# Argument Structure, Conceptual Metaphor and Semantic Change: How to Succeed in Indo-European without Really Trying\*

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... one small step for a man, one giant leap for mankind! (Neil Armstrong's first words on the moon, July 20, 1969)

### **Abstract**

In contrast to grammaticalization studies of lexical verbs changing into auxiliares, semantic changes found with lexical verbs is an understudied area of historical semantics. One exception is Reznikova et al. (2012), who investigate the complex nature of this process, emphasizing the role of metaphor and metonymy. We concentrate on the emergence of verbs of success from more concrete verbs, uncovering six conceptual metaphors which all co-occur with non-canonical encoding of subjects in Indo-European. Careful scrutiny of the relevant data reveals a development most certainly of an Indo-European inheritance; hence, we reconstruct a DAT-'succeeds' construction at different levels of schematicity for Proto-Indo-European, including propounding a novel reconstruction of a conceptual metaphor, SUCCESS IS MOTION FORWARD, and the mapping between this metaphor and the verb-class-specific argument structure construction. This article offers a systematic analysis of regularity in semantic change, highlighting the importance of predicate and argument structure for such developments.

**Keywords**: verbal semantics, success verbs, semantic change, conceptual metaphors, argument structure, oblique subject construction, syntactic reconstruction, Germanic, Indo-European

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### 1 Introduction

Historical studies of changes in verbal semantics are found in abundance in the literature. Most of these, however, focus on the change from main verbs to TAM auxiliaries, foremost in the framework of grammaticalization theory (see, for instance, Sweetser 1990, Heine 1993, Bybee et al. 1994 and Krug 2011 for cross-linguistic investigations of TAM auxiliaries). Studies of individual languages include, for instance, Diewald's (1999) and Traugott & Dasher's (2001) work on modal verbs in the history of English and German, and Fleischman's (1983), Bybee & Thompson's (2000), Barðdal's (2001), Hilpert's (2008), Diewald & Wischer's (2013) studies of aspectual verbs denoting future in, English, German, Swedish and Icelandic. Also, Haan (2007), Cornillie (2008), Diewald & Smirnova (2010), López-Couso & Méndez-Naya (2015) investigate evidential verbs in Spanish, German, English, Dutch and Swedish, inter alia.

However, little research has been devoted to the question of how full underived verbs change their meaning and develop into verbs with a different meaning. Alongside some early work on semantic change, such as Bréal (1900), Wundt (1904), Sturtevant (1917: Ch. IV), and Ullmann (1951, 1962), which contain some important findings and observations, only a few studies have dealt with this topic in a general cross-linguistic perspective, such as Viberg (1982) and Sweetser (1990). Viberg, in his typological study, investigates perception verbs from the conceptual domains of SIGHT, HEARING, TOUCH, TASTE and SMELL. Similarly, Sweetser documents that lexical items from the physical domain, in both ancient and modern Indo-European languages, regularly change into lexical items denoting concepts in the psychological domain, thus reporting a directionality from the concrete to the abstract. Both Viberg and Sweetser demonstrate a clear pattern of polysemy for perception verbs, explaining how a full lexical verb may develop new senses over time. See also Hock (1991: 280–284) on the relevance of polysemy and fuzziness in meaning as prerequisites for semantic change.

In a study on German, Wegener (2001) investigates verbs of affectedness from a diachronic perspective, showing how verbs of physical sensations have developed from verbs of physical impact. In a similar vein, Reznikova, Rakhilina & Bonch-Osmolovskaya (2012) document how verbs of physical impact develop into pain predicates through a complex process involving both metaphor and metonymy (cf. also Fortson 2003: 658 who claims that most changes in meaning represent basic metaphorical extensions). Reznikova, Rakhilina & Bonch-Osmolovskaya's (2012) work shows a clear directionality of semantic change, at least within the specialized conceptual domain of pain. They carefully analyze the process through which lexical verbs develop into new lexical verbs, a semantic shift for which they suggest the term 'rebranding'. We use the term semantic shift to refer to the rise of new lexical meanings, in addition to earlier existing meanings. Subsequently, we use the term "new verb" to refer to lexical verbs that have developed a new meaning. One of Reznikova, Rakhilina & Bonch-Osmolovskaya's (2012: 457) claims is that this process is considerably more common than the usual cases of grammaticalization in the history of languages. Despite this, work on semantic shifts in lexical verbs leading to the emergence of new verbs is minimal compared to the industrious enterprise of grammaticalization research.

The present article aims to fill in some lacunae in this understudied field of historical semantics, i.e. semantic shifts in lexical verbs leading to the emergence of new

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<sup>&</sup>lt;sup>1</sup> In accordance with the constructional approach taken in this article, a unit must consist of both form and meaning, the saussaurean sign. This also applies to lexical units like words. If either a new form or a new meaning develops, a new lexical unit has, by definition, arisen (cf. Barðdal & Gildea 2015: 17–18).

verbs, thus contributing to a general theory of semantic change. We focus on one particular process of semantic change when full verbs develop new meanings, i.e. metaphorical extension, in particular with verbs of success throughout the Germanic and, more generally, Indo-European languages. We base our investigation of the etymological history of success verbs on the semantic categories that constitute the earlier concrete meanings, and on the predicate and argument structure patterns that coincide with the new abstract meanings. We disinter a development involving six basic metaphors, of which four are found across several branches of Indo-European. The most notable metaphor, SUCCESS IS MOTION FORWARD, is well documented in the literature (Goatly 1997, 2007), the same is true for the related SUCCESS IS REACHING THE END OF A PATH (Lakoff 1993, Radden 1996), while the others are understudied.

Whereas these and similar metaphorical extensions are frequently discussed in the literature, little attention has been paid to syntactic phenomena eventually accompanying these semantic changes, for instance changes in predicate and argument structure (see however, Danesi, Johnson & Barðdal 2018, van Gelderen 2018). The general consensus in historical linguistics has been that change in meaning and change in argument structure go hand in hand (cf. Kemmer & Barlow 2000, Hilpert & Koops 2008). However, recently Christiansen & Joseph (2016: 10) have examined the relation between argument structure and meaning and found that change in one does not necessitate change in the other (cf. also Tsepeleva 2015).

One of our major findings is that verbs of success share three independent features: (i) not only have they developed through metaphorical extensions of verbs with less abstract semantics, (ii) they also select subjects that are not marked in the canonical nominative case, but are marked in the dative case, and (iii) they share the same or similar predicate structure, involving directionally-specified prefixes or modifying adverbs. While we cannot definitively answer when and how such metaphors arise, the ubiquity of the metaphorical extension, and its co-occurrence with the same predicate and argument structure across the languages that we investigate below, clearly suggest that such a conceptual metaphor must have existed at least in Proto-Germanic, if not even farther back in the history of the Indo-European languages more broadly.

Below, two examples conveying 'success', or the lack thereof when the proposition is negated, are presented, (1) for Ancient Greek with a verb derived from a verb of motion and (2) for Old English with a verb derived from a verb of growth. In both examples, the syntactic subject of the verb, i.e. the one who succeeds, is in the dative case, despite these languages' accusative alignment system, in which nominative is the unmarked subject case.

# (1) Classical Greek

hốs **hoi** dólōi ou proekhốree since he.DAT craft.DAT not succeed 'since he could not succeed by craft' (Hdt. 1.205)

# (2) Old English

him wiht ne speow
he.DAT at.all not succeed
'he did not succeed at all' (Beo. 2852)
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For our purposes, it is the *co-occurrence* of these three phenomena, metaphorical extension, non-canonical subject marking, and the predicate structure, expressing the

same concept across the Indo-European languages that demands attention. This involves more broadly the syntax–semantics interface and more specifically the role of syntactic patterns for semantic change and vice versa, e.g. how predicate and argument structure contributes to meaning. Moreover, the recurrence of these shared semantic and syntactic structures across a variety of genetically related languages also raises the question, as in any study within the field of comparative Indo-European linguistics, of the potential for reconstruction, i.e. whether such a development reflects common inheritance or independent innovations. We investigate the likely prehistory of these constructions as an extension of our etymological analysis of the relevant verbs. We furthermore argue that, in many cases, a thorough investigation of predicate and argument structure may contribute to the etymological analysis of the relevant verbs.

Furthermore, any theoretical analysis of the data investigated must be able to account for non-compositional meaning as a result of metaphorical extension, verbal polysemy in general, and it must import a theoretical grounding in order to contribute to a more precise understanding of the syntax-semantics interface. For this reason, we adopt a Construction Grammar framework (Lakoff 1987, Fillmore, Kay & O'Connor 1988, Goldberg 1995, Jackendoff 1997, Croft 2001, Michaelis & Ruppenhofer 2001, Boas 2003, Fried & Östman 2005, inter alia), in which the construction is taken to be the basic unit of language, a pairing of form-meaning. On such an account, grammar and linguistic objects are viewed as being on par with words, which are also form-meaning pairings. Originally, Construction Grammar was developed to account for idioms, set phrases and fixed expressions that other frameworks at the time had problems incorporating into their analytical machinery. Construction Grammar, in contrast, employs a uniform representational formalism to account for all linguistic data, words, morphemes, and larger morphosyntactic and syntactic constructions alike. Moreover, on a constructional view, both compositional and non-compositional meanings are accounted for in the same manner, namely as semantically regular vs. semantically irregular pairings of meaning with form.

In Section 2, we outline the background for the investigation of success verbs, which we detail first in Germanic (Section 3), where the data are more plentiful, before extending our analysis to broader Indo-European context (Section 4). In Section 5, we discuss already known conceptual metaphors for success and elaborate further on the relatedness between them. Then, in Section 6, we propose a reconstruction of the predicate and argument structure constructions for success verbs for Proto-Germanic as well as for Proto-Indo-European, employing the formalism of Construction Grammar. We further present, as the first attempt in the literature, a reconstruction of a basic conceptual metaphor, SUCCESS IS MOTION FORWARD, for both Proto-Germanic and Proto-Indo-European. This also includes a reconstruction of the mapping between the metaphor and the argument structure for the relevant proto-stages. In Section 7 we provide a summary of the content and conclusions of this article.

# 2. The Dative Subject Construction

As is now well documented across the languages of the world, there are verbs in both accusative and ergative languages that do not conform to the canonical pattern of marking the subject with the nominative or the absolutive, but rather occur with a non-nominative (hence oblique) subject. In the Indo-European languages, such non-canonical subjects are typically found in the dative or accusative case, as shown in (3) below. Each

example represents one of Barðdal et al.'s (2012) higher-level semantic classes, which frequently attest oblique subjects. The examples in (3) further span different branches of the Indo-European languages.

### (3) Oblique Subject Constructions<sup>2</sup>

a. *Natural occurrences* (Old Icelandic)

Pálægðistorm-innthenabated.3SGstorm-the.ACC

'Then the storm abated' (Helga kviða Hundingsbana II)

# b. *Perception* (Vedic Sanskrit)

táta **ebhyo** yajñáḥ prárocata then they.DAT sacrifice.NOM.SG shine.IMPF.3SG.MID 'Then they had a vision of sacrifice' (ŚB 1, 6, 2, 4)

# c. Cognition (Middle English)

**Him** wondrede of be grete li3te he.OBL wondered.3SG of the great light 'he wondered at the great light' (Roland and Vernagu 161)

### d. Emotion (Old Albanian)

MëndihēsenanlidhnjimduojndëI.DAT feel.3SGthatwe.NOMbind.1PLwhile invjedmisarësëfieldssheaves

'I felt that we were binding sheaves in the fields' (Buzuku; Genesis 37:7)

### e. *Bodily States* (Russian)

počemu ž **mne** tak teplo why indeed.PTCL I.DAT so warm 'Why indeed am I so warm?' (F.Iskander. Put' iz varjag v greki. 1990)

### f. *Happenstance* (Latin)

Mihi ne illud quidem accidit I.DAT not that.NOM even happened.3SG 'I did not even happen to experience that' (Caes. Gal. 8.0)

# g. Attitudes (Homeric Greek)

**sphōïn** mén t'epéoike ... hestámen you.DU.DAT PTC and'be.proper.3SG stay.INF 'You two were better to stay ...' (Hom. Il. 4.341)

### h. *Hindrance* (Hittite)

nu=**mu** :arpašatta=pat

CONN=I.DAT/ACC bad.luck.3SG=local-PCL

'then I had bad luck' (Hatt. i.35)

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<sup>&</sup>lt;sup>2</sup> Unless otherwise noted, the data provided come from the EVALISA project, the NonCanCase Database (http://www.evalisa.ugent.be/noncancase), which contains collected examples of the oblique subject construction across all early branches of the Indo-European language family.

We assume that these accusative- and dative-marked arguments are indeed syntactic subjects in constructions of this type, building on the large body of work that has provided the syntactic basis for delineating syntactic subjects and objects, regardless of their case marking (Allen 1986, 1995, Rögnvaldsson 1995, Barðdal 2000, Barðdal & Eythórsson 2003, 2012, Eythórsson & Barðdal 2005, Conti 2008, 2009, Fischer 2010, Danesi 2014a, Fedriani 2014, Le Mair et al. 2017, Danesi, Johnson & Barðdal 2018). The issue of subject vs. non-subject analysis for these subject-like arguments, however, has no bearing on the research presented here.

While oblique subject constructions are well documented for the Germanic languages, it is generally assumed that they are not so pervasive in many early Indo-European languages (cf. Hock 1990 on Sanskrit, Luraghi 2010 on Hittite, Viti 2016a on Tocharian). At present, the EVALISA database counts around 1,000 predicates for the early Indo-European languages, of which 36 belong to the conceptual domain of SUCCESS.

In some of these languages, e.g. certain North Germanic and Baltic languages, the argument structure containing an oblique subject has indeed been prolific and productive in the sense that new verbs entering the language may acquire this non-canonical argument structure (cf. Barðdal 1999, 2008, 2011, 2012, Bjarnadóttir 2014). There also seems to have been a major increase in the type frequency of this construction from Sanskrit to the modern Indic languages (cf. Hock 1990), at least if one takes the low type frequency in Sanskrit at face value (see, however, Danesi 2014b for several more Avestan predicates and Haig 2008 for some Old Persian predicates). It is, moreover, clear that the productivity of the oblique subject construction implies that there is a specific type of semantics associated with the argument structure.

Barðdal et al. (2012), for instance, argue that given a constructional approach, the semantics of the construction should be definable in terms of the lexical-semantic verb classes that instantiate the construction. On the basis of evidence from five different early/archaic Indo-European languages, Old Icelandic, Old Russian, Old Lithuanian, Latin and Ancient Greek, they suggest several different conceptual domains associated with the oblique subject construction, of which one is indeed the domain of SUCCESS.

While research has shown that the oblique subject construction may have been productive in different languages, there is still strong evidence for assuming that such structures can and should be reconstructed for Proto-Germanic (cf. Barðdal & Eythórsson 2012, Barðdal et al. 2016) and perhaps even further back for Proto-Indo-European (cf. Barðdal & Smitherman 2013, Barðdal et al. 2013, Danesi et al. 2017, Barðdal & Eythórsson 2019, Barðdal et al. 2019, Pooth et al. 2019). Such investigations overwhelmingly demonstrate that syntactic reconstruction is indeed possible, and the field of historical syntax has, in fact, been steadily progressing as a result of this and similar research. The present investigation thus adds to the growing body of scholarship on reconstructing syntax while, at the same time, further contributing to our understanding of the relation between semantic change and syntactic structure.

As mentioned in Section 1 above, Christiansen & Joseph (2016) recently addressed what has been assumed to be a strong relation between semantic change and change in argument structure, namely, that change in semantics goes hand in hand with a change in argument structure, and vice versa, that a change in argument structure reflects a change in verbal semantics (cf. Kemmer & Barlow 2000, Hilpert & Koops 2008). Yet Christiansen & Joseph (2016) point to at least some instances where a change in argument structure has no bearing on the meaning of a verb, and we know of many instances of changes in verbal meaning without any changes in the relevant argument structure.

Smitherman (2012) and Barðdal & Smitherman (2013) have also investigated the relation between metaphor, argument structure, and reconstruction. Their conclusion is that there are certain recurrent metaphors found throughout the Indo-European languages, many of which may be of universal nature, and which quite commonly match with similarities in non-canonical argument structure. We elaborate on these investigations by focusing solely on metaphors for success (not discussed by Smitherman 2012 or Barðdal & Smitherman 2013), i.e. on a single semantic class of verbs, diachronically traceable to verbs of motion. This metaphor is so recurrent in our data that reconstruction of this semantic shift for both Proto-Germanic and Proto-Indo-European, together with the cognitive frames that allow for this type of extension, is practically required to account for its recurrence in both the Germanic and Indo-European daughter languages.

In other words, even though a metaphor of success may be universal, its manifestation in early Germanic and the early Indo-European languages is not. In these languages we find a unique pairing between verbs meaning 'success', which has clearly arisen through metaphorical extension, and dative subject marking. Such an idiosyncratic coupling of form and meaning is unexpected cross-linguistically.

### 3. Success in Germanic

We begin our investigation by detailing several examples of success verbs in the Early and the Modern Germanic languages that take an oblique subject. By SUCCESS we do not only refer to verbs that strictly speaking mean 'succeed', but also to the wider concept of success, which involves 'doing well' in general, 'making progress' or having things 'work out well' for one (cf. Oxford Thesaurus of English for *succeed*). The relevant success verbs can be classified into six types of metaphorical extensions, based on the following source domains:

# (4) Metaphorical extensions

- Motion
- Giving
- Touch/contact
- Aiming/reaching
- Growth
- Luck

One example from a Germanic language of each metaphorical extension is given in (5), all of which occur with a dative subject:

# (5) a. Motion (Old High German) mir gelang ubelo an dîu I.DAT succeeded.3SG [<PIE 'go fast'] badly in this.DAT 'I did not succeed in this' (Notker Psalmen 118)

b. Giving (Old Icelandic)

Hversu gefask **þér** þeir útlenzku
how.well work.out.3SG [< 'give'] you.DAT that.NOM foreign.NOM
menn?

men.NOM 'How did these foreign men turn out for you?' (Eyrbyggjasaga, Ch. 19)

c. *Touch/contact* (Early Modern Dutch)

Dat en can **enen heer** niet wel raken that not can a.OBL lord.OBL not well succeed [< 'touch'] 'A lord cannot succeed at that'

(W. Bisschop & E. Verwijs, 1870, Gedichten van Willem van Hildegaersberch, p. 238, l. 101, 's-Gravenhage)

d. Aiming/reaching (Modern Icelandic)

**Mér** miðar vel með ítölsku sinfóníuna I.DAT progresses.3SG [< 'aim for middle'] well with Italian symphony.the 'I am making good progress with the Italian symphony'

e. Growth (Old English)

**Him** æt ðære byrig ne gespeów he.DAT at that city not succeeded [< 'grow'] 'He did not succeed at the city' (Ors. 4, 5; Bos. 82, 8)

f. Luck (Modern German)

Auch das glückt **mir** passabel too that.NOM succeeds.3SG [< 'have luck'] I.DAT passably 'That, too, I was able to do passably'

(Rhein-Zeitung, 19.07.2003; Gott sei Dank ohne Polizei)

Some of the etymologies in (5a-f) above are synchronically transparent in the relevant Germanic language, like Icelandic gefast in (5b), which is derived from the verb gefa 'give' and the middle suffix -st < -sk < sik 'self'. The Early Modern Dutch example with raken in (5c) is equally straightforward, since 'reach/touch' was the primary meaning of raken during the Middle Dutch period (WNT 1882-2001) and still is. Hence, we assume that the meaning 'succeed' has developed directly from the 'reach/touch' meaning. Also, the verb  $mi\delta a$  in (5d) has 'aim' as its primary meaning in Icelandic. The verb  $gl\ddot{u}cken$  in (5f), while not meaning 'have luck' in Modern German, is documented in this sense in 16th century German (Grimm & Grimm 1954-1971: Bd. 1954-

However, two of our etymologies above are not synchronically transparent, namely the ones involving Old High German (gi) lingan in (5a) and Old English (ge)  $sp\bar{o}wan$  in (5f). Starting with Old High German (gi) lingan, Schützeichel (2012: 202) gives 'succeed' as the primary meaning, while Köbler (2014) adds 'prosper' and 'have luck' as secondary senses. EWA (2014: 1313) also notes the meaning 'go forward' in Middle High German with the unprefixed lingen. Accordingly, Kroonen (2013: 338) reconstructs the form \*lingwan for Proto-Germanic with the meaning 'succeed/make progress'. Going further back in time, the meaning of the Proto-Indo-European verbal root \* $h_1$ lengwh- is reconstructed as 'go fast, go easily, speed, run' (see, for instance, Pokorny 1959: 660,

Mayrhofer 1986–1996: II, 421–422, LIV<sup>2</sup> 247–248). Therefore, a semantic development from 'go forward/fast' to 'make progress' to 'succeed' appears as likely.

Finally, in Old English the verb  $(ge)sp\bar{o}wan$  in (5e) is documented with the senses 'succeed', 'profit', 'avail'. That is, ASD (1966: 708) gives 'succeed' as the primary meaning, while Hall (1916: 272) adds 'profit' and 'avail' as secondary senses. This Germanic verb goes back to the Proto-Indo-European root  $*sp^heh_1$ -, meaning both 'grow, increase, become fat' and 'prosper' (Pokorny 1959: 983, LIV²: 584). Therefore, a semantic development from 'grow' to 'prosper' to 'succeed' appears as likely (see also Ihrig 1916: 132).

As is detailed in Section 4 below, four of these six metaphorical extensions, i.e. motion > success, growth > success, touch/contact > success and aim/reach > success, recur in other early Indo-European languages as well. In the bulk of this article, however, we focus on the most robust metaphorical extension in our dataset, namely that of success being derived from verbs of motion. This provides the backbone to the partial reconstructions we put forward in Section 6. Consider now the evidence for the analysis that motion can be extended to mean 'succeed'.

# 3.1 (Preverb +) Motion (+ Adverb)

By far the largest category of success verbs involves motion and an adverbial modifier. This is typically a postverbal adverb for the North Germanic languages, but a preverbal perfective or a directional modifier for the West Germanic languages, although Old English patterns with the North Germanic languages in this respect and not with West Germanic. To give some examples, in Modern Faroese, a verb of motion together with the postverbal prepositional modifier  $vi\delta$  'with, at' is used to indicate success:

# (6) Faroese

ganga **einhverjum** við go.3SG someone.DAT with 'Someone succeeds' (Føroysk orðabók; http://www.obg.fo/fob/fob.php)

Interestingly, not only does the pattern of MOTION VERB + ADV recur in our dataset, cognates of Faroese *ganga* are also found in the same template, again with dative subjects, in other Germanic languages. For example, the Old Icelandic cognate *ganga* is given in its success meaning in (7) below. In this case, the verb of motion co-occurs with the adverb *léttast* 'easiest'.

### (7) Old Icelandic

**þeim feðgum** hefði þá allir hlutir léttast gengit they.DAT father&son.DAT had.3SG then all.NOM things.NOM easiest gone 'that everything had gone well for the father and son' (Þorláks saga, Ch. 12)

And finally, the same construction is attested in Old Swedish, with the adverb *slät* 'smoothly', similar to the Old Icelandic adverb *léttast* 'easiest'.

# (8) Old Swedish

tha **honum** ganger mädher alt slät then he.DAT go.3SG with everything smoothly 'then he succeeded smoothly with everything' (Al 8306) Constructions of this type are well established in the North Germanic languages, with a clear pattern emerging: etymologically related forms of the verb 'go' occur in the same syntactic and lexical context, namely, alongside a dative subject and an adverb or prepositional modifier. This has sometimes been referred to as "Double" (Walkden 2013, 2014) or even "Triple" Cognacy (Barðdal & Smitherman 2013), as i) the lexical verb is cognate, ii) the predicate structure is cognate, and iii) the argument structure is cognate. In this case the lexical verb is the verb 'go', the predicate structure is VERB+ADV, and the argument structure involving dative subjects is also cognate. This is exactly the kind of evidence Walkden (2013, 2014) argues is needed to establish cognacy beyond doubt, i.e. the kind of evidence needed to reconstruct a construction for an earlier proto-stage.

In the later stages of North Germanic, we find an even greater degree of uniformity across the daughter languages, as in Modern Faroese, Modern Icelandic and Early New Swedish, where the same verb is documented with the same adverbial modifier (væl, vel and  $w\ddot{a}l$  'well', respectively), with the same meaning and the same argument structure.

- (9) a. Modern Faroese

  einhverjum gongst væl

  somebody.DAT goes well

  'Somebody succeeds'
  - b. Early New Swedish (1665)

    honom gåår sällan wäl.
    he.DAT goes seldom well
    'He has seldom success.' (Grubb 10)
  - c. Modern Icelandic
    Arnari gekk vel með fyrstu önnina í skólanum ...
    Arnar.DAT went well with first term.the in school.the
    'Arnar did well at the end of the first term at university ...'

    (https://www.facebook.com/freyjulundur/posts/90775056275)

These data give us the set of constructions with the verb 'go' in the North Germanic languages, detailed in Table 1.

**Table 1.** Success with 'go' in North Germanic.

Faroese	Old Icelandic	Modern Icelandic	Old Swedish	Early New Swedish
ganga við go with	<i>ganga létt</i> go easily		<i>ganga slät</i> go smoothly	
gangast vel go.MID well'		<i>ganga vel</i> go well		ganga wäl go well

For the West Germanic languages, the same pattern is documented, albeit with a different, yet semantically-related, verb of movement. Old English, for instance, has the verb 'go'

occurring with the adverb *wel* 'well', similar in constructional makeup to the Modern Faroese, Early New Swedish and Modern Icelandic examples.

# (10) Old English

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... and him [Decius] for ðissere worulde wel on hand eode, þæt ... and he.DAT for this world wel on hand went, because '... and he [Decius] succeeded here in this world because ...'
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(Ælfric's Lives of Saints, 34)

Cognates of this same form of the verb 'go' with the same success meaning are also found in Middle High German and Middle Dutch. In Middle High German, in addition, the verb occurs with *er*-, a prefix which in the Old High German prestage was associated with perfectivity and inchoativity (Purtscher 1902).

# (11) Middle High German

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swie halt mir mîn dinc ergât
however indeed I.DAT my thing.NOM fares
'however I may fare in my endeavor' (Wolfram von Eschenbach, Parzival: 12.2)
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This verb, *irgangan*, also exists in Old High German, but neither with the relevant success meaning nor with a dative subject (Köbler 2014, EWA 2007). The very same prefix is also found in the following Middle Dutch example along with the adverb *wale* 'well', again similar to the Old English *wel gán*, Modern Faroese *gangast vel*, Modern Icelandic *ganga vel* and Early New Swedish *ganga wäl*.

### (12) Middle Dutch

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Selden ergeet hen wale die ... rarely fares they.OBL well who 'Those who ... rarely fare well' (Limburgse Sermoenen, 28d.)
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Note that we gloss the subject, *hen*, above as "oblique", as the form can either be dative or accusative.

Further reflexes of this verb can also be found in the Modern West Germanic languages with the meaning 'succeed', as in the Modern German example in (13), both with and without *-er*:

### (13) Modern German

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Mir (er)geht es gut.
I.DAT PRE.goes.3SG it.NOM good
'I am doing well.'
```

Through this investigation, we have documented a similar set of motion verbs in West Germanic, as in North Germanic, indicating success. The West Germanic facts are given in Table 2.

Table 2. Success with 'go' in West Germanic

Middle Dutch	Old English	Middle High German	Modern German
ergaen wale 'go (to a certain point/well)'	<i>gán wel</i> 'go well'	<i>ergân</i> 'fare'	gut (er)gehen 'go well'

As is implicit in the analysis above, the meaning of the verb *go* in Germanic varies depending on predicate and argument structure. When occurring intransitively with a nominative subject, the verb attests its primary meaning 'go, walk', while when occurring in the dative subject construction, the verb has the sense 'succeed, go well'. Hence, different meanings of the verb are concomitant with different predicate and argument structure constructions. We take the variation in meaning between 'go' and 'succeed' to represent a change in the semantics of this verb of motion. That is, we consider the 'go, walk' meaning to be primary and the 'succeed' meaning to be derived through a metaphorical extension.

In addition to the role of the metaphorical extension, the question arises as to which degree the predicate structure also contributes to this new meaning. That is, to which degree do the prefixes in West-Germanic and the adverbs in Old English and North Germanic affect verbal semantics? Given that the relevant West Germanic prefix, *er*-, denoting perfectivity and inchoativity in Old High German, is purely aspectual, it does not appear to affect the core of the verbal meaning during the Middle High German/Dutch period. Hence, for West Germanic, the modification of meaning triggered by this prefix is simply minor or insignificant. The same is true for the prefix *ge*- in Old High German *gilingan*, as the meaning 'succeed' is also found with the unprefixed verb *lingan* (EWA 2014: 1313). Historically, however, *er*- derives from a spatial adverb meaning 'from' and *ge*- derives from a comitative particle meaning 'with' (Wischer & Habermann 2004, Martín Arista 2012, Köbler 2014). It can thus not be excluded that these prefixes, with their prehistorical 'from' and 'with' meanings, have contributed to the by now noncompositional meaning 'succeed' when originally prefixed to the verb 'go'.

Regarding the role of the adverbial modifiers in Old English and North Germanic, these are all manner adverbs, 'well', 'easily', 'smoothly', and as such they modify the verbal event. There is thus no doubt that the polarity of the manner adverb, with positive or negative polarity, defines whether the event described is a success or failure. Adding a polarity adverb, however, only modifies the new meaning, determined by the metaphorical extension of the core verbal semantics (MOTION FORWARD > SUCCEED), but does not itself create the new meaning. As an example, let us imagine a collocation [walk + well]. Clearly, [walk + well] does not automatically yield a success meaning. Instead, the adverbial modifier simply specifies the manner of the walking process. A further argument stems from the fact that this semantic development does not hinge upon a collocation with a polarity adverb, as evident from examples involving prefixes meaning 'from' and 'with', as discussed in the preceding paragraph and as will be further discussed in Section 4 below.

To conclude, we take the meaning 'succeed' to be non-compositional, as it cannot be derived from the motion verb *per se*, nor from the prefix/adverb, nor from the co-occurrence with a dative subject, but draws instead upon all these factors together. As such, this is a construction in the sense of Construction Grammar, i.e. a form-meaning

pairing, where the semantics of the whole is not derivable from the semantics of the parts. For a proper modelling of this construction, see Section 6 below.

To summarize, Tables 1–2 present common metaphorical extensions of two different, yet semantically-related, verbs 'go', one permeating North Germanic and the other West Germanic. In fact, as is detailed in Section 6.1 below, a complex paradigmatic relation is found between these two different roots; although they are not cognate, they existed as part of the same single paradigm for the verb 'go' in Proto-Germanic. This historical morphological relation sets the stage for the partial reconstruction presented in Section 6.1.

# 3.2 Other types of motion conceptualized as success

The verbs in Section 3.1 are all cognates, developed from the verb 'walk'. This reflects the most frequently attested type of metaphor, motion as success, in our dataset. Below, we introduce further verbs of motion in Germanic, that also attest the metaphorical extension of motion > success. The motion may be directionally specified, but it need not be, as in the example from Modern Icelandic with a motion verb cognate to English *fare*:

# (14) Modern Icelandic

**Mér** hefur farnast vel I.DAT has.3SG fared well

'I have fared well'

The motion may also be directed vertically: in Old Icelandic, movement upwards — climbing — can also indicate success, as in the following example:

### (15) Old Icelandic

**honum** kleif hvergi áfram he.DAT climbed.3SG nowhere forward 'He made no progress' (Bragða-Mágus saga, Ch. 28)

Interestingly, an adverb, *áfram* 'forward', is also used in this context, perhaps to reinforce the directional semantics of the verb *klífa* 'climb', a reinforcement that is generally not needed with the verbs of motion discussed in Section 3.1 above.

Likewise, the Old Icelandic verb *snúna* 'turn' can also be used to indicate success — much like the English colloquial *turn out (well)*.

### (16) Old Icelandic

Hverso snúnuðo **yðr** konor yðrar? how turned.3PL you.DAT woman.NOM your.NOM 'How did you win success with your women?' (Hárbarðsljóð, 16–18)

Yet another example involving motion, meaning 'succeed' in Icelandic, *reiða vel af*, with a verb derived from 'ride', is also attested.

# (17) Modern Icelandic

**Henni** reiddi vel af she.DAT fared.3SG well off 'She fared well / She got through it all right'

Finally, the verb (gi)lingan 'succeed' in Old High German and its cognates in other West Germanic languages go back to the Proto-Indo-European root \*h<sub>1</sub>léng<sup>wh</sup>-e- 'go fast, move easily'. Example (5a) is repeated below for convenience:

# (18) Old High German

mir gelang ubelo an dîu I.DAT succeeded.3SG badly in this.DAT 'I did not succeed in this' (Notker Psalmen 118)

This particular Old High German example raises an important point regarding the time depth of the metaphorical extensions discussed above, as some of these extensions appear to be more lexicalized than others. In the examples in Section 3.1 and (14–17) above, the metaphorical meaning extension is within the synchronic stages of the language. More precisely, the same verb is used in two different constructions, one with the motion meaning and the other with the success meaning.

In contrast, (gi)lingan in Old High German occurs only in its success meaning (and the related 'prosper' and 'have luck') and only with a dative subject. This conspicuous lack of variation in the meaning and argument structure of this verb, i.e. this lack of verbal polysemy, may suggest that the timeframe for this particular meaning extension with (gi)lingan is considerably longer than for the other motion verbs discussed here, i.e. on the assumption that lack of polysemy speaks for a diachronic change that has been completed.

This specific example with *(gi)lingan* indeed suggests that the co-occurrence of the dative subject construction with verbs denoting 'succeed' has its roots much further back than in Proto-Germanic. Given that, it certainly appears clear why later verbs developing the meaning 'succeed' also instantiate argument structures that deviate from the nominative canon. This is because existing synonymous verbs in the language at the relevant time selected for an argument structure that itself deviated from the nominative canon, namely the dative subject construction. An analogical process of this type, involving case and argument structure assignment to new or existing verbs, has been documented both in synchrony (Barðdal 2008) and diachrony (Barðdal 1999, 2009, Barðdal & Eythórsson 2019), thus this is not only a viable path of change, but also a predictable one.

Exactly as in Section 3.1, all the examples presented here involve a motion verb occurring with a dative subject, with the meaning 'succeed, go well', of which some occur with an adverbial modifier and some with directionally-specified adverbs. However, one of our examples above,  $sn\acute{u}a$  'turn', occurs with neither of the two, most likely because directional specifications are inherently present in the core semantics of  $sn\acute{u}a$ . It is therefore clear that the success meaning is only found with a different predicate and argument structure than the original meaning of motion.

# 4. Success in Indo-European

Looking further afield, at least four out of six of the metaphorical extensions in (4) above can also be found across the Indo-European language family, namely the extensions based on motion, growth, touch/contact and aim/reach. Exactly like in Germanic, many of these metaphorical extensions surface with dative subjects. Likewise, many of these

verbs are originally verbs of motion, either in the history of the language or in its prehistory; these motion verbs typically also co-occur with preverbs or adverbials.

### (19)Motion

Latin: *succedo* (*sub+cedo* 'under+step') a.

> si proinde mihi mereor if according.to how I.myself.NOM deserve I.DAT successerit

prosper.3SG

'but if I have succeeded according to what I deserve' (Cic. Fam. 10.4.4)

- Early Vedic: sam rdh (sam 'together' + rdh (= r 'move' +  $dh[\bar{a}]$  'put'?))<sup>3</sup> b. násmai kấmāh sám rdhyante not.he.DAT desire.NOM.PL succeed.PRS.3PL.MID 'He does not have his desires satisfied' (AV. 12.4.19)
- Middle Vedic: *sam-pad* (*sam+pad* 'together+fall/step)' c. sám hāsmai padyate yám together indeed.he.DAT fall.PRS.3SG.MID which.ACC.SG.M kámam kāmávate desire.ACC.SG desire.PRES.3SG 'Indeed he is successful in whatever desire he desires' (Brhad-Ār.Up. 6.1.4)
- Ancient Greek: sym-baínō (sym+baínō 'with+step/go/walk') d. eí moi sumbaínei toûto I.DAT turn.out.3SG this.NOM 'if I succeed in this' (Plat. Laws 744a)
- Ancient Greek: *pro-chōréō* (*pro+chōréō* 'forward+go') e. hốs hoi dólōi proekhóree ou craft.DAT since he.DAT not succeed.3SG 'Since he could not succeed by craft' (Hdt. 1.205)
- f. Lithuanian: eiti ('go')

Sūnui einasi mokslas

go.PRES.3 son.DAT.SG study.NOM.SG

'The son is doing well in his studies'

(Lietuvių kalbos veiksmažodžių junglumo žodynas)

<sup>&</sup>lt;sup>3</sup> The etymology of the Vedic root *rdh* 'succeed, be successful, go well' (see Kulikov 2012: 362–369 for a detailed discussion of the meaning and intransitive uses attested for this verb) outside Indo-Iranian is unclear (Mayrhofer 1986–1996, EWAia I, 118), with the only possible connection to Gr. ἄλθετο 'become whole and sound' (PIE  $*h_2el(-)dh$ - 'glücklich erreichen'? see LIV<sup>2</sup> 262f.), which is uncertain. On semantic grounds, one might speculate that, like many other verbs of success, it could originate in a verb of motion. Specifically, the initial part of the root may rely on one of the three Proto-Indo-European \*Her- roots, all referring to certain processes of motion:  $*h_1er$ - (LIV<sup>2</sup> 238: 'wohin gelangen, geraten'),  $*h_2er$ - (LIV<sup>2</sup> 269f.: 'sich (zusammen)fügen') and \*h3er- (LIV2 299f.: 'sich in (Fort) Bewegung setzen').

# g. Lithuanian:

(pa-)sekti-s (pa-+sekti+s 'under/aspectual+observe/follow+REFL') Kartais ir **šuniui** pasiseka gardesnį kąsnį sometimes and dog.DAT.SG succeed.3 tastier bite.ACC gauti get.INF

'Sometimes even the dog succeeds in getting a tastier bite'

(Lietuvių kalbos veiksmažodžių junglumo žodynas)

### h. Lithuanian:

(nu-/pa-)vykti (nu-/pa+vykti 'down/under+make one's way, go')

Jam gerai ten vyksta
he.DAT well there succeed.PRES.3
'He is doing well there' (Lietuvių kalbos žodynas)

### i. Lithuanian:

*kloti-s* ('put+REFL') (cf. OHG hladan 'load'; s. Derksen 2015: 252f; LIV<sup>2</sup> 362)

Kelinonėje **man** klojosi gerai journey.LOC I.DAT get.on.PAST.3 well 'The journey went well for me'

(Lietuvių kalbos veiksmažodžių junglumo žodynas)

All the examples above are etymologically transparent at the synchronic level, involving some type of (caused) motion, with either directional or comitative preverbs, except for the Lithuanian example in (19f), where the verb *eiti* 'go' only occurs with a dative subject and no preverb or modifying adverbial. These facts will become relevant for the Proto-Indo-European reconstruction in Section 6.2 below.

### (20) Giving

- a. Old Russian: ou-dati-sja, Modern Russian u-dat'-sja ('at+give+REFL')

  A voina sja imъ ne udala
  but war.NOM REFL they.DAT NEG succeed.PAST.3SG.F
  'but they did not succeed at war' (Afanasij Nikitin, "Xoženie za tri morja",
  15th cent. = Late Old / Middle Russian)
- b. Lithuanian: nu-(si)-duoti ('down (+REFL)+give')

  Man nusidave kelionė

  I.DAT succeed.PRES.3 travel.NOM

  'My trip was successful'

### (21) Touch/contact

a. Hittite: hap(p)- 'join, attach' (= PIE \* $h_2ep$ - 'fit, suit') takku=**šmaš** ŪL=ma hapzi if=they.DAT/ACC not=but succeed.3sg 'but if they do not succeed' (KBo XI 34 I 4-5)

# (22) Aim/reach

a. Ancient Greek: *epi-tunkhánō* 'reach, obtain' ('upon'+tunkhano 'happen' < PIE \*dʰeugʰ- 'deliver (a product)')

autôi oudèn epetúnkhane he.DAT nothing.NOM succeed.3SG 'he succeeded in nothing' (Ant. Lib. 41.6)

b. Lithuanian: *nu-tìkti* ('down+suit/match'), probably related to *tèkti* 'fall to/on' (< PIE \**tek-* 'reach (out with the hand)')<sup>4</sup>

Ne **kiekvienam** nutiks taip iš karto not everyone.DAT happen.FUT.3SG thus immediately

atrasti uždarbio find.INF earning.GEN

'Not everyone will succeed in finding an earning immediately'

(Lietuvių kalbos žodynas)

Some of these verbs are polysemous in their respective languages, while others only denote success. In those cases, the metaphorical extension is apparent from the etymological history of the root. For both categories of success verbs, some show varying case frames, as they can instantiate either the Nom-Acc or the Dat-(Nom) argument structure construction, while others are only found in the Dat-(Nom) case frame.

To sum up, there are ample data from five different branches of the early Indo-European languages documenting the metaphorical extension of motion to success. The growth metaphor, by contrast, seems to be confined to Germanic and Balto-Slavic, the touch/contact metaphor is found in Germanic and Hittite, while the aim/reach metaphor is documented in Germanic, Lithuanian and Ancient Greek. We confine our reconstructions in Section 6 below to the metaphorical extension of motion to success, as this metaphorical extension has the widest distribution across the Early Indo-European branches. Before that, a few words on known metaphors of success are in order.

# 5. Metaphors for success

To recapitulate, the six SUCCESS metaphorical extensions, documented in early Germanic and a subset of the other early Indo-European languages, are given below:

### (4) Metaphorical extensions

- Motion
- Giving
- Touch/contact
- Aiming/reaching
- Growth
- Luck

The question that arises is whether or not these source domains are already known in the field of metaphor theory — and if so, to which degree.

<sup>4</sup> For a discussion of possible Baltic (and Germanic) reflexes of this Proto-Indo-European root, see, in particular, Derksen 2015: 462, 465; LIV<sup>2</sup> 618. These include verbs meaning i) 'suffice, match' (Lith. *tìkti* 'suit, match'), ii) 'agree, believe' (Lith. *tikéti* 'believe', OHG *dingen* 'id.'), and iii) 'prosper' (Go. *beihan*, etc.).

Early research on metaphor in the cognitive linguistics community has documented that common metaphors for success are "reaching the end of a path" (Lakoff 1993: 222, Radden 1996: 446ff.) and "motion forward" (Goatly 1997, Kövecses 2002: 137). It turns out that our aim/reach metaphorical extension may be taken to be an elaboration of Lakoff's SUCCESS IS REACHING THE END OF A PATH, since both aiming and reaching presupposes intention to attain something somewhere, whether it be the end of a path or another predetermined goal. The same is true for our motion extension; this is clearly an elaboration of Goatly's SUCCESS IS MOTION FORWARD metaphor, even though not all our motion examples stem from verbs signifying motion directed forward. Thus, two of our established metaphorical extensions for Germanic and Indo-European are clearly rooted in well-established conceptual metaphors.

Additional research into metaphors in Modern English has revealed several more conceptual metaphors for SUCCESS in everyday use of the language, like the following (Nicholls 2004, Goatly 2007: 151–160):

# (23) English conceptual metaphors for SUCCESS and FAILURE

- SUCCESS IS BIG FAILURE IS SMALL
- SUCCESS IS HIGH FAILURE IS LOW
- SUCCESS IS MOVING FORWARD FAILURE IS STATIC OR STUMBLING
- SUCCESS IS SWIMMING FAILURE IS DROWNING
- SUCCESS IS LIFE FAILURE IS DEATH
- SUCCESS IS SPEED FAILURE IS SLOWNESS

There is a clear connection between the last metaphor, SUCCESS IS SPEED and the development of (gi) lingan from Proto-Indo-European \* $h_1$ leng<sup>wh</sup>- from the meaning 'go fast, speed, run'. Also, the first two of the conceptual metaphors listed above, SUCCESS IS BIG and SUCCESS IS HIGH, are indeed relevant for two more of the metaphorical extensions that we have documented in this article: grow > success and climbing > success.

Even though we have here considered all motion verbs together, irrespective of direction, one particular motion verb that is used to denote success in Old Icelandic is *klifa* 'climb', cf. (15) above. This use of 'climb' in the meaning 'succeed' can also be seen as an instantiation of the SUCCESS IS HIGH metaphor since climbing is inherently directional, going either upwards or downwards. Also, SUCCESS IS HIGH is one submetaphor of a set of spatial metaphors including GOOD IS HIGH, HAPPY IS HIGH and MORE IS HIGH (cf. Goatly 2011). A variant of this spatial metaphor, SUCCESS IS UP, is discussed by David (2016: 89).

Another metaphorical source domain, growing, in the metaphorical extension grow > success, may be seen as an instantiation of the SUCCESS IS BIG metaphor, since SIZE and GROWTH are intertwined concepts, with growing being involved when sizes change ascendingly. This is evident from the fact that if somebody succeeds, that person may be described as having "grown" (Nicholls 2004). The SUCCESS IS BIG metaphor is also a submetaphor of the higher-level metaphor GOOD IS BIG, of which other instantiations are IMPORTANT IS BIG, SIGNIFICANT IS BIG and POWERFUL IS BIG (Lakoff & Johnson 1980, Nicholls 2004, Schubert, Waldzus & Giessner 2009).

Thus, three of our documented source domains, giving rise to existing metaphorical extensions in Germanic and Indo-European, motion, aiming and growth, are rooted in established metaphors for success. The remaining three source domains,

giving, touching and luck, are not documented in the field, as far as we know. Of these three metaphors, SUCCESS IS A GIFT seems to be confined to Germanic and Balto-Slavic, SUCCESS IS CONTACT/TOUCHING is confined to Germanic and Hittite, while the last one, SUCCESS IS LUCK, appears to be only found in Germanic. These three metaphors are of course only three more construals of how the concept of SUCCESS may be conceptualized by speakers.

We now turn to the potential reconstructability of the early Germanic and early Indo-European data presented in Sections 3–4 above.

### **6** Reconstruction

In our quest to document how full verbs may develop from other full verbs, we have uncovered several regularities in semantic change, including the development motion > success, which is at least of Proto-Germanic origin, if not Proto-Indo-European (see Sections 3–4). Hence, we have good reasons to reconstruct a set of success constructions for earlier stages. In what follows, we begin with the relatively more secure context of Proto-Germanic in Subsection 6.1, before proceeding towards Proto-Indo-European in Subsection 6.2.

### 6.1 Proto-Germanic

As is true for most reconstructions, each (partial) reconstruction given below has a level of certainty associated with it that is directly related to the strength of the attested patterns. We focus on Germanic for this reason, as the languages of West and North Germanic in particular share the same set of six conceptual success metaphors, each attested to greater or lesser degrees with the dative subject construction.

With regard to motion verbs, we have documented that there are two sets of cognates relevant for the Germanic success constructions: in North Germanic, verbs cognate to Faroese ganga; in West Germanic, verbs cognate to Old English  $g\bar{a}n$ . The North Germanic verb can be reconstructed as \*gangan for Proto-Germanic, and the West Germanic as \*gæjan. In spite of having two separate Proto-Indo-European roots, (\*ĝhongh- and \*ĝheh₁i-, respectively), these two verbs are indeed related.

The commonly held view is that the old Proto-Indo-European athematic paradigm of \*h<sub>1</sub>ei- 'go' was replaced in Proto-Germanic with two similar-looking but etymologically distinct verbs: Proto-Germanic \*gæjan and \*gangan, exactly the verb roots under discussion here (cf. Mottausch 1998). In the prehistory of West Germanic, \*gæjan and \*gangan, got integrated into one paradigm, with \*gæjan used in the present system and \*gangan in the past. In contrast, in the prehistory of North Germanic, \*gangan was generalized throughout the entire tense system, although reflexes of \*gæjan can be found in both East Norse (Old Swedish  $g\bar{a}$ , Old Danish gaa) and West-Norse (Old Icelandic ga). Therefore, even though the two verbs are not etymologically related, they are still morphologically related in the sense that they belonged to the same morphological paradigm of the verb 'go' in Proto-Germanic.

To continue, this morphological relation in the history of the languages under discussion implies a shared history of utilizing the same verb for two argument structure constructions: one with the concrete meaning 'go, walk' and the other with the abstract

meaning of 'succeed'. Starting with the concrete meaning of 'walk, go', we provide the lexical correspondence set in Table 3.

**Table 3.** Correspondence set for the verb 'walk' in Germanic with the proposed reconstructed form.

	Form1	Form2	MEANING	RECONSTRUCTED FORM
Gothic Old High German Old English Old Saxon Old Frisian Old Icelandic Old Swedish Old Danish	gaggan gangan gangan/gongan gangan /gunga ganga ganga ganga	gān/gēn gān gān gān gā gá gā	ʻwalk' ʻwalk' ʻwalk' ʻwalk' ʻwalk' ʻwalk ʻwalk	*gangan-/g&jan-

*	verb-specific argument structure cxt									
	FORM									
	SYN	ARG-ST < NP-Nom <sub>i</sub> >								
	SEM	FRAMES	Self_motion-fr SELF_MOVER i							

**Figure 1.** Reconstruction of the verb 'walk' in Proto-Germanic.

Moreover, in the same way that one can construct a correspondence set among *lexical* items, one can also provide correspondence sets for *syntactic structures*, at least given the framework of Construction Grammar where no meaningful distinction between the storage of lexical items and syntactic structures is assumed, i.e. both exist in the mental repository as form–meaning pairings. The correspondence set in Table 3 is not intended to capture the phonological shape of the relevant lexical material, but rather to capture the lexical items relevant for a particular argument structure and, following that, the semantic participants of the corresponding verbal event. In all instances across Germanic, the argument structure for the correspondence set in Table 3 includes a nominative subject, which codes the participant of the verbal event who is propelling him/herself forward (hence, the index *i* on both the syntactic and semantic participant in Figure 1). Since all Germanic languages have this particular construction — a verb of walking with

a nominative participant — we propose a reconstruction for Proto-Germanic as shown in Figure 1.

We use the formalism of Construction Grammar to lay out the details of our reconstruction (Kay & Fillmore 1999, Michaelis & Ruppenhofer 2001, Boas 2003, Fried & Östman 2005, Michaelis 2009, 2013, Sag 2012, Fried 2015). The reconstruction in Figure 1 consists of three fields, the FORM field, the SYN field and the SEM field. The FORM field, in this case, is filled with the etymologically reconstructed forms that have already been proposed by Germanic etymologists. The SYN field specifies the argument structure, in this case there is only one argument, namely the nominative, while the SEM field defines the semantic structure in terms of semantic frames, in this case the frame associated with Self\_motion in the English FrameNet project. Although the form of the verb in the FORM field differs in the daughter languages depending on which form is generalized in each language, the argument structure and the semantic frame are the same.

As already mentioned in Section 1, our analysis of the metaphorical extension from motion to success in Germanic must take polysemy into account. It is clear that the lexical verb of motion, 'walk, go', reconstructed in Figure 1, is also used in the abstract context of success, cf. the evidence in Section 3.1. Hence, polysemy is here accounted for through the existence of different argument structure constructions each verb can instantiate.

Given the ubiquity of the use of the verb 'walk, go' with the same predicate and argument structure across several Germanic languages — i.e. a dative subject — and a requisite pre- or post-verbal adverbial, we argue that a reconstruction of a success construction is also appropriate for Proto-Germanic. In other words, rather than assuming that each success construction independently developed from the verb 'walk' into each daughter language, we argue instead that the etymological relation among the lexical items and the shared predicate and argument structure, including varying degrees of productivity in the languages under discussion, rather indicate a proto-construction. By the term *proto-construction*, we refer to a construction that may be reconstructed for a proto-stage, on the basis of abundant attestations in the daughter languages.

However, the North and West Germanic languages show some important differences, as is evident from a comparison of the two correspondence sets in Tables 4–5 for North and West Germanic, respectively. Even though both the North and the West Germanic correspondence sets utilize the same morphological paradigm for the verb 'go', the modifying morphemes differ — namely, North Germanic prefers a post-verbal adverb, while at least two of the West Germanic languages prefer a perfective prefix. As is discussed in Section 3.1 above, the perfective meaning is most likely a later development, with the prehistoric meaning being the directionally-specified 'from'. In that sense, the MHG and Middle Dutch forms are equivalent to the prefixes discussed in Section 4 for the other Early Indo-European languages. Old English, however, patterns with North Germanic in that the bare verb 'succeed' occurs with an adverb 'well'. Middle Dutch also shows a conglomeration of the two templates, as it occurs with a perfective prefix and the manner adverb 'well'. This seems to suggest that the VERB+ADV template is younger and has replaced the PREVERB template.

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<sup>&</sup>lt;sup>5</sup> https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Self\_motion

**Table 4.** Correspondence set for 'succeed' in North Germanic.

	VERB ADV	MEANING	RECONSTRUCTED FORM
Old Icelandic Old Swedish Modern Faroese	ganga létt ganga slät ganga vel	'succeed'	*gangan-/gæjan- ADV

**Table 5.** Correspondence set for 'succeed' in West Germanic.

P	REVERB	VERB ADV	MEANING	RECONSTRUCTED FORM
Old English Middle High German Middle Dutch	er- er-	gān wel gān gaen wale	'succeed' 'succeed' 'succeed'	*PRE-gangan-/gǣjan-

On this basis, we opt for partial reconstructions for both Proto-North Germanic and Proto-West Germanic, as in Figures 2–3, respectively. These reconstructions are *partial* in that certain "slots" are not lexically specified at this level, namely, the specific modifying adverb used in North Germanic and the prefix in West Germanic.

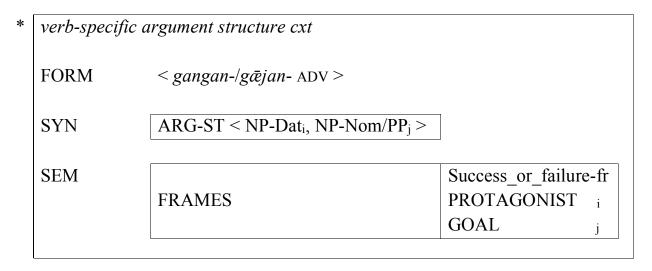


Figure 2. Partial reconstruction of 'succeed' in Proto-North Germanic.

Observe that, exactly as in Figure 1, the argument structure and the semantic frame, including the semantic participants of the verbal event, are also reconstructed, all this on the basis of the data presented in Section 3. For both reconstructions, the argument structure for 'succeed' involves a dative subject (here defined as the first argument in the argument structure, see Eythórsson & Barðdal 2005, Barðdal & Eythórsson 2012, 2019) alongside an optional nominative "object" or a prepositional object (see 5b above for a nominative object and 5a for a prepositional object). These syntactic participants correspond to the semantic roles of "agent" and "goal", respectively. Importantly, these

semantic roles are adopted directly from the FrameNet project, which specifies that 'succeed' as a verbal event involves an agent and goal.<sup>6</sup>

However, FrameNet also makes use of the term *protagonist* for deprofiled individuals who attempt to succeed, a term more accurate for verbs of success selecting for dative subjects. Clearly, in languages where 'succeed' occurs with an oblique subject, the relevant subject referent is not construed as an agent, but as some sort of a non-agentive participant engaged in the event of accidental or non-controlled success.

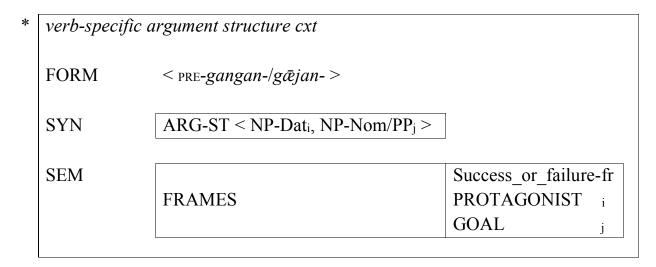


Figure 3. Partial reconstruction of 'succeed' in Proto-West Germanic.

In Figures 2–3, we reconstruct verb-specific argument structure constructions for Proto-North and Proto-West Germanic. The function of the prefixes in the reconstruction in Figure 3 is not specified, since it is not transparent synchronically, as discussed in Section 3.1. Alongside the reconstructions for Proto-North and Proto-West Germanic, it is also possible to reconstruct a verb-class specific argument structure construction for verbs of motion in general, not only for 'go'. Consider the correspondence set in Table 6, which forms the basis for a partial reconstruction of a verb-class-specific construction of success in Proto-Germanic in Figure 4.

**Table 6.** More correspondences for motion > success across North and West Germanic

	Form	MEANING OF Etymon	Constructional Meaning
Old High German	DAT-gelingen	'move quickly'	'succeed'
Old English	DAT-gān wel	'go well'	'succeed'
Old Swedish	DAT-ganga slät	ʻgo smoothly'	'succeed'
Old Icelandic	DAT-ganga létt	'go easily'	'succeed'
Old Icelandic	DAT-klífa áfram	'climb ahead'	'succeed'
Old Icelandic	DAT <i>-snúna</i>	'turn'	'succeed'

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<sup>&</sup>lt;sup>6</sup> https://framenet2.icsi.berkeley.edu/fnReports/data/frameIndex.xml?frame=Success\_or\_failure

There are two major differences in the reconstruction in Figure 4, as compared to the reconstructions in Figures 1–3: i) the FORM field is empty, and ii) there is a new field between the SYN and the SEM fields, namely a field for VERB CLASS.

k	verb-class-specific argument structure cxt									
	FORM	< >								
	SYN	ARG-ST < NP-Dat <sub>i</sub> , NP-Nom <sub>j</sub> >								
	VERB CL	Verbs of motion								
	SEM	FRAMES	Success_or_failure-fr PROTAGONIST i GOAL j							

**Figure 4.** Partial reconstruction of a verb-class-specific 'succeed' construction in Proto-Germanic.

The reason that the FORM field is empty is because different lexical verbs of motion are found in the success construction in the Germanic languages, even though the same argument structure is used and the same metaphorical extension is found. Thus, this partial reconstruction lacks *any* lexical specification in the FORM field. Rather, this partial reconstruction for Germanic requires that the verbs that participate in this construction be a member of the class "verbs of motion" in Proto-Germanic.

Figure 4, indeed, captures a broader generalization about Proto-Germanic than the reconstructions in Figures 2–3, namely that the *conceptual metaphor*, SUCCESS IS MOTION FORWARD, must have existed at this proto-stage. That is, we are not merely reconstructing an argument structure construction together with the relevant lexical material (in fact, in this case we are not reconstructing any lexical material at all), but this reconstruction also includes an implicit association with the conceptual metaphor that triggers the use of the dative subject construction. This cognitive association falls out from the co-occurrence of verbs of motion in the VERB CL field and the Success\_or\_failure frame in the SEM field.

In other words, a reconstruction like the one in Figure 4 represents an even larger step forward than simply reconstructing lexical or phonological information. Not only does our reconstruction encode syntactic information — adding to the growing body of syntactic reconstruction — it also encodes cognitive information through the implicit association with a conceptual metaphor, SUCCESS IS MOTION FORWARD, shared across related languages.

As already pointed out in Section 5 above, this metaphor, in and of itself, need not be exceptional. It is entirely possible that a metaphor of this type is universal and occurs in non-Indo-European languages or can perhaps independently emerge in different branches. We believe, however, that this particular metaphorical extension is

reconstructable for Proto-Germanic, since it coincides with a synchronically unmotivated argument structure, the one involving oblique subjects, and in certain cases, etymologically related lexical items. Thus, any potential existence of this metaphorical extension in other language families is irrelevant for the purposes of reconstruction in the present article.

The question, of course, arises whether the unique coupling between a lexical verb meaning 'succeed' and its unexpected non-canonical subject marking could be due to the productivity of the dative subject construction, for instance in Germanic. On such a scenario, a verb meaning 'succeed', occurring with a nominative subject, would get attracted to the dative subject construction, and hence start occurring with a dative subject instead of the expected nominative. Such verb-specific changes have certainly been documented in the history of the Germanic languages with oblique subject predicates (Allen 1995: 250, Falk 1997: 51, Barðdal 1999, 2001, 2009, 2011, Eythórsson 2000, 2002, Jónsson & Eythórsson 2005). The problem, however, is that such itemspecific changes are generally not found across several daughter languages, but are confined to only one of the daughters, due to the analogical nature of such changes. In our case, however, we find the same lexical verbs, the same meaning, the same predicate structure, and the same non-canonical argument structure in one language after the other, which clearly speaks for inheritance rather than productivity (cf. Barðdal et al. 2012).

In the next section we show how this motion > success metaphor may be explicitly reconstructed for the grammar and the conceptual system of Proto-Indo-European.

# 6.2 Proto-Indo-European

Let us now ponder over the possibility that the DAT-succeeds construction, i.e. the dative subject construction together with the metaphorical extension, SUCCESS IS MOTION FORWARD, can be reconstructed even further back to Proto-Indo-European. As shown in Sections 3–4 above, many verbs of success throughout the Indo-European language family have a dative subject with a verb that, at least etymologically, derives from motion. On this basis, consider the correspondence set in Table 7.

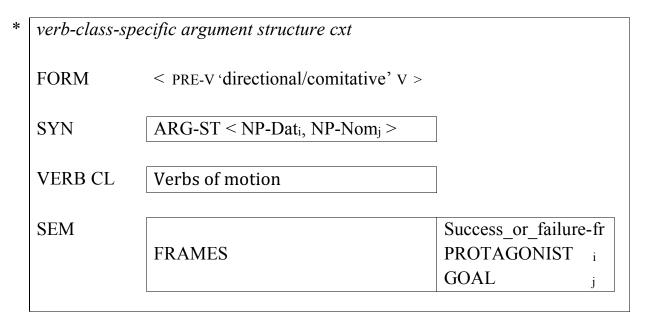
Table	· 7.	Inc	lo-Euro	pean	correspo	ndence	set for	r motion >	'succeed'.
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	FORM	MEANING OF ETYMON	Constructional Meaning
Old English Latin Ancient Greek Lithuanian Vedic	DAT-gān wel DAT-succedō DAT-prochōréō DAT-(pa-)sekti-s DAT-sam-pad	'go well' 'step under' 'go forward' 'follow' 'step together'	'succeed' 'succeed' 'succeed' 'succeed' 'succeed'

We have already reconstructed a DAT-'succeeds' construction based on the metaphorical extension, SUCCESS IS MOTION FORWARD, for Proto-Germanic (Figures 2–3). In Latin, Classical Greek, Lithuanian, and Vedic Sanskrit, we find similar instantiations of this construction (see Section 4 above). In all the languages in the correspondence set in Table 7, the subject of the verb is in the dative case. Moreover, each verb has etymological or synchronic derivational roots expressing motion.

For example, the Latin verb *succedere* 'succeed' represents the simplex verb *cedere* 'step' compounded with the preverb *sub*- 'under'. Likewise, the Classical Greek *prochoréo* is a combination of the preverb *pro*- 'forward' and the motion verb *choréo* 'go, move'. The examples from Vedic Sanskrit both involve the comitative 'with'. Note that in these examples a preverb is used in the same way as it is used with the verb 'go, walk' in the West Germanic data presented in Section 3 above.

Furthermore, although the degree of polysemy found for the verbs across the languages in Table 7 might vary — with the 'succeed' meaning becoming the only meaning for some but not necessarily all the languages — this simply indicates, within a Construction Grammar framework, that the nominative subject construction with the original concrete meaning is no longer available for the compounded verb, i.e. the semantic change is complete. Taking seriously the fact that both the metaphorical extension of motion > success and the predicate and argument structure are recurrent across genetically related languages that are distant in time and space, which is unexpected given the lack of any intrinsic link between the two, a partial reconstruction for Proto-Indo-European may be suggested as in Figure 5, on the basis of the correspondence set in Table 7 above.



**Figure 5.** Partial reconstruction of the DAT-'succeeds' construction in Proto-Indo-European.

Again, exactly as in Proto-Germanic, the reconstruction in Figure 5 captures the fact that an argument structure with a dative subject is readily used to indicate success in Proto-Indo-European with a verb originally signifying motion. That is, the metaphor SUCCESS IS MOTION FORWARD and the dative subject construction coupled with the meaning 'succeed' were all available in the constructiCon of Proto-Indo-European. Instead of leaving the FORM field blank, we use it to specify the morphological restrictions of the predicate, namely that it must contain a preverb with either directional or comitative semantics, with the verb class specifying that verbs of motion in particular participate in this construction. This reconstruction was achieved by simply projecting back to the proto-language a template consistently found across the daughter languages, which is the standard process of reconstruction. The difference between the reconstructions we

propose above and any traditional reconstruction is that in our case a *syntactic* reconstruction is being carried out, not a phonological or a morphological one.

The claim here is that some Proto-Indo-European verbs of motion filled the FORM slot in the construction in Figure 5, although this assumption does not hold for all verbs of motion, exactly as not all verbs of motion are used to denote success in all the daughter languages. Given that we assume that such a construction existed in Proto-Indo-European, the question arises as to why some cognate verbs are not found instantiating the construction in the Indo-European material presented in Section 4 above, which in turn would allow for a reconstruction of a verb-specific Proto-Indo-European construction and not only a verb-class-specific construction as in in Figure 5 above. The reason is, as is well known in historical linguistics, that vocabulary gets replaced over time (e.g. Firth 1935, Bynon 1977: 183–193, Cavalli-Sforza & Wang 1986, D'arcy 2006, Calude & Pagel 2011, François 2011). Such a process has been termed 'lexical replacement' or 'lexical substitution' in the literature, resulting in new lexical material, replacing the older lexical material within a construction, as also discussed by Barðdal & Eythórsson (2019) for the Nom-Dat construction in the Indo-European languages.

Regarding the cognacy of the case markers, it is common knowledge in the Indo-European scholarship that the markers for the dative case are cognate across the Indo-European branches (see, for instance, Kuryłowicz 1964: 190–193, Szemerényi 1996: 160, Ringe 2006: Ch. 2, Clackson 2007: 90–91), and not only across the Germanic languages (except of course for the instances of syncretism of the dative with some other case(s) such as, e.g., instrumental, where the original cognate relationships can be blurred). In some branches, new markers for the dative have arisen, as in the Indo-Aryan languages, where new markers were adopted into the language during the Middle and New Indo-Aryan periods (see Kulikov 2009: 440–442, Butt & Ahmed 2011). Another example is Tocharian, where the original Proto-Indo-European case system has been restructured. However, our reconstruction above is neither based on Tocharian nor late Indo-Aryan data.

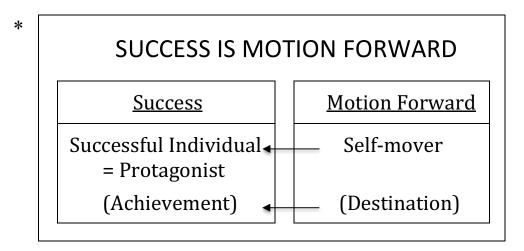
Furthermore, although the metaphor SUCCESS IS MOTION FORWARD itself could very well be universal, that fact is simply irrelevant for the present purposes. The reason is that it is the prevalence of the template — that the meaning 'succeed' co-occurs with a dative subject construction, summarized by the partial reconstruction in Figure 5 — shows beyond doubt that such a construction could and should be reconstructed for Proto-Indo-European. In other words, if we take seriously that such a metaphor must have existed within Proto-Indo-European, then at some stage in the production of this construction there must have been a mapping from a conceptual frame (SUCCESS IS MOTION FORWARD) onto the available argument structure. Oblique subject constructions typically express involuntary events, most notably with experiential meaning but also with other types of non-agentive semantics. Success may indeed belong to this domain, depending on how it is conceptualized in a language.

Yet another issue not hitherto addressed is whether success events may generally be expressed with dative subjects cross-linguistically, irrespective of the motion > success metaphor, for instance in languages generally exhibiting dative subject constructions. We are aware of only a few languages outside Indo-European where dative subjects are found with verbs of success. These include some Finno-Ugric languages (Saami, Finnish, Hungarian), Modern Hebrew, two Nakh-Daghestanian languages (Akhvakh, Avar) and one Tibeto-Burman language (Japhug). In contrast, no evidence for such constructions is found in several other languages and language families across Eurasia, specifically, Kartvelian, Tsez (Nakh-Daghestanian), Japanese, Korean, Dravidian

(Tamil, Kannada, Malayalam), Tibeto-Burman (Manipuri, Lamkang), or in South America (Cariban).<sup>7</sup>

Returning to the languages in which dative subjects occur with success verbs, Saami and Finnish are geographically surrounded by Indo-European languages, namely Germanic, Baltic and Slavic, and the same holds for Hungarian. Thus, it is unclear whether this is an inherited Finno-Ugric feature or whether it stems from an Indo-European ador substrate. Modern Hebrew, moreover, is heavily influenced by Yiddish (Zuckermann 2006, 2009), while the Nakh-Daghestanian languages have been in contact with Russian, at least during the last few centuries (Comrie 2008), leaving only Tibeto-Burman as unexplained by a potential contact situation. Examples of verbs of success occurring with dative subjects in Amerindian, Austronesian, Japanese, Korean and Kartvelian, for instance, are conspicuous by their absence. Hence, no clear cross-linguistic generalization emerges involving a correlation between dative subjects and success verbs, except for in Eurasia, where Indo-European languages are amply present. Of course, more systematic research is needed to rule out a cross-linguistic association between success verbs and dative subjects in general. Meanwhile, these preliminary observations further strengthen our claim that a verb-class-specific construction involving dative subjects, with the meaning 'succeed', may be felicitously reconstructed for Proto-Indo-European. Adding a motion verb to the equation strengthens the reconstruction even further.

Returning to our reconstruction, we start with modeling the conceptual frame in Figure 6, i.e. our metaphor, SUCCESS IS MOTION FORWARD, in Proto-Indo-European. As is evident, the source domain, to the right in Figure 6, is MOTION FORWARD and the target domain, to the left, is SUCCESS. The mapping between the semantic participants of the source and target domains in Figure 6, i.e. between the self-mover of the Self motion-frame and the protagonist, i.e. the successful individual, of the Success-frame is represented through the arrows between the participants of the two domains. Recall that the second argument of the dative subject construction is either a nominative or a prepositional object. This argument, moreover, is optional, hence the brackets around the Destination in the source domain and the corresponding Achievement in the target domain.



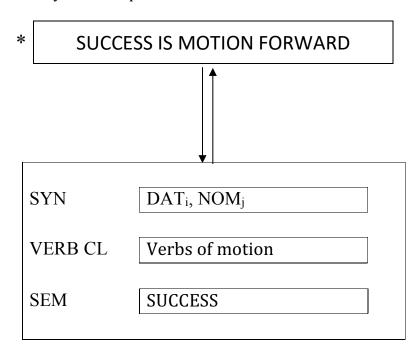
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<sup>&</sup>lt;sup>7</sup> We thank Flávia Castro Alves, Raghavachari Amritavalli, Shobhana Chelliah, Denis Creissels, Spike Gildea, Eitan Grossman, Guillaume Jacques, Zaira Khalilova, Ritsuko Kikusawa, Elena Kondratyeva, Valéria Molnár, Na'ama Pat-El, Yakov Testelets, Hannu Tommola and Jussi Ylikoski for providing us with data from a variety of non-Indo-European languages.

**Figure 6.** A Reconstruction of the SUCCESS IS MOTION FORWARD metaphor in Proto-Indo-European (inspired by the notational system of David 2016: Ch. 4)

Finally, Figure 7 models the mapping between the metaphor in Figure 6 and the verbclass-specific dative subject construction in Figure 5, with verbs of motion, represented here in a simplified version for the sake of clarity. Recall that the mapping of the semantic participants of the Success-frame onto the arguments of the argument structure is already specified within the argument structure itself through indexing. Through these two mappings, from the metaphorical source domain onto the target domain in Figure 6 and the mapping of the participants of the semantic frame onto the arguments in the argument structure, the following facts fall out: the Self-mover, perceived of as the Successful Individual, the Protagonist, is realized as a dative subject in the grammar, and the Destination, perceived of as the Achievement, is realized as either a nominative object or a prepositional object, when spelled out at all.

The double arrows in Figure 7 illustrate the mutual influence of the argument structure and the metaphor on each other; the metaphor affects the choice of argument structure, while at the same time the argument structure predicts a certain type of semantics motivated by this metaphor.



**Figure 7.** Mapping metaphor onto a verb-class-specific construction.

One could now argue, perhaps in particular on the basis of the dative case marking of the subject, that the conceptual metaphor, motion > success, should be understood as implying that success comes to the protagonist. That is, as involving movement of the success to the Successful Individual, the Protagonist, instead of the Protagonist moving forward and achieving success. One major problem with such an analysis is that it entails not only no straightforward mapping, but also simply no mapping at all, between the Selfmover of the source domain and any semantic participant in the target domain. This would produce a major mismatch between the participant roles of the source and the target domains, with the Self-mover of the source domain not being anchored in the target domain at all, but somehow being left out or being unrealized in the grammatical

representation. Second, this also entails that the Protagonist, the Successful Individual, should be realized as a Destination, which it is not, as Destination instead materializes as the Achievement, when realized at all.

Another option would be to introduce an additional metaphor into the equation, a metaphor where the dative subject would be perceived of as a beneficiary, somehow receiving the success. On such an analysis, two metaphors are needed to account for the semantic development of motion > success across the Indo-European family. Of these two, only a subsection of the semantic participants of the two source domains would be realized in the one target domain, again resulting in a major mismatch between the participant roles of the source and the target domains, now with the success itself having to be realized as an object. However, on the analysis of the first metaphor, SUCCESS IS MOTION FORWARD, success would have to be realized as the subject moving towards the dative argument. Hence, yet another mismatch would arise, namely as to the mapping of the success itself onto a) subject on the first metaphor, but onto b) object on the second metaphor.

There is, however, another way of accounting for the perceived benefactive properties of the dative subject argument, and thus to account for any potential perception that success moves to the Protagonist, the Successful Individual, instead of him/her achieving success through motion forward. This alternative account is even glaringly obvious, given a construction grammar approach, on which it is reasonable to assume that any potential benefactive semantics indeed stems from the dative subject construction itself, irrespective of the metaphor motivating the meaning extension of the lexical verbs instantiating the construction, in this case verbs of motion. It is a well-known fact that an agentive reading of dative subject arguments is excluded in languages where such constructions are found. Instead of repeating here the type of examples that have been used to establish this in the earlier literature, for instance the ungrammaticality of imperatives, the ungrammaticality of embedding under verbs of intention and verbs of attempting, as well as examples where optional modifiers expressing agentivity can be shown to be infelicitous, we refer the reader to Barðdal (2004: 124–131), Thráinsson (2007: xx), and the references found there.

We have shown above that there are at least six metaphorical extensions behind the creation of success verbs across the early Indo-European languages. Hence, more such extensions could easily have existed in the proto-stage. However, we confine our reconstruction to the extension best attested in the daughter languages. What is more, this metaphorical extension motion > success may well be attested outside Indo-European, which, however, would not call into question the validity of our reconstruction for Proto-Indo-European. The reason is that structures of this type are confidently found in a large enough number of branches and can thus be reconstructed for a proto-stage, irrespective of their existence in other language families. That is, we believe that it is important that any modeling of an earlier prehistoric stage is in accordance with the facts of the earliest attested daughter languages, as one must assume continuation from the relevant proto-stage to the daughter languages.

The benefit of our partial reconstruction for Proto-Indo-European in Figures 5–7 is that these provide support for the suggestion that an argument structure construction involving a dative subject must have been available in the proto-language. That is, it adds to the growing body of work that suggests that oblique-subject constructions are indeed reconstructable for Proto-Indo-European. This has already been argued for Proto-West-Indo-European (cf. Barðdal et al. 2012) and Proto-Indo-European in general (Barðdal & Smitherman 2013, Barðdal et al. 2013). What the present investigation adds to our pool

of knowledge is the reconstruction of a metaphor for Proto-Indo-European, SUCCESS IS MOTION FORWARD, on which the reconstructed DAT-'succeeds' construction in Proto-Indo-European is based.

There is no doubt in our minds that the ubiquity of the complementary aspects of this template speaks to a shared ancestral construction, which is itself a subconstruction of the oblique subject construction that has arguably existed in the proto-language. The fact that the attested constructions with DAT-'succeeds' fit into the purported template of the oblique subject construction already reconstructed for Proto-Indo-European is strong evidence for the existence of a proto-construction of the same type during the proto-stages of the languages discussed here.

### 7. Summary and conclusion

The goal of this article has been to contribute to an understudied domain of historical semantics in the international scholarship, namely the investigation of how existing lexical verbs may develop into new lexical verbs, as opposed to the development of lexical verbs into auxiliaries. For this purpose, we have focused on the emergence of verbs meaning 'succeed' in several early/archaic Indo-European languages, concentrating particularly on Germanic. We argue that one of the main loci of this process involves the domain of verbs of motion, typically compounded with spatial preverbs or constructed with modifying adverbs. Through this process a new meaning 'succeed' arises from the meaning of motion. This semantic change is accompanied by: i) reduction in agentivity, ii) decrease in syntactic transitivity, coupled with iii) systematic use of preverbs, and iv) a concomitant change in argument structure from a canonical Nom-(Acc) frame to a noncanonical Dat-(Nom/PP) frame. The type of verbal polysemy involved is accounted for, within Construction Grammar, through different argument structure constructions.

On the basis of the data presented in this article, we have shown that 'succeed' constructions systematically develop from verbs of motion in both Germanic and in the Indo-European languages in general. Not only have we demonstrated the well-known regularity in semantic change, from concrete to abstract, we have also identified a more specific path of semantic change found with verbs of success, i.e. 'go (forward)' > 'succeed'. This metaphorical extension is arguably documented for several branches of Indo-European, manifesting the regular character of this path, which thus can serve as basis for our semantic reconstruction, going hand in hand with our syntactic reconstruction.

Thus, we reconstruct a 'succeed' construction with a Dat(-Nom/PP) argument structure, instantiated by the same lexical verb 'go (forward)' for Proto-Germanic, as well as a verb-class-specific DAT-'succeeds' construction, confined to verbs of motion with preverbs or adverbial modifiers for Proto-Germanic and verbs of motion with directional and comitative preverbs in Proto-Indo-European. What is more, we are able to reconstruct a conceptual metaphor, SUCCESS IS MOTION FORWARD, for Proto-Indo-European, and its mapping with the dative subject construction. As far as we are aware, this is the first reconstruction of a conceptual metaphor for a proto-language in the literature.

We are not contesting the possibility that metaphors like SUCCESS IS MOTION FORWARD may be found crosslinguistically or even be independently constructed given the appropriate cognitive frame of speakers. However, it is not self-evident that such a metaphor would map onto argument structures involving dative subjects, thus deviating

from the nominative canon, as in the Indo-European languages discussed here. On the contrary, the co-occurrence of verbs of success with dative subjects does not seem to be well attested cross-linguistically, only documented in Modern Hebrew, Finno-Ugric, Nakh-Daghestanian and Tibeto-Burman, as far as we are aware. Most of these languages have been in contact with, or are geographically adjacent to, Indo-European languages, which in turn may account for the existence of the DAT-'succeeds' construction in these languages. Therefore, the ubiquity of the DAT-'succeeds' construction across several branches of the Indo-European family, instantiated by verbs of motion with directional and comitative preverbs, speaks for the reconstructability of this construction.

We have, moreover, also provided examples of verbs denoting success derived through other metaphorical extensions than the one based on motion, like growth, luck, touch/contact, aim/reach, and giving. Such metaphorical extensions, while documented across several daughter languages, or even across several branches, are not attested to the same degree as the extension based on the SUCCESS IS MOTION FORWARD metaphor which motivates the DAT-'succeeds' construction. This may mean that these metaphorical extensions represent either an earlier inheritance that has gone lost or a later innovation in the daughter languages. While the DAT-'succeeds' construction can be confidently reconstructed for Proto-Germanic and Proto-Indo-European with motion verbs on the basis of the abundant and recurrent templates presented above, further research is needed to throw light on the issue whether other metaphorical extensions — e.g. SUCCESS IS A GIFT — represents an innovation or a shared retention in the daughter languages.

To address the riddle proposed in the subtitle of this article — how to succeed in Indo-European — the root of the success is in the root. Success is achieved through deriving an abstract meaning from an originally concrete root by means of an available conceptual metaphor and a deviant argument structure construction, used in general to convey different types of involuntary and non-controlled events. This process illustrates regularity in semantic change, of validity for cross-linguistic research and historical-comparative reconstruction, as such contributing to a better understanding of semantic metaphorization and regularity in historical semantics.

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