. Verbs of (dis)similarity
26. Verbs of connection/location
27. Verbs expressing superiority
28. Verbs of properties/abilities
29. Verbs of other ontological states

**Verbs of Possession:**

30. Verbs denoting possession

36. Verbs of symptoms of diseases
37. Verbs of hunger/thirst

**Verbs of Cognition**

38. Verbs of thinking/beginning to think
39. Verbs of (in)determinacy
40. Verbs of surprise/confusion
41. Verbs of knowing/change in knowledge
42. Verbs of agreeing/disagreeing

**Verbs denoting Attitudes:**

43. Verbs expressing sufficiency/usefulness
44. Verbs expressing appropriateness/suitability

**Verbs of Perception:**

45. Verbs of perception

**Verbs of Speaking:**

46. Verbs of speaking

**Verbs of Success:**

47. Verbs of success:

**Verbs of Happening:**

48. Verbs of happening

**Verbs of Modality:**

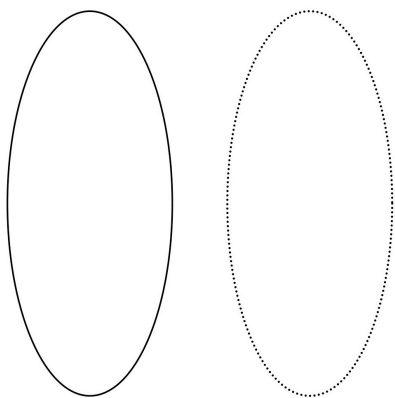
49. Verbs of obligation
50. Verbs of lacking

**Verbs of Evidentiality:**

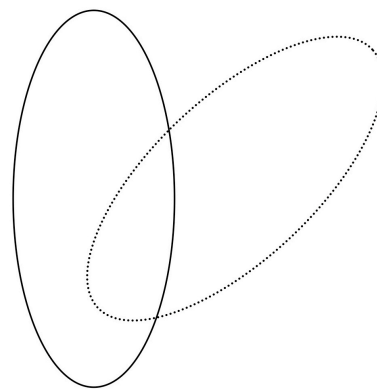
51. Verbs of seeming/appearing

Before presenting an overview of how the various lexical semantic verb classes divide across the five early and archaic Indo-European language branches, let us first consider some different scenarios and what kind of conclusions can be drawn from different types of semantic overlap.

Consider first Figures 1 and 2. If the Dative Subject Construction is not inherited, but an independent development in the various branches of Indo-European, then one would not necessarily expect any semantic overlap, as is shown in Figure 1. Or one would at least not expect more overlap than by pure chance, as is shown in Figure 2., where there is some overlap, although it is not systematic. Overlap by pure chance should be characterized by lack of systematicity.



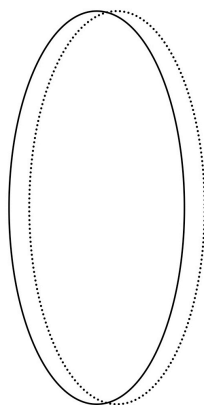
**Figure 1:** Independent Development:  
No Overlap



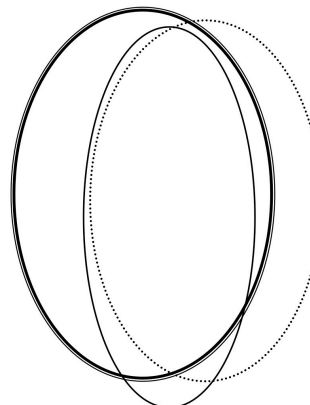
**Figure 2:** Independent Development:  
Overlap by Chance: Lack of Systematicity

Consider now Figures 3 and 4. If the Dative Subject Construction is a relatively recent common development, one might expect next to a 100% overlap in semantic fields, as the vocabulary will not have had much time to develop. This scenario is found in figure 3. However, on this scenario, one would also expect a high number of cognates across the branches, which is not the case here (cf. Bauer 2000, Lühr 2008), again speaking against this scenario as being likely for the development of the Dative Subject Construction in Indo-European.

Alternatively, if the Dative Subject Construction is an early inheritance, and not a recent development, one would expect a common semantic core, but some branch-specific developments may be expected. This scenario, shown in figure 4, presupposes that the Dative Subject Construction has been productive in the individual branches.

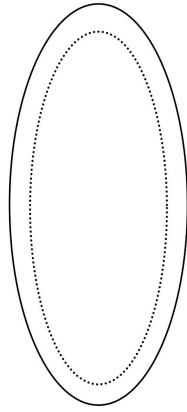


**Figure 3:** Recent Common Development

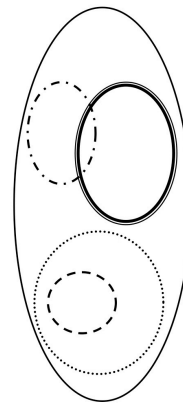


**Figure 4:** Early Inheritance: Productivity

However, if the Dative Subject Construction is an early inheritance from a common proto-stage, and has not been productive, there are two scenarios possible; first one might expect either more or less the same semantic fields across the branches, provided that the relevant vocabulary has not fallen into disuse. This scenario is shown in Figure 5. Or, alternatively, if the vocabulary has fallen into disuse, one might expect the semantic space to have shrunk in some of the branches. This last scenario might look as in Figure 6.



**Figure 5:** Early Inheritance:  
Non-Productivity



**Figure 6:** Early Inheritance:  
Non-Productivity

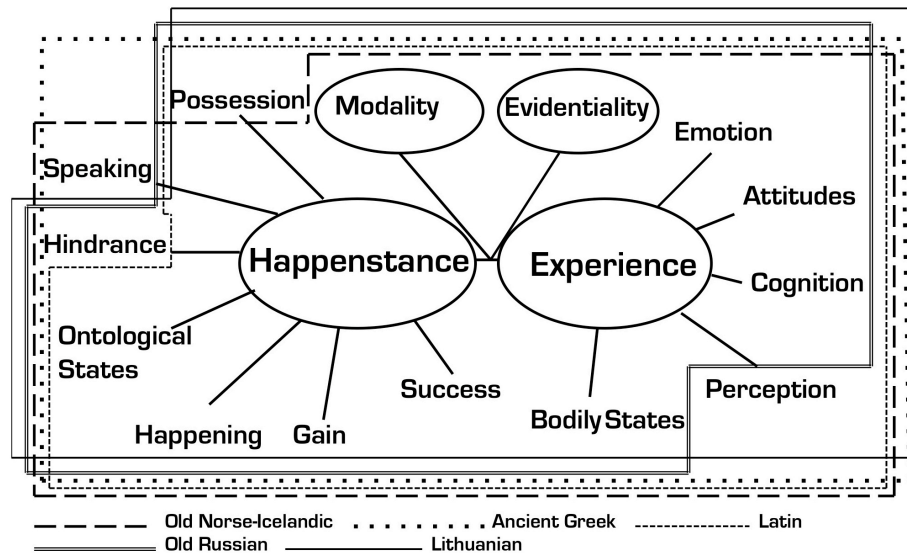
So which of these scenarios is found when we compare the lexical semantic verb classes across the five Indo-European branches under investigation here? How does the picture revealed by our five branches look like? This is the topic of next section.

## 5. A Reconstruction of the Semantics of the Dative Subject Construction in Indo-European

The predicates instantiating the Dative-Subject Construction comprise two main semantic categories, EXPERIENCE-BASED predicates and HAPPENSTANCE predicates (Barðdal 2004, 2008, 2011). The experience-based predicates are verbs of emotion, bodily states, cognition, attitudes, and perception. The happenstance predicates are verbs of gain, success, happening, hindrance, ontological states, speaking, and possession. In addition there are verbs of modality and evidentiality, also found occurring in the Dative Subject Construction, and these are not readily classified as either experience or happenstance.

The predicates can also be divided into event type categories in that some are stative and others are eventive. However, things are not so simple that the experience-based predicates are stative and the happenstance predicates are eventive, as verbs of emotion are very often stative but there are also some inchoative predicates among them. For instance, ‘occur to one’s mind’ would be inchoative and not stative. The same is true for happenstance predicates, some of them are eventive like ‘happen’, ‘lead to death’, while others are stative. The semantic class of Verbs of Ontological States is one such class where the predicates are stative. One such, ‘be similar to’, from Verbs of (dis)similarity, would be a case in point.

We will now present two different semantic maps of the lexical semantic classes instantiating the Dative Subject Construction, one, manually drawn, based on the 14 higher-level semantic categories, and another, computationally drawn, based on the narrowly-circumscribed semantic verb classes. We start with the manually-drawn map, given in Figure 7. Here one can see that the Dative Subject Construction has the widest semantic scope in Ancient Greek, where all the categories are represented. Old Norse-Icelandic has all the subconstructions, except for with Possession, Latin has all but Verbs of speaking and Verbs of hindrance, Old Russian has all but Verbs of speaking and Verbs of perception, while Lithuanian is missing Verbs of speaking. The graphics in Figure 7 are therefore most reminiscent of the graphics in Figure 6, which we claimed in Section 3 above might be typical for a scenario where the construction is an early inheritance, but has not been productive since the languages split. Parts of the vocabulary within different semantic categories have fallen into disuse in different language branches.



**Figure 7:** A Comparison of the Higher-Level Semantic Categories across Old Norse-Icelandic, Ancient Greek, Latin, Old Russian and Lithuanian

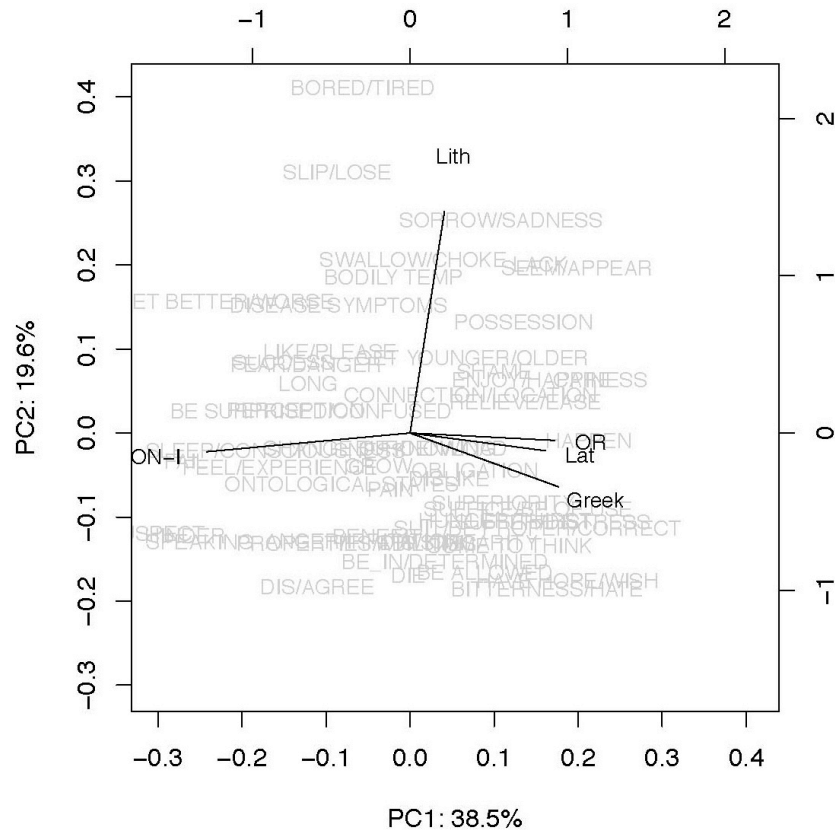
Some of the semantic categories are possibly innovations, like Verbs of speaking in Old Norse-Icelandic and Ancient Greek. All other semantic categories in Figure 7 are always found in at least four of five branches, although there is an unusually high number of predicates denoting bodily states in Lithuanian, compared with the other groups, suggesting that this particular semantic domain has become productive in that language. Apart from this, the semantic map in Figure 7 suggests an amazing stability within the semantic field of the Dative Subject Construction in the history of Indo-European.

One of the requirements of the Semantic Map Model is that related categories be located in connected regions in semantic space, the so-called SEMANTIC MAP CONNECTIVITY HYPOTHESES (Croft 2001: 96). This is a consequence of the fact that semantic maps are intended to represent conceptual space and the structure of categories in conceptual space. However, most semantic maps are intended to capture grammatical categories and not lexical categories. We believe that semantic maps of lexical verb classes should be regarded as discrete networks rather than continuous categories, and the details of such networks are hard to represent given 258 sememes. We therefore present our lexical categories as continuous spaces on the semantic map in Figure 7, while in reality this is more of a discrete network than a set of continuous categories. The discrete nature of lexical categories is better captured by maps as in Figure 8, although semantic maps as in Figure 7 are good for illustrative purposes, showing very clearly where some of the similarities and differences between languages lie (cf. Janda 2009).

Let us now consider the computationally-drawn semantic map in Figure 8, based on the 51 narrowly-circumscribed semantic verb classes. The map is based on a PRINCIPAL COMPONENT ANALYSIS (PCA), an unsupervised clustering method closely related to techniques such as MULTIDIMENSIONAL SCALING (MDS) and CORRESPONDENCE ANALYSIS (CA). The specific choice of technique is motivated by the data at hand, which consists of binary vectors, indicating whether a narrowly-circumscribed verb class is attested in our five Indo-European language branches or not. For each language branch, we have calculated the centroid of the vector per verb class, which is essentially the arithmetic mean. For details, see Everitt & Hothorn (2006).

As the map in Figure 8 undeniably reveals, there are strong similarities between Latin, Greek, and Old Russian. Furthermore, we note that Old Norse-Icelandic, as well as

Lithuanian are clearly different, both from the first three languages, and from each other. It should be pointed out that since PCA is an unsupervised clustering method, such clusters arise only from the underlying associations in the data, that is, the degree to which a given language is represented in each verb class.



**Figure 8:** A PCA Comparison of the 51 Narrowly-Circumscribed Semantic Verb Classes across Old Norse-Icelandic, Ancient Greek, Latin, Old Russian and Lithuanian

The verb classes themselves are harder to interpret, since there is obviously much overlap, as seen in the plot. However, this is hardly surprising, both due to linguistic realities and the nature of the data. It would be surprising to find clear, unique and unambiguous clouds of verb classes clustered with specific languages, given that the languages at hand are genetically related. Secondly, and perhaps more importantly, the underlying binary nature of the data makes a faithful representation more difficult. In this perspective, it should be noted that the 58.1% of the variation captured in the map, the  $x$  and  $y$  axes combined, is probably a very good result, indicating that there are real differences between the languages. This picture is therefore highly compatible with a scenario of early common development where the languages have had time to develop in different directions.

A multinomial logistic regression analysis, with verb class as the dependent variable and the binary language vectors as predictor variables, given in Table 2, confirms this impression, as only Latin comes out as not significant at the 0.05 level with respect to predicting the verb classes. This means that Latin does not deviate significantly from the average for our data, while the other languages deviate from this average to a higher degree. We expect that a more precise clustering result might be achieved with corpus-based frequency data, and more detailed syntactic information.

**Table 2:** Summary of multinomial logistic analysis of the similarities and differences between Old Norse-Icelandic, Ancient Greek, Latin, Old Russian and Lithuanian with respect to the narrowly-circumscribed semantic verb classes

	<i>Chisq</i>	<i>Df</i>	<i>P-value</i>	<i>Sig-level</i>
Ancient Greek	74.50	51	0.01757	0.05
Latin	60.83	51	0.16307	n.s
Lithuanian	75.82	51	0.01365	0.05
Old Norse-Icelandic	90.65	51	0.00053	0.001
Old Russian	84.00	51	0.00247	0.01

A final issue that we would like to discuss is the cross-linguistic fact that if a language has non-canonically case-marked subjects, these tend to be in the dative case expressing the experiencer. Therefore, one may argue, the facts discussed here do not necessarily show that the Dative Subject Construction is inherited in the Indo-European daughter languages under discussion, as these facts might as well be explained by reference to a typological universal or a near-universal defined by a conceptual constraint that experiencer subjects be in the dative case. Given the high number of languages with dative experiencers in the world, such a conceptual constraint might seem motivated.

To this we have several objections. First of all, the “typological dative”, i.e. the dative found cross-linguistically, is not COGNATE to the Indo-European dative, so it does not necessarily represent the same functional category. Second, the question arises what is meant by DATIVE here, as what is referred to as “dative” in the world’s languages is often a third case, i.e. neither a nominative/subject case, nor an accusative/object case, but a third morphological marker. In other words, there is no uniform category of a “typological dative”, but rather a category of a third case. Let us now consider Tables 3–7 for Icelandic, Ancient Greek, Latin, Russian and Lithuanian. Notice that non-canonical subject marking is found for accusative, dative and genitive, in all five language branches, even though we are only dealing with the Dative Subject Construction in this article. This stands in a stark contrast with, for instance, Japanese, shown in Table 8, where the case labeled DATIVE is much more of a third case than in Indo-European, as accusative and genitive cannot be used as non-canonical subject markers in Japanese.

**Table 3:** Case and argument structure constructions in Germanic

<i>Nom</i>	<i>Acc</i>	<i>Dat</i>	<i>Gen</i>
Nom	Acc	Dat	Gen
Nom-Acc	Acc-Nom	Dat-Nom	Gen-Nom
Nom-Dat	Acc-Acc	Dat-Gen	Gen-PP
Nom-Gen	Acc-Gen	Dat-PP	Gen-S
Nom-PP	Acc-PP	Dat-S	
Nom-S	Acc-S		

**Table 4:** Case and argument structure constructions in Latin (preliminary)

<i>Nom</i>	<i>Acc</i>	<i>Dat</i>	<i>Gen</i>
Nom	Acc	Dat	Gen
Nom-Acc	Acc-Nom	Dat-Nom	Gen-Nom
Nom-Dat	<del>Acc-Acc</del>	Dat-Gen	Gen-PP
Nom-Gen	Acc-Gen	Dat-PP	Gen-S
Nom-PP	Acc-PP	Dat-S	
Nom-S	Acc-S		

**Table 5:** Case and argument structure constructions in Ancient Greek (preliminary)

<i>Nom</i>	<i>Acc</i>	<i>Dat</i>	<i>Gen</i>
Nom	Acc	Dat	Gen
Nom-Acc	Acc-Nom	Dat-Nom	Gen-Nom
Nom-Dat	<del>Acc-Acc</del>	Dat-Gen	Gen-PP
Nom-Gen	<del>Acc-Gen</del>	Dat-PP	Gen-S
Nom-PP	Acc-PP	Dat-S	
Nom-S	Acc-S		

**Table 6:** Case and argument structure constructions in Lithuanian (preliminary)

<i>Nom</i>	<i>Acc</i>	<i>Dat</i>	<i>Gen</i>
Nom	Acc	Dat	Gen
Nom-Acc	Acc-Nom	Dat-Nom	Gen-Nom
Nom-Dat	<del>Acc-Acc</del>	Dat-Acc	Gen-PP
Nom-Gen	Acc-Gen	Dat-Gen	Gen-S
Nom-PP	Acc-PP	Dat-PP	
Nom-S	Acc-S	Dat-S	

**Table 7:** Case and argument structure constructions in Russian (preliminary)

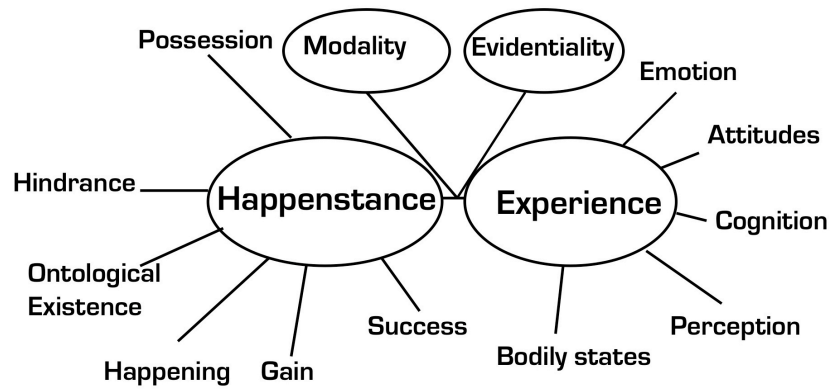
<i>Nom</i>	<i>Acc</i>	<i>Dat</i>	<i>Gen</i>
Nom	Acc	Dat	Gen
Nom-Acc	Acc-Nom	Dat-Nom	Gen-Nom
Nom-Dat	<del>Acc-Acc</del>	Dat-Acc	Gen-PP
Nom-Gen	<del>Acc-Gen</del>	<del>Dat-Gen</del>	Gen-S
Nom-PP	Acc-PP	Dat-PP	
Nom-S	Acc-S	Dat-S	

**Table 8:** Case and argument structure constructions in Japanese

<i>Nom</i>	<i>Acc</i>	<i>Dat</i>	<i>Gen</i>
Nom			
Nom-Acc		Dat-Nom	
Nom-Dat			
		Dat-PP	
Nom-PP		Dat-S	
Nom-S			

Therefore, since the Indo-European language branches have at least three different morphological cases functioning as non-canonical subject markers, there is no issue of “dative” here. That is, since non-canonical subject marking is divided across three different case categories in our five Indo-European languages, the dative case is not a specific third case, used for other functions than the ordinary subject and object functions. Hence, any claims that the use of the dative as a non-canonical subject case in the Indo-European languages, as being motivated by typological considerations or universal conceptual constraints, are not well founded, as they abstract away from a considerably more complex situation. Notice also that the Indo-European languages display non-canonical case patterns that are extremely rare typologically, for instance Acc-Gen, and Dat-Gen, which further strengthens our point that these argument structure constructions are inherited from a common proto-stage (cf. Barðdal & Eythórsson 2011, Barðdal 2012).

The last point we want to bring up relates to the semantics of the Dative Subject Construction in our five Indo-European languages, compared to the semantics of Dative Subject Constructions cross-linguistically. In particular, we want to emphasize that all five Indo-European language branches have happenstance predicates instantiating the Dative Subject Construction, although to a varying degree. This use of the dative for subject arguments is hardly motivated by any cross-linguistic considerations, although these predicates clearly denote a lack of control on the behalf of the subject referent, and in that sense they are similar to experience-based predicates. In a cross-linguistics overview of the predicates typically occurring with non-canonical subject marking, Onishi (2001) discusses happenstance predicates. However, all his examples are from Icelandic and Bengali, which are both Indo-European languages, and no examples are given from any other language family. In fact, as far as I know, it is only in research on the Indo-European languages that happenstance predicates of this type are discussed in relation to non-canonical subject marking. It therefore seems that this construction is highly specific for Indo-European, supporting our assumption that the Dative Subject Construction is inherited in the Indo-European languages.



**Figure 9:** Reconstruction of the Semantics of the Dative Subject Construction for a common proto-stage

On the basis of all this, we would like to suggest a reconstruction of the semantics of the Dative Subject Construction, for a common Indo-European proto-stage, as shown in Figure 9. We have excluded here Verbs of speaking, which are only documented in two language branches, i.e. Old Norse-Icelandic and Ancient Greek, but we have included all the other high-level semantic classes, as all of these are found in four language branches, although they are not documented in all the same four language branches.

We would like to emphasize, however, that we are not making claims about the structure of the semantic space of the Dative Subject Construction for Proto-Indo-European, as our investigation is only based on five Indo-European subbranches. In order to make such claims, more Indo-European language branches must be investigated. One could claim, however, that our reconstruction may be valid for a common West-Indo-European stage, given that such a stage existed. What we have shown, however, is how a semantic reconstruction of constructional semantics may be accomplished within historical-comparative linguistics, irrespective of whether one can reconstruct any specific lexical predicates or not for the relevant proto-stage.

To conclude, the present comparison of sememes found with the Dative Subject Construction across five different Indo-European language branches does not suggest an independent development but either a recent common development or an early inheritance. However, the fact that there are not very many cognate predicates, found across these branches, instantiating the Dative Subject Construction suggests an early inheritance rather than a recent common development. When it comes to the development of the different subconstructions, it is clear that Verbs of Possession have disappeared in Old Norse-Icelandic and Verbs of Bodily States seem to have expanded in Lithuanian. The Dative Subject Construction does not seem to have been productive in Latin, Ancient Greek and Old Russian, at least not to the extent that the semantic field has expanded. Therefore, our preliminary results, based on five branches of Indo-European, certainly suggest that the Dative Subject Construction is inherited in these branches. In particular, the existence of happenstance predicates, which is not associated with dative subjects cross-linguistically, speaks in favor of our analysis. This inherited Dative Subject Construction has certain semantic properties, which are in principle reconstructable as a semantic space, meaning that even though we are not reconstructing any individual verbs and their lexical semantic meaning, it is still possible to reconstruct the meaning of more abstract argument structure constructions for earlier language stages and dead languages, given the tools of Cognitive Construction Grammar in combination with the Semantic Map Model.

## 6. Summary

Our primary goal in this article has been to develop a methodology of use when reconstructing constructional semantics for dead languages, based on the theoretical framework of Cognitive Construction Grammar in combination with the Semantic Map Model. As semantic reconstruction has hitherto mostly been focused on lexical items and morphemes, reconstructing the meaning of larger and more complex linguistic units, such as argument structure constructions, represents a greater challenge. This task, however, is made possible by the basic assumptions of Cognitive Construction Grammar where the semantics of semantically general constructions are assumed to be derived from the semantics of the predicates instantiating it.

In order to lay out the method, we collected and compared predicates instantiating the Dative Subject Construction in Old Norse-Icelandic, Ancient Greek, Latin, Old Russian and Lithuanian. This data collection has uncovered between 116 and 379 predicate types in each of the five branches considered. As several of these predicates are synonymous, the data collection resulted in a total of 258 sememes, which in turn may be divided into different higher-level semantic categories, i.e. experience-based, happenstance, modal and epistemic predicates. The experience-based and happenstance predicates may be further divided into 12 different subcategories in total. A further analysis of all these into narrowly-circumscribed semantic verb classes yielded 51 such semantic classes.

After a comparison of how different kinds of semantic overlap may represent different types of historical scenarios, ranging from an independent development with no overlap to an early common development with a considerable partial overlap, we shown in Figure 7, based on the 14 higher-level semantic categories, what the five different Indo-European branches have in common and how they differ. We have also carried out a Principal Component Analysis (PCA), of the 51 narrowly-circumscribed semantic classes, for all five language branches, which has revealed that Latin, Ancient Greek, and Old Russian are most similar, while Old Norse-Icelandic and Lithuanian differ from these and from each other. However, the PCA analysis has not revealed any specific clustering of verb classes, based on language branch, which however is expected given that these languages are genetically related, again corroborating the assumption that the Dative Subject Construction is an early Indo-European inheritance. We have therefore suggested a reconstruction of the semantic structure of the Dative Subject Construction, found in Figure 9, based on the core of the semantic category, i.e. the semantic categories found in at least four of five language branches. We do not intend this reconstruction to be valid for Proto-Indo-European, as it is only based on five out of 11 Indo-European subbranches, but believe that it may reflect a common West-Indo-European language stage, if such a stage has existed. Through this enterprise, we have shown how constructional semantics in earlier language stages and dead languages may be reconstructed with the aid of Cognitive Construction Grammar in combination with the Semantic Map Model.

### Appendix: Narrowly-Circumscribed Lexical Semantic Verb Classes

#### LIKE/PLEASE:

**like:** falla (í geð) (ON-I), areskō (Gr),  
patikti (Lith), ougažati (OR)

**like to hear:** fallast í eyru ON-I)

**be pleased:** finnast (ON-I), arestōs einai  
(Gr), malonu būti (Lith), v'sladěti (OR),  
libere (Lat)

**find pleasant:** smagu būti (Lith)

**love:** leika ást á (ON-I)

**appreciate:** vera virkt á (ON-I)

**DISLIKE:**

**dislike:** leiðast (ON-I), displicere (Lat), handánō (Gr), nepatíkti (Lith)

**be(come) unhappy:** forþokkast (ON-I)

**find unpleasant:** amarus esse (Lat), echthros einai (Gr)

**detest:** mr'z'ko byti (OR)

**LONG:**

**have desire:** fýsast (ON-I), ougod'no (OR)

**long:** lengjast (ON-I)

**want:** knietēti (Lith)

**have interest for:** vera hugur (ON-I), interesse (Lat), įdomu būti (Lith)

**be eager:** vera tíðkan á (ON-I)

**feel tempted:** rozvrat'no (OR)

**ENJOY/HAPPINESS:**

**feel good:** bjóða þekt (ON-I)

**be(come) happy:** charizō (Gr), džiugu būti (Lith), oudob'nyi byti (OR)

**enjoy:** filus einai (Gr), contingere (Lat), linksma būti (Lith), radost'nyi (OR)

**feel delighted:** terpsis (Gr)

**FEEL/EXPERIENCE:**

**feel:** búa í skapi (ON-I)

**feel at rest:** eira (ON-I)

**feel/think:** finnast (ON-I), m'nitisja (OR)

**experience:** empeirian (Gr)

**be affected:** sugaruoti (Lith)

**be in a spirit:** liggja á (ON-I)

**FEAR/DANGER:**

**have fear/agonny:** ofbjóða (ON-I), baisētis (Lith)

**become terrified:** renna kalt vatn milli skinns og hörunds (ON-I), pabaisti (Lith)

**shudder:** blikra (ON-I), bisētis (Lith)

**be in danger:** standa mein að (ON-I), molestus esse (Lat), kindunos einai (Gr)

**be out of danger:** vera borgið (ON-I)

**bring punishment:** dzēmian ameibō (Gr)

**SUFFER/DISTRESS:**

**suffer:** paschō (Gr), gore byto (OR)

**be in distress:** dolor esse (Lat), olethros einai (Gr)

**be anxious:** kniesti (Lith)

**be in misery:** miserus esse (Lat), pēma einai (Gr)

**be offended:** bdeluktos (Gr)

**find strength in sth:** vera styrkur að (ON-I), firmus esse (Lat), pora byti (OR)

**ANGER/IRRITATION:**

**become angry:** renna í skap (ON-I)

**be vexed:** skaprauna (ON-I), odiosus esse (Lat)

**be irritated:** taedio esse (Lat)

**find intolerable:** intolerabilis esse (Lat)

**BORED/TIRED:**

**be bored:** leiðast (ON-I), nusibosti (Lith)

**be tired:** prailgti (Lith), taedio esse (Lat)

**RELIEVE/EASE:**

**feel relieve:** léttast (ON-I)

**become at ease:** hægjast um (ON-I), solacium esse (Lat), lengva būti (Lith)

**feel calm:** ramu būti (Lith)

**be easy:** facilis esse (Lat), oudobyi byti (OR), anesis (Gr)

**be a friend to sby:** familiaris esse (Lat), filotēs einai (Gr)

**be helpful:** prosthumōs (Gr)

**be of good:** bene esse (Lat), lysiteleō (Gr), sveika būti (Lith), blago byti (OR)

**BURDEN/LOAD:**

**be bothered:** angra (ON-I)

**worry:** rūpēti (Lith), thorubos einai (Gr)

**regret:** angra (ON-I), gailēti (Lith)

**feel burdened:** thlipsis einai (Gr)

**have problems with sth:** vandræðast (ON-I), laboriosuses esse (Lat), metež'no (OR)

**find (im)possible:** hlýðast (ON-I), adynatéō (Gr), moč'no byti (OR)

**be a foe:** vraž'dno byti (OR)

**be of bad:** rīgos einai (Gr)

**be difficult:** acerbus esse (Lat), argaleon einai (Gr), sunku būti (Lith), v'stoužiti byti (OR)

**be awkward:** vera um hönd (ON-I)

**SORROW/SADNESS:**

**be in sorrow:** empiptō (Gr), liūdna būti (Lith), pečal' byti (OR)

**be heartbroken:** pjati (Lith)

**feel bad:** darytis blogai (Lith)

**feel sad:** lupē (Gr)

#### **PAIN:**

**cause pain:** sárna (ON-I)

**be in pain:** algeinōs einai (Gr), skaudėti (Lith), z'lo byti (OR), dolori esse (Lat)

**be wounded:** vera sár (ON-I), elkoō (Gr)

**feel pinched by sth:** há (ON-I)

**harm, cause trouble:** nocere (Lat)

#### **BITTERNESS/HATE:**

**bear accusations:** krisis (Gr)

**be hateful:** odium esse (Lat), odussetai (Gr)

**be bitter:** pikros einai (Gr)

**find blame in:** povin'n' (OR)

#### **SHAME:**

**be shameful:** pudor esse (Lat), gēda būti (Lith), vina byti (OR)

**be of shame:** elegchos einai (Gr), vera skömm að (ON-I)

#### **CARE:**

**be dear:** carus esse (Lat), brangu būti (Lith), č'st'nyi byti (OR), entimos einai (Gr)

**care:** melō/melomai (Gr), curae esse (Lat)

**find lovable:** amabilises esse (Lat), ljubivyi byti (OR)

**find (un)important for sby:** skipta máli (ON-I), levis esse (Lat), lyō (Gr), svarbu būti (Lith)

**have something at heart:** vera umhugað um (ON-I)

**be of smb's business/concern:** res esse (Lat), méteimi (Gr), bēda būti (Lith), nadob'nyi (OR)

**be compassionate:** ētor entrepō (have the heart turned) (Gr)

**feel pity for:** gailti (Lith), žal' byti (OR)

#### **SUFFICE/BE OF USE:**

**be sufficient/suffice:** duga (ON-I), satis esse (Lat), exarkein (Gr), kakti (Lith), dov'lati (OR)

**have use of sth:** verða gagn að (ON-I), lysiteleō (Gr), usui esse (Lat)

**be fair:** aisimon einai (Gr)

#### **SUIT/BE PROPER/CORRECT:**

**suit, become:** sama (ON-I), addecere (Lat), prepō (Gr), derēti (Lith), prijēt'nyi byti (OR)

**be proper for sby:** sama (ON-I), oportere (Lat), eika (Gr), godě byti (OR)

**be acceptable:** prijēt'nyi byti (OR)

**be approved:** ratus esse (Lat)

**be accustomed to:** eoika (Gr)

**be correct:** lěpo buty (OR)

**be laudable:** euklees einai (Gr)

#### **HAVE HOPE/WISH:**

**be hopeful:** spes esse (Lat)

**have faith:** verno byti (OR)

**have a wish:** optatus esse (Lat),

polyarētos einai (Gr), dobiti (OR)

**gather courage:** ageirō thymos (Gr)

**be inspired:** eni fresi aēmi (blow in breast) (Gr)

#### **BENEFIT:**

**benefit:** aflat (ON-I), prodesse (Lat), kerdiōn einai (Gr), pol'za (OR)

**get, receive:** áskotnast (ON-I), piptō (Gr), tekti (Lith), imati (OR)

**have (bad) luck:** aka (ON-I)

**gain time:** ouprazd'nitise (OR)

**be ordained by fate:** auðnast (ON-I), moira einai (Gr)

**manage to collect:** safnast (ON-I)

**produce a (lawful) witness:** fullnast vitni (ON-I), testis esse (Lat)

**have an advantage:** perisson (Gr)

#### **BE ALLOWED:**

**be offered:** bjóðast (ON-I)

**be allowed:** licere (Lat), exeimi (Gr), l'zě byti (OR)

**be permitted:** fas esse (Lat)

#### **GROW:**

**gain strength:** vaxa fiskur um hrygg (ON-I), menos aexoō (Gr)

**grow:** vaxa fjaðrir (ON-I), crescere (Lat)

**prosper:** euodos (Gr)

**swell:** sukti (Lith)

### **BODILY TEMP:**

**feel warm:** hitna (ON-I), karšta būti (Lith), teplo buty (OR), thermē (Gr)  
**(start to) freeze:** kólna (ON-I), šalta būti (Lith)

**have fever:** febris esse (Lat)

### **GET BETTER/WORSE:**

**get better** (health): batna (ON-I), gerėti (Lith)

**get worse:** daprast (ON-I)

**get ill:** darytis blogai (Lith)

**grow weak:** förlast (ON-I)

### **GET YOUNGER/OLDER:**

**get younger:** pomoloděti (OR)

**reach age:** sueiti (Lith)

**be at one's peak:** v'rx' (OR)

### **SLEEP/**

#### **CONSCIOUSNESS:**

**get a clouded vision:** draga ský (ON-I)

**feel sleepy:** gera svefnhöfugt (ON-I)

**fall/be asleep:** nēdymos hypnos idzanō (sit the sleep in eye) (Gr)

**lose consciousness:** sortna fyrir augum (ON-I)

**disappear for sby:** išgaruoti (Lith)

### **SWALLOW/CHOKE:**

**go down the wrong way** (about food): svelgjast á (ON-I)

**feel disgusted:** a(w)ēdia (Gr), fastidio esse (Lat), bjauru būti (Lith)

**feel like choking:** užgulti (Lith)

### **DISEASE (SYMPTOMS):**

**bleed:** blæða (ON-I)

**have cramps:** sutraukti (Lith)

**itch:** niežėti (Lith), sūrna í augu (ON-I)

**stretch:** tampyti (Lith)

**break out in spots:** versti (Lith)

**have a disease:** morbus esse (Lat)

**become dry:** tersetai (Gr)

**shiver:** gnolla (ON-I)

### **HUNGER/THIRST**

**hunger:** lakati (OR)

**by thirsty:** sitis esse (Lat)

### **SUSPECT**

**suspect:** boða hugur (ON-I)

**have apprehension:** segja hugur um (ON-I)

### **(COME TO) THINK:**

**occur to one's mind:** hugsast (ON-I), succurrere (Lat), epierchomai (Gr), dingtelėti (Lith), priiti v' um' (OR)

**consider/count:** v'slovesitisja (OR), skepsin (Gr)

**expect:** vera von (ON-I), expectatio esse (Lat), epanamenō (Gr)

**have an understanding (or not):** skiljast (ON-I), adēlēō (Gr)

### **BE (IN)DETERMINED:**

**be determined:** certus esse (Lat)

**be sure:** constare (Lat)

**have a reason:** causa esse (Lat)

**change one's mind:** gangast hugur við (ON-I)

**be hesitant:** vera um og ó (ON-I)

**be in doubt:** dubium esse (Lat), onar (Gr)

**have (good) intensions:** hilaos einai (Gr), consilium esse (Lat)

### **BE SURPRISED/CONFUSED:**

**be confounded:** fipast (ON-I)

**forbode:** furða (ON-I)

**be amazed:** hnykkja við (ON-I)

**be of surprise:** thauma einai (Gr), dyvéti (Lith), divovatisha (OR)

**be in confusion:** empiptō (Gr), maišytis (Lith)

**be startled/shocked:** blikra (ON-I)

### **(CHANGE OF) KNOWING:**

**know:** vera (ó)kunnleiki á (ON-I), ignotus esse (Lat), vedemo byti (OR), gnōston (Gr)

**forget:** fyrynast (ON-I), užkristi (Lith)

**remember:** loða í eyrum (ON-I), priminti (Lith)

**be curious:** skeyta forvitni (ON-I)

**be of wisdom:** mētis einai (Gr)

**be ignorant:** skotos einai (Gr)

**be senseless:** insania esse (Lat)

### **PERCEPTION:**

**hear:** heyrast (ON-I)  
**hear news:** spyrjast (ON-I)  
**dream:** vera draums (ON-I), sapnuotis (Lith)  
**have a vision:** vitra (ON-I)  
**smell:** subolere (Lat)  
**be tasteful:** skanu būti (Lith)  
**perceive:** phainetai (Gr)

**SPEAKING:**

**say:** kveðast (ON-I)  
**speak well:** mælast (ON-I)  
**have a slip of the tongue:** verða á mismæli (ON-I)  
**misspeak:** vefjast tunga um tönn (ON-I)  
**accidentally speak out a poem:** verða vísa á munni (ON-I)  
**be struck dumb:** verða orðfall (ON-I)  
**chatter uncausiously:** verða létthjalað (ON-I)  
**complain:** leschē (Gr)

**SUCCESS:**

**make progress:** fara fram (ON-I)  
**get well on with sth:** klotis (Lith)  
**fare well:** farast vel (ON-I)  
**do well:** ganga (ON-I), žitisja (OR)  
**have victory over:** sigrast (ON-I)  
**succeed:** takast (ON-I), succedere (Lat), symbainō (Gr), gerai eiti (Lith), ougoditsę (OR)  
**manage:** takast (ON-I), taikyti (Lith)

**HINDER:**

**get hindrance/stay:** dveljast (ON-I)  
**get caught:** áhankast (ON-I)  
**be delayed/hindered:** verða seint (ON-I), protivitisja (OR)  
**get impeded:** hlekkjast á (ON-I)  
**be slow:** lata (ON-I)

**DIE:**

**lead to death:** draga til dauða (ON-I), pēma agō (Gr)  
**perish:** gybnouti (OR)

**FAIL:**

**fail, do wrong:** gefask yfir (ON-I), nesisekti (Lith)  
**go amiss with sby:** misfarast (ON-I)

**not succeed/go wrong:** mistakast (ON-I), xxxxx (OR)  
**falter:** skjátlast (ON-I)  
**see wrongly:** missýnast (ON-I)  
**escape one's notice:** yfirsjást um (ON-I)

**SLIP/LOSE:**

**slip/stagger:** missa (ON-I)  
**lose ability:** atimti (Lith)  
**loosen bowels:** paleisti (Lith)  
**lose:** nunešti (Lith)

**(DIS)SIMILARITY:**

**turn into one's kin:** kippa í kynið (ON-I)  
**be similar:** podob'n- (OR)  
**differentiate:** različ'nyi byti (OR)  
**be equal:** isos einai (Gr), rav'nosil'nyi (OR)

**DIS/AGREE:**

**come in collision with:** lenda saman (ON-I)  
**agree:** lynda (ON-I), keimai (Gr)  
**disagree:** missemja (ON-I), neikos einai (Gr)  
**have in common:** communis esse (Lat)

**CONNECTION/LOCATION:**

**be disconnected:** seiunctus esse (Lat)  
**get dislocated:** nunirti (Lith)  
**be near:** eggys einai (Gr)

**SUPERIORITY:**

**be of power:** potestas esse (Lat), vyložitsę (OR)  
**be of wealth:** amplus esse (Lat)  
**be worthy:** axios einai (Gr)  
**be noble:** gennaiotata einai (Gr)  
**be obedient:** katēkoos einai (Gr)  
**be leaderlike:** k'nęžo byti (OR)  
**feel honored by sth:** vera höfuðburður at (ON-I), garbé būti (Lith), honori esse (Lat)

**ONTOLOGICAL STATES:**

**be in a certain way:** vera farið (ON-I)  
**have a mother (of a certain type):** mæðra (ON-I)  
**be left:** reliquus esse (Lat)  
**be covered:** užtrauktí (Lith)  
**make a difference:** muna (ON-I)

**accompany:** opādeō (Gr)

**be due:** tunchanei (Gr)

**PROPERTIES/ABILITIES:**

**never smile:** stökkva bros á vör (ON-I)

**have an ability:** vera gefið (ON-I)

**be able to:** pareikō (Gr), moč' byti (OR)

**be hearable:** slyšano byti (OR)

**one's hands be amiss:** vera mislagðar hendur (ON-I)

**have a sound mind:** mens esse (Lat)

**HAPPEN:**

**happen:** accedere (Lat), apo-bainō (Gr), pataikyti (Lith), loučitišja (OR)

**come upon:** dostatisę (OR)

**have a journey:** cursus esse (Lat)

**not the fate for sby:** nęst' (OR)

**OBLIGATION:**

**be obliged:** bera (ON-I)

**be destined to/must:** menō (Gr)

**have to/must:** ofeilō (Gr), likti (Lith), priiti (OR)

**be indebted to/owe:** d'ľž'n' (OR)

**have a tie of hospitality:** hospitium esse (Lat)

**LACK:**

**run out of:** dospęti (OR)

**lack:** bila (ON-I), deesse (Lat), dei (Gr), stigtı (Lith), lixyi byti (OR)

**need:** vera þörf á (ON-I), oportere (Lat), dei (Gr), reikęti (Lith), nadobę buty (OR)

**waste:** išeiti (Lith)

**SEEM/APPEAR:**

**seem:** virðast (ON-I), videri (Lat), dokęō (Gr), atrodyti (Lith), javitise (OR)

**be clear/apparent to sby:** aisku būti (Lith), vidęti (OR)

**appear as old to sby:** drev'nyi byti (OR)

**appear:** birtast (ON-I), apparere (Lat), paristęmi (Gr), rodyti (Lith), doz'ręti (OR)

**POSSESSION:**

**be called:** nomen esse (Lat)

**have, possess:** eimi (Gr), būti (Lith)

**have space:** spatium esse (Lat)

**have a son:** synъ byti (OR)

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