Verbal particles, results, and directed motion

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1 Introduction

Particles (such as *out*) and particle verbs (such as *call out*) have received much attention in the literature on Germanic linguistics, as evidenced by the following sample of book-length treatments: Fraser (1976), Svenonius (1994), den Dikken (1995), Zeller (1999), Müller (2002), Dehé (2002), Toivonen (2001, 2003), Lüdeling (2001), Zeller (2001), McIntyre (2001), Dehé et al. (2002), Cappelle (2005), Blom (2005), Thim (2012), Los et al. (2012), Walková (2013), Larsen (2014). Recognizing that it is not easy to posit a clear definition of Germanic particles, Dehé et al. (2002, 3) suggest the following characterization:

"A particle is an accented element which is formally (and, often, semantically) related to a preposition, which does not assign case to a complement and which displays various syntactic and semantic symptoms of what may informally be called a *close relationship* with a verb, but without displaying the phonological unity with it typical of affixes."

The particles have attracted interest for a variety of reasons, but perhaps especially because verb-particle combinations seem to have intermediate status between words and phrases.

Since verbal particles have already received many in-depth treatments (see the references above) and they have also been described in several excellent general overviews (see, e.g., the introduction to Dehé et al. (2002), chapter 2 of Los et al. (2012), and Dehé (2015)), I will not attempt a comprehensive review here. Instead, after providing a brief summary of their main characteristics and also some of the main topics of debate regarding particles in the literature in section 2, I will turn to interactions between verbal particles and other constructions. Section 3 focusses on resultative constructions such as *hammer the metal flat*. Such constructions occur in various forms across Germanic, and they share many characteristics in common with verb-particle constructions. I will in particular focus on what appears to be a cross-Germanic quirk about observation about resultative particles in transitive constructions: post-object particles *may* receive a resultative interpretation predicated of the direct object, but pre-object particles *necessarily* receives such an interpretation. Section 4 provides an overview of directed motion constructions in Germanic, often referred to as *way*-constructions, exemplified by *elbow one's way across the room*. The section discusses how verbal particles and directed motion constructions interact.

2 The syntax of verbal particles

2.1 Morphology or syntax?

Particle verbs raise the important question of what distinguishes morphology from syntax. It is not clear whether particles combine with verbs morphologically or syntactically (Booij 1990, Zeller 2001,

Lüdeling 2001, Los et al. 2012, Dehé 2015). Is *throw up* a single compound word, or is it a syntactic phrase made up of two words? Verb-particle combinations are word-like in that they often carry idiomatic or semi-idiomatic meaning that is not completely compositional, as for example in the expressions *hang out* meaning socialize and *put down* meaning humiliate or criticize, and also kill (for an animal). Particles also participate in derivational morphology unlike full prepositional phrases. For example, particle verbs such as German *vorwerfen* 'reproaches (lit. in front throw)' can be nominalized: *Vorwurf* (Zeller 2001, 2). Furthermore, modification of particles is restricted. For example, pre-object particles in English, Norwegian, Icelandic and Swedish cannot be modified: **throw right out the garbage*. This supports the morphological view of particles, as does the fact that pre-object particles in many cases cannot be separated from the verb. Compare the (a) examples below to the (b) examples (all examples are from McCawley 1988):

- (1) a. John picked up the money and picked out a coin.
 - b. *John picked up the money and out a coin.
- (2) a. John picked up, and Mary hoisted up, some heavy weights.
 - b. *John picked, and Mary hoisted, up some heavy weights

Examples (1-2) illustrate the tight connection between pre-object particles and the verb, which fits nicely with the view that the verb-particle connection is morphological.

There are also data points that speak against a morphological analysis. Particles are not always adjacent to the verb:

(3) John picked the money up.

(4) Sara kastade aldrig bort brevet.S. threw never away letter.the 'Sara never threw away the letter.'

(Swedish)

The examples above show that English post-object particles are separated from the verb by the direct object, and Swedish pre-object particles can be separated from the verb by an adverb. Numerous other examples of non-adjacent verbs and particles are included below from several Germanic languages; see, for example, the German example in (8). This separability is the main difference between particle verbs and so-called prefix verbs (Stiebels and Wunderlich 1994 list a number of differences between German prefix verbs and particle verbs).

In general, the separability of the verb and the particle depends on a variety of factors, such as the syntactic configuration in which the particle occurs, and the meaning contributed by the particle (Zeller 2001). There are also cross-linguistic differences. For example, Swedish pre-object particles are less closely connected to the verb than their English counterparts (Toivonen 2003). Finally, even though modification of particles is restricted, modification is not prohibited across the board. For example, many post-object particles in English, Norwegian, Icelandic and Swedish can be modified, as in *throw the garbage right out, kick the ball straight up*.

Data points such as the ones reviewed here (see also Los et al. 2012 and others) make it difficult to determine whether particle verbs are words or phrases. We return to this question in section 2.3 below.

2.2 Word order

English, the Scandinavian languages, and Yiddish¹ are SVO languages, and German, Dutch and Afrikaans are (S)OV in subordinate clauses. All Germanic languages except English are verb-second in declarative main clauses. The placement of particles interacts interestingly with the ordering of the verbs and objects in the different languages. In German, Dutch and Afrikaans, the particle follows the main verb and the direct object in V2 structures but immediately precedes the verb elsewhere. This is illustrated with the German examples in (5–9), taken from Lüdeling (2001):

- (5) Das Märchen fängt an. the fairy.tale catches on 'The fairy tale begins'
- (6) daß das Märchen an-fängt that the fairy.tale on-catches 'that the fairy tale begins'
- (7) *das Märchen an-fängt
- (8) Der Prinz ruft Dornröschen an. the prince calls Sleeping.Beauty up 'The prince calls up Sleeping Beauty.'
- (9) daß der Prinz Dornröschen an-ruft.
 that the prince Sleeping.Beauty up-calls
 'that the prince calls up Sleeping Beauty.'

Yiddish patterns with German, Dutch and Afrikaans, except that particles precede the direct object in V2 structures:

(10) az er zogt nit ois dem sod.
that he says not out the secret
'that he does not reveal the secret.' (Yiddish; den Besten and van Walraven 1986)

Particle verbs are normally inseparable in OV structures in these languages. However, in Dutch (Neeleman and Weerman 1993, Evers 2003), some varieties of German (Müller 2002, section 6.1.3.3), and marginally in Afrikaans (Le Roux 1988), the particle can appear in several possible positions if the clause contains more than one verbal element:

(11) dat Jan de informatie op wilde zoeken / dat Jan de informatie wilde op-zoeken. that J. the information up wanted search / that J. the information wanted up-search 'that John wanted to look up the information.' (Dutch; Blom 2005,7)

Standard German and Afrikaans normally require that the particle appears immediately before the verb in verb-final structures.

In English, Norwegian and Icelandic, the particle appears before or after the direct object, both in main and subordinate clauses:

¹See Dehé (2015) for references and discussion of Yiddish word order.

(12) John sparka (ut) hunden (ut).J. kicked out dog.the out'John kicked out the dog.'

The particle typically precedes the direct object in Swedish:

(13) Maja tryckte ner knappen.M. pressed down button.the 'Maja pushed the button down.'

In Danish, the particle follows the object:

(14) Han knugede sine hænder sammen.he clasped his hands together.'He clasped his hands.'

The above description covers the basic facts about the word order in clauses containing particles, see also the summary in (17), as well as Haider's contribution to this volume (Chapter 16). However, it is important to note that the description here shies away from several important details. For example, discourse considerations such as focus can play a role. Also, modification of particles may alter the regular ordering. In English, Swedish, Norwegian, and Icelandic, modified particles necessarily follow the direct object:

(15) Meg hurled the wallet right out.

(16) *Meg hurled right out the wallet.

In (15), the particle out is modified by right and it must follow the object.

Furthermore, it is in some languages relevant whether the direct object is a pronoun. In English, for example, particles must follow pronominal objects: **pick up it*. These characteristics are discussed at length in the books and articles cited above.

(17)		MAIN CLAUSE	SUBORDINATE CLAUSE
	German, Dutch, Afrikaans	S V O Prt	S O Prt V
	Yiddish	S V Prt O	S O Prt V
	English, Icelandic, Norwegian	S V { Prt } O { Prt }	S V { Prt } O { Prt }
	Swedish	S V Prt O	S V Prt O
	Danish	SV O Prt	S V O Prt

2.3 Word class

In addition to the phrase-structural status and semantics of verbal particles, the word class of particles has also been a topic of discussion in the literature. Traditional grammars often note that particles are not easy to characterize as a particular part of speech and therefore often resort to calling them "adverbial particles" or "adverb particles", suggesting that they are a special type of adverbs. Linguists tend to refer to particles as (intransitive) prepositions (Emonds 1972, van Riemsdijk 1978, den Dikken 1995), and the majority of particles do seem to be homophonous with and otherwise similar to prepositions. Compare the particles in the (a) examples to the transitive prepositions in the (b) examples of (18–19):

(Norwegian; Åfarli 1985)

(Swedish)

(Danish; Platzack 1998)

- (18) a. John put his socks on.
 - b. John's socks are on his feet.
- (19) a. Jenna satte på skorna.J. put on shoes.the 'Jenna put the shoes on.'
 - b. Jenna satte skorna på fötterna.J. put shoes.the on feet.the 'Jenna put the shoes on her feet.'

It is reasonable to assume that the words *on* and pa in (18–19) are intransitive and transitive prepositions, respectively: they are identical in form and close in meaning. This is also true for many other particles: *in, over*, etc.

However, even though prepositional particles dominate, it has been pointed out that certain members of other word classes also pattern with particles. For example, *free* and *loose* can sometimes appear before the object, just as particles do (e.g., *tear loose the ligaments*). Focussing on German, Stiebels and Wunderlich (1994), Müller (2002), and Zeller (2001) discuss adjectival particles such as *krank-feiern* 'sick-celebrate' (skip school) and nominal particles such as *teil-nehmen* 'part-take'. Booij (1990) and van Marle (2002) provide similar examples from Dutch; for example, *hard-lopen* 'fast-walk' (race), *buik-spreken* 'belly-speak' (ventriloquize). Toivonen (2001, 2003) suggests that there are Swedish adjectives, nouns and verbs that seem to pattern with particles. Åfarli (1985) and Svenonius (1996) offer non-prepositional particle examples from Norwegian, such as the adjectival example in (20):

(20) Vi gjorde klar bilen. / Vi gjorde bilen klar. we made ready car.the / we made car.the ready 'We made the car ready.'

Most theoretical work thus assumes that particles are elements pulled from various word classes that have specific morpho-syntactic properties. Prepositional particles have received much more attention than particles of other word classes (Lüdeling 2001, Larsen 2014).

The traditional analysis that particles form their own word class is not widely adopted in the theoretical literature (but see, e.g., Norén 1996), mostly because there is such a clear overlap between particles and prepositions. However, the view that particles are simply special cases of prepositions, etc., does not explain why there are so many particles that only function as particles. That is, there are words that consistently pattern with particles and that do not pattern with non-particle members of the relevant word class. For example, English *away* and *apart* do not seem to pattern with regular prepositions (or adverbs), and Swedish *ner* 'down' and *kvar* 'left, remaining' are not obviously prepositions (or adjectives or adverbs).

2.4 Argument structure

Particles can alter the argument structure of verbs, as in examples (21–22) taken from Larsen (2014, Chapter 3):

- (21) a. John shut *(his mouth).
 - b. John shut (*his mouth) up.

(Swedish)

(Åfarli 1985)

- (22) a. John waited (*the storm).
 - b. John waited out *(the storm).

The verb *shut* (21) normally requires an object, but the addition of the particle *up* prohibits a direct object. Conversely, *wait* (22) is intransitive, but *wait out* is transitive. The fact that the addition of particles can alter the argument structure of a verb is generally true across the Germanic languages and not unique to English. For example, the Swedish verb *slå* 'to hit' requires an object, but the particle verb *slå runt* 'to party' (lit. 'to hit around') cannot take an object.

In many cases, the argument alternation induced by particles can be compared (and perhaps equated) to argument additions that can be observed in resultative constructions; compare for example *dream oneself away* and *dream oneself across the sea*. Resultatives and particles are the topic of section 3 below. It has also been argued that some aspectual particles (for example continuative *on*) restrict the argument structure. Examples and references are given in section 3.

For thorough discussion of particles and argument structure, see Stiebels (1996), McIntyre (2003, 2004), and Cappelle (2005, chapter 7).

2.5 Theoretical analyses

Numerous theoretical analyses have been proposed for the morpho-syntax of Germanic particles but the field has not yet reached a consensus; see Larsen (2014) for a thorough and recent review of different theoretical approaches to particles and particle verbs. This might be because a unified analysis is not correct, even though a unified analysis would seem intuitively desirable given the diachronic relatedness and synchronic similarity of particles across the Germanic languages.

One major point of disagreement is whether verbs and particles form *complex predicates* or whether particles and the direct objects form *small clauses* (for a good overview of this debate, see Blom 2005). The syntactic arguments for each view tend to rely on assumptions about the relationship between syntax and semantics. Scholars who adopt frameworks that assume a direct and universal connection between specific syntactic configurations and semantic interpretation will of course reach different conclusions than scholars who assume that the syntax-semantics mapping is more flexible. The fact that particles do not correspond to a single semantic role complicates the matter. Germanic particles roughly divide into three semantic classes: They can be interpreted as spatial locations or directionality markers as in (23) or as aspectual markers as in (24), or else their use is idiomatic (25):

- (23) a. Carla took out the food.
 - b. Barbara put down her books.
- (24) a. Susie walked on.
 - b. Mark wiped up the crumbs.
- (25) a. Mona gave in.
 - b. Sam threw up.

Especially the locative use (as in (23)) has led to the small clause analysis mentioned above, whereas the aspectual and idiomatic uses may seem more compatible with a complex predicate analysis. Representative examples of each type of analysis are den Dikken (1995) for a small clause analysis and Blom (2005) for a complex predicate analysis.

Several researchers have argued that particles can be part of lexical compounds or fully projecting words, but also something in between, namely non-projecting words (Toivonen 2001, 2003, Neeleman 2002, Elenbaas 2007, Larsen 2014). That is, particles can occur in the following distinct morphosyntactic guises across and also within languages (note that the word order may differ as particles can also precede the verb):

$$\begin{array}{ccccccc} (26) & V^0 & V^0 & VP \\ & & \\ & & \\ & verb-prt & V^0 & Prt & V & PP \end{array}$$

Allowing for the possibility that particles can be bound morphemes, non-projecting words or fully projecting words explains some of the diversity and seemingly incompatible characteristics described in the literature. For example, Toivonen (2003) argues that the fact that pre-object particles cannot be modified while post-object particles can is due to their distinct phrase-structural realization: post-object particles project full phrases, whereas pre-object particles do not.

3 Resultatives

The Germanic languages display an array of different resultative constructions; see Goldberg and Jackendoff (2004), Beavers (2012) and Christie (2015) for overviews of resultatives in English. A typical English example is *she paints the door black*, and similar examples from German, Dutch and Swedish are given in (27–29):

(27)	Sie streicht die Tür schwarz. she paints the door black 'She paints the door black.'	(German; Müller 2002)
(28)	dat Jan de stok in stukken breekt that J. the stick in pieces breaks 'that Jan breaks the stick into pieces'	(Dutch; Neeleman and Weerman 1993)
(29)	Jag kokar morötterna mjuka. I boil carrots.the soft 'I boil the carrots soft.'	(Swedish)

There are also plain intransitive resultatives (30), as well as resultatives with fake objects (31) and fake object reflexives (32)²

- (30) The cup shattered into pieces.
- (31) Joe danced his shoes to shreds.
- (32) I sang myself into a finer state of mind.

Verb-particle constructions and resultative constructions share certain properties in common and are often compared in the literature (e.g., Neeleman and Weerman 1993, Svenonius 1996, Lüdeling 2001, Zeller 2001, Müller 2002, Larsen 2014). One striking similarity is that particles can be secondary predicates that arguably denote a result: *he kicked the ball away* roughly means 'he kicked the ball and as a

²These are attested examples found on the internet with simple Google searches.

result, the ball was away'. It is somewhat controversial whether locational endpoints count as true results, and by extension, it is controversial whether examples such as (33–34) with locational endpoints count as resultatives:

- (33) Sam kicked the ball into the net.
- (34) Tim fell down.

If locational examples of this type are included in the class of resultatives, then the parallel between resultatives and verb-particle constructions is very clear: compare *Sue drove the truck back/home* to *Sue drove the truck to her house*. The parallel is also clear in property results, especially if we accept that there are adjectival particles (see section 2.3 above): *Yvonne broke open the coconut* is a straightforward example of a resultative construction.

Resultatives are generally assumed to be telic (but see Goldberg and Jackendoff 2004 for discussion). Setting aside aspectual particles and idiomatic particle verbs, it seems that verb-particle combinations are telic as well. Adverbs or prepositions that denote a path and are inherently incompatible with an endpoint interpretation do not function as particles, as evidenced by the fact that they cannot appear in the pre-object particle position:³

- (35) a. Marly rolled the ball in/inwards.
 - b. Marly rolled in/*inwards the ball.
- (36) a. They pushed the agenda further.
 - b. *They pushed further the agenda.

Words like *inwards, downwards, outwards* and *further* do not denote endpoints and they are dispreferred in the pre-object position characteristic for particles in English. (Although they can, of course, appear before the object if the object has undergone heavy-NP shift.)

The following examples indicate that the same generalization holds for Swedish:

- (37) a. Malin sparkade fram/upp bollen.M. kicked forth/up ball.the 'Malin kicked out/up the ball.'
 - b. *Malin sparkade bollen fram/upp.
- (38) a. Malin sparkade bollen framåt/uppåt.
 M. kicked ball.the forwards
 'Malin kicked the ball forwards/upwards.'
 - b. *Malin sparkade framåt/uppåt bollen.

The words *fram* and *upp* can denote an endpoint and must occur in the typical Swedish particle position before the object. The words *framåt* and *uppåt*, on the other hand, denote a direction or a path without an endpoint and are not acceptable in the particle position. The absence of atelic directional particles is explained if we assume that particles necessarily denote results, and results are telic.

Particles also pattern with resultatives in that they obey the direct object restriction (DOR; Simpson 1983, Levin and Rappaport Hovav 1995). The DOR states that resultative predicates are predicated of the object. It has been suggested that it follows from the DOR that intransitive resultatives are restricted

³Zwarts (2015, This Volume) discusses different nuances of locational meanings of prepositions, particles and adverbs.

to unaccusatives, where the result is predicated of an object-like subject (30). In order to add a secondary resultative predicate to an unergative intransitive, a fake reflexive must be added, as in *sing oneself hoarse* or *laugh oneself to death* (see also (32)).

Like resultative predicates, particles follow the DOR and must be predicated of the object. In *Sarah threw out the garbage*, the garbage (not Sarah) is *out* as a result, and in *Timothy took down the bag*, the bag (not Timothy) is *down* as a result. Remarkably, particles (or words that can normally function as particles) cannot appear in the pre-object particle position if they are not predicated of the object (Toivonen 1999, 2001):⁴

- (39) a. Sarah took the path back.
 - b. #Sarah took back the path.
- (40) a. They took the elevator down.
 - b. #They took down the elevator.
- (41) a. Caudia followed the stranger home.
 - b. *Caudia followed home the stranger.

The generalization that pre-object particles must be predicated of the object appears to hold in Swedish, Norwegian, and Icelandic as well. If the ability to occur before the object in English, Swedish, Icelandic, and Norwegian is taken to be a crucial criterion for particlehood, then the words *back, down* and *home* are not functioning as true particles in (39–41). They are instead fully projecting prepositions (or perhaps adverbs) with an adverbial use. It seems especially reasonable that the pre-object position should be considered a criterion for particlehood in Swedish, where post-object particles are generally barred:

- (42) a. Sixten plockade upp plånboken. S. picked up wallet.the 'Sixten picked up the wallet.'
 - b. *Sixten plockade plånboken upp.

In (42a), *upp* is a regular resultative particle, predicated of the object. The particle in (42a) occurs in the regular particle position, before the object; it cannot follow the object (42b). However, in example (43a), where *upp* is predicated of the subject (*Ramona*), the particle must follow the object:

- (43) a. Ramona tog hissen upp. R. took elevator.the up. 'Ramona took the elevator up.'
 - b. *Ramona tog upp hissen.

How is the fact that true, pre-object particles must be predicated of the object relevant to the question of whether verb-particle constructions are resultatives? If we adopt the DOR (resultatives are object-predicated), and we assume that the ability to appear before the object is a criterion for particlehood (that is, the words synonymous to particles in (39–41) and (43) are not in fact true particles), then the generalization that pre-object particles are object-predicated can be taken as evidence that predicative verb-particle constructions are resultatives. Results must be predicated of objects and pre-object particles must be predicated of objects: this follows if (pre-object) particles denote results.

⁴The examples in (39b) and (40b) are grammatical, but have a readings which are not intended here.

However, does the DOR hold over all (and only) resultatives? The examples in (39–41) are similar to examples without particles such as those in (44–45), which are argued in Verspoor (1997) and Wechsler (1997) to be counterexamples to the DOR:

- (44) John swam laps to exhaustion.
- (45) The wise men followed the star out of Bethlehem.

Examples like (44–45) indicate that resultative predicates can be predicated of subjects: *John* and *the wise men* end up exhausted and out of Bethlehem, *laps* and *the star* do not. If it is indeed generally possible for resultative predicates to be predicated of subjects, then (39–41) are orthogonal to the question of whether true particles (that is, particles that can precede the object) are resultatives. They may or may not be, and there might be some independent constraint that requires that pre-object particles be predicated of the object, regardless of whether they are resultatives or not.

A clue that may help answer this question comes from aspectual particles such as *up*, *on*, *along*, and *over*:

- (46) John tidied up the hotel room.
- (47) Tonya drove on.
- (48) Things moved along.
- (49) She looked the paper over.

Are these particles predicated of anything at all, or do they simply add aspectual information to the verb (telicity/completion in the case of *up*, atelicity/continuation in the case of *on*)? These elements are not clear predicates and therefore should perhaps not in principle be predicated of anything at all. However, in Toivonen (2006), I suggest that a peculiar argument structure constraint imposed by continuative *on* can be explained if it is assumed that a version of the DOR applies. The constraint that has been proposed is that continuative *on* is restricted to intransitive verbs (Fraser 1976, McIntyre 2001, 2004, Jackendoff 2002). Consider (50–52):

- (50) Norah ate on.
- (51) Norah ate burgers.
- (52) *Norah ate burgers on.

Note that the example with a direct object and *on* is not allowed (52). A sentence like (51) is atelic and seems to be perfectly compatible with a continuative action (as in *Norah kept on eating burgers*), but *on* is not compatible with *Norah ate burgers* (52). This is consistent with the claim that continuative *on* is restricted to intransitive verbs. However, in a limited set of cases the particle *on* can, in fact, co-occur with direct objects:⁵

(53) They encouraged the contestants on.

⁵Example (54) is lifted from the Wikipedia article on Tyrtaeus, and example (55) is also an attested example, retrieved in May 2017 from https://www.pressreader.com/south-africa/daily-news/20160216/281509340243420.

- (54) ...by means of his songs he urged on the Lacedaemonians in their war with the Messenians...
- (55) Relief pilots have arrived in Harare to fly the plane on to its destination.

It seems that objects are allowed only when *on* can be predicated of the object. For example, in (53) *the contestants* are supposed to continue. In contrast, no continuation is implied for *burgers* in (51–52). It thus seems that continuative *on* is predicated of the lowest available argument function: the object if there is one, otherwise the subject. Examples such as **Tom played guitar on* is ungrammatical because an interpretation where the guitar continues is not available. Parallel examples occur in Swedish with the Swedish equivalent pa (Toivonen 2006). It is worth noting that the comparable Swedish particle pa occurs in its characteristic pre-object position.

It is unclear whether this generalization holds for other aspectual particles as well. Consider completive *up*, for example: there does not seem to be any obvious difference in predication between intransitive *Sam tidied up* and transitive *Sam tidied up the room*. I will not discuss other aspectual particles further here, but see section 2.4 and references cited there for more examples of how particles influence argument structure.

Assuming that it is correct that *on* must be predicated of the lowest available grammatical function, how is this relevant for the question of whether particles are resultative or not? Continuative *on* is not a resultative, yet it seems to be covered by the same predication criteria as resultatives: the DOR restricts the distribution of both resultatives and *on*. The fact that the DOR holds over locational particles that precede the object therefore does not constitute evidence that those particles are resultatives. The predication requirements should be considered separately from the question of whether locational particles are results.

Before concluding this discussion, let us consider one further generalization from Dutch. Bennis (1991) points out that Dutch particles can follow the modal in cases where the locative particle denotes a location that is arrived as a result of the action denoted by the verb (56):

- (56) a. dat Jan niet boven wil komen that J. not upstairs wants come 'that Jan doesn't want to come upstairs'
 - b. dat Jan niet wil boven komen

The same particle *boven* cannot follow the modal if the verb that the particle modifies is stative and the particle denotes a stative location (57):

- (57) a. dat Jan niet boven wil wonen that J. not upstairs wants live 'that Jan doesn't want to live upstairs'
 - b. *dat Jan niet wil boven wonen

These Dutch examples are similar to the examples we saw above (e.g., (35)) in that certain positions in the clause are reserved for telic, resultative particles. However, these examples differ from (39–41) in that they are intransitive, which makes it difficult to intuit what they are predicated over. I will leave it an open question whether the relevant point is telicity/resultativity (*boven* is a telic result in (56) but not in (57)), or secondary predication (*boven* is a secondary predicate predicated of the subject in (56), and not a secondary predicate but an adverbial modifier in (57)).

To summarize this section, verb-particle constructions are interestingly similar to resultatives in several ways, which has led many researchers to posit that verb-particles *are* resultatives. See, for example, Bolinger (1971), Svenonius (1994), but see also Neeleman and Weerman (1993), Cappelle (2005), who note a number of differences between the constructions. This section has pointed to some relevant data points concerning telicity, the DOR and aspect-marking particles. The connection between the resultatives and particle verbs is tight, interesting, and deserving of further investigation.

4 Directed motion constructions

In addition to the resultatives discussed in the previous section, Germanic languages have constructions that resemble resultatives but express directed motion towards a goal instead of the achievement of a result.⁶ All Germanic languages seem to have a way of expressing directed motion with a semi-fixed combination of a verb, some kind of reflexive element, and a prepositional phrase, even though the verb itself is not a motion verb. In English, Icelandic, Dutch, and German, the directed motion construction can contain a word equivalent to *way*:

(58)	Lilah laughed her way across the room.
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(59)	Það var eittvaðað éta sérleiðinn ieyrað áthere was something to eat REFL.DAT way.ACC in to earon'Something was eating its way into my ear.'()	mér. me Icelandic; Barðdal et al. 2011)
(60)	Der Regenwurm frisst sich seinen Weg durch das Erdreich. the earthworm eats REFL its way through the soil 'The earthworm eats its way through the ground.'	(German; Ludwig 2005)
(61)	Zij worstelde zich een weg door de menigte. she struggled REFL a way through the crowd 'She struggled her way through the crowd.'	(Dutch; van Egmond 2009)

German examples such as (60) are unusual, as are the equivalent examples in Swedish and Norwegian, which also display occasional examples of expressions denoting directed motion with a word like $v\ddot{a}g$, roughly equivalent to 'way' (or 'road'), but these expressions do not appear to be productive or particularly common. Instead, Swedish, Norwegian, and German make more frequent use of a construction with a slightly different format, a construction that looks very similar to a fake reflexive resultative (62–64). Dutch also exhibits this type of construction (65):

(62)	Mamma Anne Grete trente seg gjennom svangerskap mummy A. G. exercised SELF through pregnancy	bet.
	'Mummy Anne Grete exercised her way through the pregn	hancy.' (Norwegian; Seland 2001)
(63)	Storebror Hugo sparkar sig fram över asfalten. big.brother H. kicks SELF forth across asphalt 'Big brother Hugo kicks his way across the asphalt.'	(Swedish)
(64)	Die Helfer wühlen sich durch den Schutt. the helpers dig themselves through the rubble 'The helpers dig their way through the rubble.'	(German; Perek and Hilpert 2014)

⁶I use the term *construction* in a pre-theoretical sense in this paper. See Asudeh et al. (2013) for a proposal of how to analyze constructions in a lexicalist framework.

(65) Hugo zong zich in de finale.H. sang REFL in the final 'Hugo sang his way into the final.'

(Dutch; Marie-Elaine Van Egmond, p.c.)

These brief examples of course do not do justice to all the intricate details involved in the syntax and semantics of these constructions. For further examples and discussion, see van Egmond (2006, 2009), Verhagen (2003, 2007) for Dutch; Oya (1999), Ludwig (2005), Perek and Hilpert (2014) for German; Toivonen (2002), Lyngfelt (2007) for Swedish; Barðdal et al. 2011 for Icelandic; Seland (2001) for Norwegian; and Asudeh et al. (2013), Pedersen (2013) for typological overviews.

The motion constructions, especially the ones without *way* in (62–65) are quite similar to fake reflexive resultatives such as (32) above, but they differ in several ways: 1) Resultatives emphasize the end result and motion constructions emphasize motion along a path. 2) Fake object resultatives are telic and can take adjectival results, whereas directed motion constructions are not necessarily telic, as illustrated with the atelic example *John elbowed his way towards the exit*. 3) Directed motion constructions take PPs and not APs: **Sam drank his way silly*. Resultatives typically take APs, even though there are also examples with PP results: *drink oneself into a drunken stupor*. 4) The AP/PP in resultatives is typically a property (as in *hammer the metal flat*), and the PP in directed motion constructions typically expresses a path or location. However, there are examples where the result in a fake object resultative is a location (66), and there are also examples with where the PP in a motion construction is a (figurative) path or goal that actually expresses a property (67):

- (66) Kim danced himself across the room.
- (67) Kim sang his way into happiness.

Proto-typical motion constructions and resultatives are easy to tell apart, but there are many examples that are very similar in meaning. Some attested examples are given in (68–69):

- (68) a. A mouse chewed its way into our room.
 - b. A rat has chewed itself into the home.
- (69) a. Two five-year-old boys use spades to dig their way out of their kindergarten and set off on a mission to buy a Jaguar sports car.
 - b. Dantes and Priest hatched a plan to dig themselves out of prison.

It is difficult to pinpoint the exact difference in meaning between the (a) and (b) examples in (68–69). I will set aside here the interesting question of the meaning difference between the constructions, but see Christie (2011) and Mondorf (2011) for discussion. See also van Egmond (2009) for a discussion of the equivalent Dutch constructions.

As described in the previous section, Germanic particles interact with resultatives in an interesting way: a particle in pre-object position necessarily denotes an object-predicated result. It appears that the opposite holds for motion constructions, at least for English and Swedish: even if the path/goal is expressed with a particle (or particle-like word) like *out*, *up*, *in*, or *back*, that word cannot appear in the typical pre-object position. The following examples illustrate that particles can follow but not precede *one's way* in English:

- (70) a. Sara danced her way out.
 - b. *Sara danced out her way.

- (71) a. Clara worked her way back.
 - b. *Clara worked back her way.

The Swedish directed motion construction does not include a word equivalent to the English *way* but instead just a plain reflexive (see example (63)). In Swedish, fake reflexive resultatives are therefore very difficult to distinguish from directed motion constructions. However, when the examples include particles, the two constructions differ in word order: resultatives take pre-object particles and directed motion constructions take post-object particles. This is illustrated with the resultative examples in (72) and the directed motion examples in (73). The particles are boldfaced:

- (72) a. Filip stressade sönder sig.F. stressed broken REFLLit. 'Filip stressed himself broken.'
 - b. De målade **in** sig i ett hörn. they painted in REFL in corner 'They painted themselves into a corner.'
- (73) a. Margareta jobbade sig upp.
 M. worked REFL up 'Margareta worked her way up.'
 - b. De målade sig **in** i ett hörn. they painted REFL in in corner 'They painted their way into a corner.'

The examples in (70–73) suggest that regular, pre-object particles are not allowed in Germanic motion constructions in Swedish and English. As far as I am aware, the question of whether particles are restricted in directed motion constructions in other Germanic languages has not yet been carefully investigated.

5 Concluding remarks

The Germanic verbal particles provide many interesting puzzles for linguists. Even the basic issue of categorizing particles as a coherent class is a struggle. Nouns are recognized by their ability to take number and definiteness marking, subjects agree with verbs and appear in a specific phrase structural position, etc. Verbal particles are harder to pin down, especially if we attempt to determine defining characteristics that hold across the Germanic languages. The particles do not take inflectional morphology. It is difficult to pinpoint their phrase structural position, and they do not appear in a set position even within a given language. Moreover, as pointed out in sections 1 and 2, particles have long puzzled linguists with their mixed morphological and syntactic properties.

Despite all this, "verbal particles" does mean something to linguists working on Germanic. Using the term rarely leads to confusion, and for a scholar versed in the structure of one of the Germanic languages, it is not difficult to identify examples of particles in another. Why should it then be so difficult to state their defining characteristics? And what exactly is it that enables researchers to distinguish particles from other words/morphemes? Perhaps there is no uniform particle category that shares certain characteristics in common across the Germanic languages. Perhaps the particles are connected across the languages merely by their diachronic affiliation and not by any synchronically real formal similarity. Particles do seem cross-linguistically similar in that their ability to take modifiers or complements is heavily restricted. However, this is also true for sentential adverbs. Particles do not take inflection, but neither do prepositions, conjunctions, and complementizers in many languages. One interesting feature that particles do seem to have in common across the Germanic languages is their ability to alter the argument structure of the verb. Compare, for example, the grammatical *look up a word* to the ungrammatical **look a word*. However, particles are not unique in this regard, as resultatives can also introduce "fake objects" (section 3).

The very fact that it is difficult to state defining properties that cover all particles and exclude other words and phrases means that they are a worthwhile topic of study. Identifying defining characteristics and distinguishing features in order to delimit classes and subclasses of linguistic categories is an important part of what linguists do. Particles are therefore of interest precisely because they are difficult to characterize. And if we decide that it is in fact not possible to define and delimit a coherent class of verbal particles, then other important questions arise: how are the particle types different? How did the classes of particles drift apart diachronically?

In these pages, I have described the main properties of Germanic particles. I have also pointed to some of the theoretical controversies in the literature, as well as some of the reasons why a unified analysis has proved elusive. I have also connected particles to two Germanic constructions with which they interact in interesting ways: resultatives and directed motion ('way') constructions. I would like to end by suggesting that explorations of the use of particles in various constructions might lead to interesting novel discoveries about verbal particles, various interesting constructions (such as those mentioned here), and Germanic syntax more generally.

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