

The Particularity of Particles, or Why They Are Not Just ‘Intransitive Prepositions’

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1. Particles as different from prepositions

Some words in English can appear in constructions which superficially look identical but which, on closer examination, turn out to be radically different. Consider the following pair of sentences:

- (1) a. Jill ran up a big hill.
b. Jill ran up a big bill.

In (1a), *up* is a preposition indicating the direction of Jill’s motion. The noun phrase *a big hill* is called the ‘prepositional object’ (or ‘object of the preposition’), and together with the preposition *up* it forms a constituent called a ‘preposition(al) phrase’ (PP). In (1b), *up* might at first sight be analyzed in exactly the same way. However, *up* does not form a constituent with the following NP in this sentence. Rather, *up* combines with *run* to form an idiomatic combination with the meaning ‘accrue (e.g., a debt or a bill)’. *Up* is called an ‘adverbial particle’, or simply a ‘particle’ here: an accented item that does not take an object and that usually has a fairly close bond with the verb, whence such terms as ‘phrasal verb’, ‘particle verb’, ‘verb-particle combination’, ‘separable complex verb’, etc. There exist a number of standard and straightforward tests, illustrated in (2) and (3), to demonstrate that the underlying structures of (1a) and (1b) are not the same (see, e.g., among many others, Fraser 1976: 1–3; Lindner 1981: 5–20; Radford 1988: 90–101; Wollmann 1996: 42–59; Haegeman and Guéron 1999: 253–254):¹

- (2)
- a. Jill ran {[up a big hill] / *a big hill up}. (P precedes NP)
 - b. That big hill, Jill ran {[up it] / *it up}. (P precedes unstressed pronoun)
 - c. It was [up a big hill] that Jill ran. (cleft)
 - d. [Up which hill] did Jill run? (Wh-movement with pied piping)
 - e. This is the hill [up which] Jill ran. (relativization with pied piping)
 - f. [Up a big hill] ran Jill. (preposing)
 - g. Jill ran [úp a hill] and Jack ran [dówn a hill]. (P can be replaced by its antonym)
 - h. Did Jill run [up a big hill] or [up a small hill]? (repetition allowed in coordination)
 - i. Did Jill run [up a big hill]? – No, [up a small hill]. (P + NP can be used as sentence fragment)
 - j. Jill ran [up a big hill], and Jack, [up a small hill]. (verb gapping)
 - k. Jill ran—and Jack merely walked—[up a hill]. (P + NP can function as a shared constituent)
 - l. Jill ran quickly [up a big hill]. (manner adverb can be inserted)
 - m. Jill ran [right up a big hill]. (*right* can precede P)
 - n. Jill ran [up (the hill)]. (NP ellipsis)
 - o. This is not the hill that Jill RAN up. (primary stress can be on the verb)
 - p. *A big hill was run up by Jill. (no passive)
 - q. *I witnessed Jill's running up of a big hill. (no action nominalization with *of*)
 - r. *Jill ran up a big hill, and Will, a small hill. (verb and P cannot be gapped together)
- (3)
- a. Jill ran {up a big bill / a big bill up}. (NP can usually either follow or precede Prt)²
 - b. That big bill, Jill ran {*[up it] / it up}. (unstressed pronoun precedes Prt)
 - c. *It was [up a big bill] that Jill ran. (no cleft)
 - d. *[Up which bill] did Jill run? (no Wh-movement with pied piping)
 - e. *This is the bill [up which] Jill ran. (no relativization with pied piping)
 - f. *Up a big bill ran Jill. (no preposing)
 - g. *Jill ran [úp a bill] and Jack ran [dówn a bill]. (Prt cannot in

- general be replaced by its antonym)
- h. *Did Jill run [up a big bill] or [up a small bill]? (repetition not allowed in coordination)
 - i. Did Jill run [up a big bill]? – *No, [up a small bill]. (Prt + NP cannot function as sentence fragment)
 - j. *Jill ran [up a big bill], and Jack, [up a small bill]. (no verb gapping)
 - k. *Jill ran – and Will coughed – [up a bill]. (Prt + NP cannot function as a shared constituent)
 - l. *Jill ran quickly [up a big bill]. (manner adverb cannot be inserted)
 - m. *Jill ran [right up a big bill]. (*right* cannot precede Prt)
 - n. Jill ran [up *(a big bill)]. (no NP ellipsis)
 - o. *This is not the bill that Jill RAN up. (primary stress cannot be on the verb)
 - p. A big bill was run up by Jill. (passive)
 - q. I witnessed Jill's running up of a big bill. (action nominalization with *of*)
 - r. Jill ran up a big bill, and Will, a small bill. (verb and Prt can be gapped together)

Up is not the only item that can be used either as a preposition or as a particle with one and the same verb. Since there are many items that alternate between the use as a preposition and the use as a particle, homonymous sequences like *run up* are not so hard to come by. Huddleston (2002: 282) gives the following examples:

- (4) a. He shouted [down the phone].
b. He [shouted down] his opponent. ('silenced him by shouting')
- (5) a. They turned [in the wrong direction].
b. They [turned in] the fugitives. ('took them to the police')
- (6) a. She ran [off the road].
b. She [ran off] another copy. ('produced one on a machine')
- (7) a. He got [over his disappointment] quickly.
b. He [got over] his message clearly. ('made it understood')

Similar pairs are *turn [on one leg] – [turn on] the audience*, (of someone's head) *stick [out the window] – [stick out] all the exams* ('endure'), or *talk [through one's nose] – [talk through] the plan*.

Note that a preposition does not always have to be directional, nor a particle idiomatic, but homonymic pairs involving the same verb are hard, if not impossible, to find in that case.³ Here is a pair with different verbs:

- (8) a. Jill decided [on her wedding dress].
 b. Jill [tried on] her wedding dress.

In (8a), the preposition *on* is non-directional and forms a fixed combination with the verb—a so-called 'prepositional verb', like *approve of NP*, *ask for NP*, *believe in NP*, *complain about NP*, *consist of NP*, *look after NP*, *object to NP*, *wait for NP*, etc. In (8b), *on* is a literal particle and is part of a fully transparent verb-particle combination, just like *out* in *pull out the plug* or *up* in *toss up a ball*. Readers can make out for themselves that the application of the tests in (2) and (3) to the pair of sentences in (8) will reveal the same contrasts, overall. A few tests will give different results, namely NP ellipsis, antonym substitution, *right* insertion, and the passivization test. Fixed prepositions, especially, behave a bit differently from most directional prepositions: *Jill decided on* is not comprehensible without an NP complement; *Jill decided off her wedding dress* is not acceptable; nor is *Jill decided right on her wedding dress*; conversely, the passive sentence *A wedding dress hasn't been decided on yet* is perfectly fine. Literal particles, on the other hand, can often be replaced by an antonym, e.g., *She pulled {on / off} her dress* or *She pulled {up / down} her dress*. Leaving aside such complications, the majority of the tests given above will not fail to tell particles and prepositions apart. It seems justified, therefore, to treat particles as a category of words distinct from prepositions.

2. Particles as 'intransitive' prepositions

The underlying structural difference between V + P + NP and V + Prt + NP is a classic textbook example of how syntactic tests can give decisive answers to questions of constituency and category membership. In recent linguistics, however, we often find statements to the effect that particles and prepositions are similar, or even identical. Langacker (1987: 243), for example, states that "particles are not distinct from the class of prepositions: they are simply

prepositions employed in grammatical constructions where the landmark happens not to be elaborated, as it otherwise normally is.”⁴ Langacker’s is just one paraphrase of the now quite common contention that particles are in fact *intransitive prepositions*. That this claim is no longer subversive or intentionally witty but fully canonized is confirmed by the fact that it has found its way in *The Cambridge Grammar of the English Language* (Huddleston and Pullum 2002: 272, 612–613).

Of course, nothing can be brought to bear against this claim insofar as it is taken to mean simply that particles do not take NP complements. That is precisely what has been made clear in the previous section, namely that *a big bill* is not the object of *up* in (1b). Also, the rationale for saying that particles are prepositional in nature is clear enough. The fact that so many particles double as true prepositions ought to alert us to a violation of the principle of Occam’s razor, in other words, to an unnecessary multiplication of grammatical entities (see Aarts 2001: 177–181). Even if the number of particles that can also function as prepositions is sometimes exaggerated—*ahead, apart, aside, away, back, home, and together* cannot—this does not in principle invalidate the claim that particles are prepositional. After all, in the case of verbs, from which the notion of (in)transitivity is borrowed, we are happy to reckon all purely intransitive verbs (and not just the relatively small group of pseudo-transitive verbs like *eat* and *sing*) to the class of verbs in general, so why then should we not also count *back* and *together* and similar invariably intransitive words as prepositions? The upshot of allowing prepositions to be intransitive is that PPs no longer have an exceptional phrase structure compared with the other major phrase types: while NPs, VPs, AdjPs, and AdvPs can all be realized as heads only, PPs were anomalous in requiring a complement to the head. This is no longer the case now (cf. Cowper 1992: 22; Lee 1999: 136).

The belief that adverbial particles are prepositions without an object has actually been around for a long time. It was (and still is) prevalent in transformational generative grammar and its subsequent versions, and precursors can be found in structural and traditional grammar—it can even be traced back to antiquity (see Declerck 1976: 14, fn. 1). References to the similarity between prepositions and verbs are legion. For example, Jespersen (1924: 88–89), commenting on pairs like *Put your cap on* and *Put your cap on your head*, and *He was in* and *He was in the house*, wrote the following:

On and *in* in the former sentences are termed adverbs [I would call them ‘particles’ – B.C.], and in the latter prepositions, and these are reckoned to be

different parts of speech. Would it not be more natural to include them in one class and to say that *on* and *in* are sometimes complete in themselves and sometimes followed by a complement (or object)? Take other examples: “he climbs up” and “he climbs up a tree,” “he falls down” and “he falls down the steps” (cf. “he ascends, or descends” with or without the complement “the steps” expressed) ... The close correspondence between the object of a transitive verb and that of a “preposition” is seen in those cases in which a preposition is nothing but a verb form in a special use, as for example *concerning* (G. *betreffend*) and *past* in “he walked past the door at half-past one,” which is simply the participle *passed* written in a different way; in “he walked past” it has no complement. (Jespersen 1924: 88–89)⁵

Let us very briefly evaluate the claim that particles are intransitive prepositions. If we agree that the transitivity/intransitivity distinction can be usefully applied outside the realm of verbs, particles can indeed be called ‘intransitive’, in view of the fact that particles do not have a complement. To the extent that many particles are homonymous with prepositions, there is not much harm in calling them ‘intransitive prepositions’. Still, there are two complications that ought to be mentioned.

First, there are a number of prepositions, like *inside* or *under*, which can be used intransitively but which cannot easily occur in the position where we typically find particles, i.e., between the verb and its object (e.g., **They pushed inside the piano*; **I ducked under my head*). If we stick to the principle that all particles should be able to occur in post-verb–pre-object position—this is, after all, how the category ‘particle’ is standardly defined—then this means that not all intransitive prepositions are particles. In other words, the claim that all particles are intransitive prepositions cannot be reversed. (Alternatively, one could say that all prepositions used intransitively are particles but that some of them are not able to fill the position typical of particles. In that case, however, one would allow for particles that do not even pass the definitional criterion of ‘particle’.)

Secondly, the claim that particles are intransitive prepositions also raises a problem for some particle-like elements that are not prepositional, such as *open* in *push open the door*, *short* in *cut short the speech*, or *go* in *let go the rope*, all of which can appear in the particle position. A way out is to say that the post-verb–pre-object position is usually *but not exclusively* filled by particles, and that elements in this position are particles only if they are prepositional, not adjectival or anything else. But then we have to exclude *home* (as in *take home this video*) on the grounds that this word is not prepositional but nominal in nature. Such an exclusion would be a pity, since

home is like other particles not just in having the same positional characteristics but also in expressing directionality. Accordingly, we will leave *home* in, even if it is a bit awkward to look upon this item as a preposition. The requirement that only *prepositional* items able to occur in post-verb–pre-object position can be called particles is also problematic for items like *ahead*, *apart*, etc. These are particles by all standard criteria, even though, as we mentioned above, they cannot directly govern an NP, and hence cannot be independently attested as playing a true prepositional role. Saying that these items are prepositional *because* they are particles is of course circular reasoning. Sure, they are not verbs, they are not nouns, and since they resist being used attributively (e.g., **the apart couple*), they make poor adjectives. Given that they can occupy the particle position, they are not ordinary adverbs, either. But the fact that they can occur in this position does not in itself legitimately qualify them as prepositions. All we can do is *accept* that items like *ahead*, *apart*, etc., too, are prepositions, thereby extending the class of prepositions from those that always take an NP (e.g., *from*, *into*), via those that sometimes take an NP and sometimes do not (e.g., *down*, *through*), to those that never take an NP (e.g., *together*), unless via an ancillary preposition like *of* or *from* (e.g., *ahead*, *away*). Of course, this variability in transitivity actually makes prepositions completely parallel to verbs, which can also be transitive, pseudo-transitive or intransitive, or which have to take a preposition before an NP object (e.g., *consist*).

So, overall, the claim that particles are intransitive prepositions is a correct rendering of the fact that particles are not followed by an object they govern themselves, but some intransitive prepositions do not behave like standard particles and, conversely, some elements qualifying as particles are not prepositions unless by stipulation. In the following section, I will provide a more in-depth investigation of three views that are closely linked to the particle-as-intransitive-preposition view.

3. Three versions of the claim that particles do not form a class distinct from prepositions

Often, the claim that particles are (intransitive) prepositions is used in a more specific sense. In what follows, I will evaluate three different interpretations, or related claims, that can be distinguished in the linguistic literature:

1. Particles and full PPs behave syntactically alike.

2. Particles are reduced PPs.
3. Particles have the same meaning as their related prepositions.

All three claims are made with reference to directional particles and directional PPs. The claim that particles behave like intransitive prepositions can only be put to the test with directional particles, since only these can be compared with full PPs in minimally differing pairs of sentences. The second claim only applies to directional particles as well, since we cannot give a full PP as alternative (let alone as underlying form) for idiomatic or aspectual particles. For example, from what full PP would *up* in *wrap something up* be reduced? The third claim, about the semantic identity between particles and homonymic prepositions, in fact implies that the use of a particle only differs from the use of a formally related full PP in that the reference object (the object of the preposition) is contextually available and therefore left unmentioned. This claim, too, is restricted to particles and PPs with a directional meaning: no one would seriously claim that the particle *about* is semantically identical to the preposition *about* as used in *John can't stop talking about her*—if it were, we should be able to drop *her*, since a pronoun refers to a contextually available entity.

However, if we are to believe Declerck (1976: 9), who contends that there are no significant syntactic differences between directional verb-particle combinations and idiomatic ones, it should be possible to extend the claim that directional particles are prepositions to particles in general. As a matter of fact, Emonds (1972: 554) seems to make his claim that “post-verbal particles are prepositions” as general as can be, since he adds the following parenthetical comment: “We have also seen that idiomatic post-verbal particles and other idiomatic prepositional phrases do not differ in syntactic behavior.” In recent work as well (e.g., Dehé et al. 2002: *passim*), particles are generally accepted to be intransitive prepositions, no matter whether one has in mind directional particles or not.

My strategy for the remainder of this text is based on the following logic: if it can be shown that even *directional* particles have different properties (leaving aside their lack of an object) from full directional PPs, then this must mean that particles *in general* cannot simply be analyzed as one-word prepositional phrases, i.e. as “intransitive prepositions”. In that case, we will have to conclude that particles form a category *sui generis*.

4. On the claim that particles and full PPs behave syntactically alike

The best-founded rejections of the view that particles form a category of their own are perhaps those by Emonds (1972) and Jackendoff (1973). They pointed out that full directional PPs and directional particles have the same syntactic distribution. This was meant as a justification for the claim that particles are a sort of PPs, namely PPs whose head is not followed by a complement NP. As I have already said, the claim that particles are intransitive prepositions is acceptable enough in itself—what is at stake here is a justifying claim which has come to lead a life of its own.

To a large extent, it is true that full directional PPs and directional particles (i.e., intransitive prepositions) are syntactically alike, in the sense that either of them can fill certain syntactic positions. Most notably, any verb that subcategorizes for a directional PP complement (whether it is an obligatory or an optional one) can also combine with a particle instead of that PP:

- (9) a. She {ran / jumped / looked / carried the child / pushed the piano} {into the garden / up the stairs / around the corner}.
 b. She {ran / jumped / looked / carried the child / pushed the piano} {in / up / around / down / back / away}.
- (10) I am alone, Virginia thinks, as the man and woman continue up the hill and she continues down. (Michael Cunningham, *The Hours*. London: Fourth Estate. 1999, p. 167)

Apart from this fact, Emonds and Jackendoff show that full PPs and particles are also similar in that they can be specified by *right*, which in Standard English cannot specify any other category. Lobeck (2000: 194) lists *right* in a set of similar emphatic specifiers, some of which are dialectal.⁶

- (11) a. The heel broke {clean / clear / flat / plumb / right / slap / straight} off my boot.
 b. The heel broke {clean / clear / flat / plumb / right / slap / straight} off.

Jackendoff (1973: 355, 2002a: 71) also mentions words like *completely* and *partway*, which, when modifying a path expression, indicate how much of the path is covered:

- (12) a. She stuck the needle {completely / partway / halfway / a long way / all / all the way} into the cake.
 b. She stuck the needle {completely / partway / halfway / a long way / all / all the way} in.

Fraser (1976: 26) gives the form *partways*, which is a variant not attested in the *OED* (second edition), although it very occasionally occurs. Here are some examples:

- (13) a. The lieutenant picked out his binoculars and climbed partways up the base of a monument.
 (<http://www.crosswinds.net/~nickless/saab/fics/rr/rr15.html>, accessed 4 August 2002)
 b. Fraser didn't answer, and so he turned partways around, and saw that Fraser's color had deepened, high on his cheeks.
 (<http://members.bellatlantic.net/~vze3gwsy/unassuming.html>, accessed 4 August 2002)

Furthermore, both PPs and particles can occur in the so-called locative inversion construction—note, however, that a pronoun subject does not switch its position with the verb in this preposing construction:

- (14) a. Into the hole fled the mouse.
 b. Off the table it rolls!
 c. Up the syntactic tree moves the particle.
- (15) a. Out jumped the frog!
 b. Off you go.
 c. Up she rises.

Finally, particles as well as full PPs can be found in the 'expletive' or 'exclamatory' construction *X with NP!*:

- (16) a. Out the window with this manuscript!
 b. To hell with what they think of her!
 c. Down the hatch with the tequila!
- (17) a. Away with you!

- b. Down with the president!
- c. Out with this Schweinerei!

Emonds (1972: 554) sums up that “the advantages and simplifications ... in subcategorization, in specifying the distribution of *right*, in analyzing the expletive construction mentioned above, and in stating the directional adverb preposing rule justify the claim that post-verbal particles are prepositions.”

The evidence for removing the well-established distinction between directional particles and ordinary directional PPs seems overwhelming. One of the arguments not even mentioned by Emonds or Jackendoff is that particles and PPs can easily be conjoined, which suggests that they must have the same syntactic status:

- (18) a. She swung up and into the saddle of her horse.
- b. She was stood stock still in the middle of the floor, as the crew drifted around her and away.
- (<http://www.luned.co.uk/dark3.htm>, accessed 4 August 2002)

Of course, the occurrence of such combinations follows readily from the fact, mentioned above, that verbs make no distinction between full PPs and particles as their path arguments.

However, if we take a closer look at the syntactic distribution of particles and prepositions, we notice quite a few differences, a survey of which is given in what follows. The last two differences are partly semantic in nature.

1. It is a well-established fact that with transitive verbs, single particles (i.e. particles not preceded by, e.g., *right*) but not normally full PPs can occur left of the direct object:

- (19) a. She carried the logs into the house.
- b. *She carried into the house the logs.
- (19') a. She carried the logs in.
- b. She carried in the logs.

This property is in fact the standard test for particlehood. The ability to be in post-verb–pre-object position is a robust diagnostic for distinguishing particles from other elements, including full PPs. Note again, however, that there are some other words than particles that can

fill the particle position, such as the adjectives *open* (e.g., *throw open the windows*) and *short* (*make short a long story*).

2. It is also a basic fact that particles and full PPs occupy different places with respect to each other. Particles must go first, and PPs have to follow them:

- (20) a. She looked up to the sky.
 b. He walked down towards the picnic ground.
 c. They came on through into the room.

- (20') a. *She looked to the sky up.
 b. *He walked towards the picnic ground down.
 c. *They came {through into the room on / on into the room through / into the room on through}.

It should be observed that it is possible for a particle to be put behind one or more full PPs and appear in front of a following one:

- (21) a. They went [out of the pub] back to the car.
 b. She bled to death [all through that woman's bed sheets] on into the mattress... (Toni Morrison, *Jazz*. London: Picador. 1993, p. 210)
 c. We watched as it circled and then plunged [out of sight] [over the hill] down to the reservoir.
 (<http://www.crabfish.com/features/birds2.htm>, accessed 4 August 2002)

The generalization, then, is that a particle cannot follow a final PP, whereas a PP can follow a final particle.

3. Particles cannot easily be separated from the verb by an *of*-NP in a nominalization construction, whereas PPs can:⁷

- (22) a. The taking of the hostages to the front of the building (was not a clever move).
 b. The pushing of the piano down the stairs (meant the end of their friendship).

- (22') a. ?The taking of the hostages out (was not a clever move).

- b. ?The pushing of the piano down (meant the end of their friendship).
4. Full PPs cannot be contiguous with the verb in a nominalization construction with an *of*-NP, whereas particles can:
- (23) a. *The taking to the front of the building of the hostages (was not a clever move).
 b. *The pushing down the stairs of the piano (meant the end of their friendship).
- (23') a. The taking out of the hostages (was not a clever move).
 b. The pushing down of the piano (meant the end of their friendship).
5. Full PPs do not have to follow the verb (and object, if present) immediately, but it is rather strongly required of particles that they do (Fraser 1976: 47):
- (24) a. I went with my wife to Europe.
 b. They took the hostages one by one to the front of the building.
- (24') a. *I went with my wife back. (cf. I went back with my wife.)
 b. *They took the hostages one by one out. (cf. They took the hostages out one by one.)
6. Particles can enter derivational processes, which is ruled out for full PPs. For example, *bypass*, *outpour*, *castaway*, *rip-off*, *unputdownable*, *come-uppance* and *fixer-upper* are possible (and attested) words, but **into-ruin-fall*, **marcher-up-the-street*, **throw-out-the-doorer*, etc. are not.
7. As noted by Emonds (1972: 555) and Jackendoff (1973: 352) themselves, full PPs but not single particles can occur in the focus position of a cleft construction, and can be used as a bare reply to a question:
- (25) a. It was into the cinema that she fled.
 b. Where you should send him is back to his mum.
 c. Where did they walk? Towards the village.
- (25') a. *It was down that they pushed the piano.

- b. *Where you should go is {back / home}.
- c. Where did she run? *Away.

Similarly, PPs but not normally single particles can be used in constructions exemplified by the following sentence:⁸

- (26) a. At the end of the road there was nowhere for him to go but back to his childhood home (Jonathan Rutherford, *I Am No Longer Myself Without You: An Anatomy of Love*. London: Flamingo. 1999, p. 29)
- b. *At the end of the road there was nowhere for him to go but back.

In (26a), the particle *back* is not a head but a specifier; see the comments on example (32') for justification.

- 8. Jackendoff (2002a: 71) points out that degree expressions like *completely* and *partway* can occupy a right-hand position with respect to particles. The same goes for degree expressions like *far* or *high*. Both kinds of degree expressions, however, cannot easily follow full PPs:

- (27) a. ?She stuck the needle into the cake halfway.
- b. *Icarus soared above the sea high.

- (27') a. She stuck the needle in halfway.
- b. Icarus soared up high.

It should be observed, though, that when the degree expression is modified itself, it can follow a PP as well:

- (28) a. She stuck the needle into the cake only halfway.
- b. Icarus soared above the sea way too high.
- (28') a. She stuck the needle in only halfway.
- b. Icarus soared up way too high.

If the particle appears on the left of a direct object, the modifier stays behind. Of course, as observed above, a full PP cannot occur in pre-object position:

- (29) a. *She stuck into the cake the needle halfway.
 b. *He pushed along the street the cart fifty meters.
- (29') a. She stuck in the needle halfway.
 b. He pushed along the cart fifty meters.
9. A modifying degree expression like *high* or *far* that is modified itself by a measure phrase can precede a full PP but not a particle:
- (30) a. She ventured five meters deep into the cave.
 b. The submarine sank 1000 meters deep below the surface of the sea.
 c. This type of ball could be catapulted fifty yards high into the sky.
- (30') a. *She ventured five meters deep in.
 b. *The submarine sank 1000 meters deep down.
 c. *This type of ball could be catapulted fifty yards {high up / far away}.
10. Jackendoff (2002a: 93) observes in a note that in the locative inversion construction, PPs introduced by *from* or *to* are slightly awkward if they are not preceded by a particle. By contrast, a particle can be used without a following *to/from*-PP here:
- (31) a. ?To his mum he runs.
 b. ?From the deep abyss came a loud roar.
- (31') a. Back (to his mum) he runs.
 b. Out (from the deep abyss) came a loud roar.

This indicates that the initial slot of the locative inversion construction is more welcoming to particles than to PPs. Note that in (31'), the particle forms a constituent together with the following *to/from*-PP, since this chunk can in its entirety be restored back in its 'original' position: *He runs back to his mum*. The fact that the particle in the examples in (31') can occur on its own suggests that the particle is the head of the phrase and that the following PP is an optional complement. This follows from the general principle that a given construction merely specifies by what

categories its component phrases be headed and further remains blind to the internal make-up of these phrases.

11. In the same note, Jackendoff shows that ‘locative’ PPs, both spatial and temporal ones, but not particles can be preposed in the ordinary non-inversion construction with stative verb phrases. If particles do occur in this construction, they need to be followed by a PP.

- (32) a. Above the pole circle, the summer sun shines 24 hours a day.
 b. On Chippewa Avenue, there are several funky hangouts.
 c. In the thirties, the BBC had two nation-wide broadcasting programmes.
 d. In the future, we’ll be able to cure aids like a simple flu.

- (32') a. {*Up / Up above the pole circle}, the summer sun shines 24 hours a day.
 b. {*Out / Out on Chippewa Avenue}, there are several funky hangouts.
 c. {*Back / Back in the thirties}, the BBC had two nation-wide broadcasting programmes.
 d. (Sometime) {*off / off in the future}, we’ll be able to cure aids like a simple flu.

This means that the ‘locative’ preposing construction without inversion requires the head of the preposed constituent to be a (transitive) preposition. (Since particles cannot occur in this pattern unless when followed by a PP, they must be specifiers, not heads.)

12. Unlike single particles, full PPs can be used as a (sort of) right-dislocated element after a sentence with locative inversion whose initial element is *here* or *there*:

- (33) a. There goes Harry, into the woods.
 b. Speak of the devil! Here comes Mr. Crab now, down the hill.
 (Douglas R. Hofstadter, *Gödel, Escher, Bach: an Eternal Golden Braid*. London: Penguin. 1980, p. 549)

- (33') a. *There goes Harry, away.
 b. *Speak of the devil! Here comes Mr. Crab now, down.

13. Locative inversion allows the fronted element to be topical (i.e., backgrounded), but in that case the head of this element can only be a preposition, not a particle. Note that the meaning of this topical fronting pattern does not have to be translocational, that is, the movement does not have to involve the crossing of spatial boundaries.

(34) a. On the wall hung some beautiful canvasses.
b. In the pool swam several ducks.

(34') a. {Up on the wall / *Up} hung some beautiful canvasses.
b. {Down in the pool / *Down} swam several ducks. (*Down* on its own can only be focal.)

If the meaning of this topical preposing pattern *is* translocational, the verb can be in the progressive. If translocational preposing involves a single particle (in which case the particle is necessarily focal), the verb has to be non-progressive:

(35) Into the garden was coming the strangest figure you ever saw.
(Bolinger 1977: 516)

(35') a. *Down was coming the snow. (cf. Down came the snow.)
b. *Away was sailing the ship. (cf. Away sailed the ship.)

In other words, the fact that the locative inversion construction allows only PPs to be topical, which is a semantic difference between full PPs and particles, can be turned into a purely formal difference: full PPs but not particles can be the first element of a locative inversion construction in the progressive.

14. As discussed in Cappelle (2002), the locative inversion construction can host particles that do not have a purely directional meaning. Full PPs with a non-spatial meaning cannot be similarly preposed:

(36) a. *Without stopping sang the girl.
b. *In God trusts the true American.

(36') a. On (and ever on) sang the girl.
b. Out went the lights.

To conclude this section, there appears to be sufficient counterevidence against the claim that particles and full PPs have exactly the same distributional properties. Some constructions or syntactic configurations are confined to full PPs only, while others allow particles only. The inevitable conclusion is that if we consider particles as merely a sort of PPs (namely PPs with just a head), we obscure the fact that some patterns are sensitive to the difference between head-only PPs and PPs with a complement NP. This means that particles do have their own syntactic status. Does that also mean we should abandon the claim that particles are intransitive prepositions? I think we should recognize that this claim may perhaps be definitionally satisfying, but that for the rest, nothing much can be gained from it.⁹

5. On the claim that particles are reduced PPs

A somewhat related claim to the one just discussed is that directional particles are in fact reduced directional PPs. That is, they are the result of a syntactic transformation which brings about that “some adverbials ... initially in the form of prepositional phrases with an unspecified object, reduce to only the preposition or the first part of it” (Fraser 1970: 96–97; cited in Declerck 1976: 5). According to this view, the (b)-examples in the following pairs of sentences are derived from the corresponding (a)-sentences:

- (37) a. The terrorist slipped through something (viz. the metal detector).
b. The terrorist slipped through.
- (38) a. The girl walked around something (viz. the town).
b. The girl walked around.
- (39) a. He took the candy away from somebody (viz. the child)
b. He took the candy away.
- (40) a. The butler brought the dinner into something (viz. the room).
b. The butler brought the dinner in.

The ‘prepositional phrase reduction’ transformation originally proposed in Fraser’s (1965) doctoral dissertation simply deletes the object of the preposition, as well as the second part of a so-called ‘two-word’ preposition (e.g., 39), which may be fused into a single word (e.g., 40).

Declerck (1976: 9–22) brings up some well-argued criticisms against Fraser’s transformation, which was endorsed by most contemporary transformationalists.¹⁰ Most of Declerck’s counterarguments are valid only within a transformational framework that is no longer adhered to today. Let me therefore confine myself to giving two of his arguments that are more theory-independent.

Firstly, the fact that the sentence *Come in!*, for instance, requires that there be some identifiable place into which the addressee can go does not mean that anything is deleted from the underlying syntactic structure of this sentence. Declerck makes his point as follows:

For example, *John is swimming* is an appropriate sentence only if the material situation necessary for the act of swimming is present: in other words, if there is water or some other liquid in sufficient quantity ... The sentence is not appropriate if John is, say, in the middle of the Sahara and no water is around. In spite of this, nobody has ever proposed that *John is swimming* should be derived from *John is swimming (in) something*. (Declerck 1976: 17)

According to Declerck, the prepositional object implicit in *Come in!* is merely a ‘presupposition’, witness the fact that sentence negation (*Don’t come in!*) does not affect the requirement that there is some place known to the addressee into which he is able to go (cf. Keenan 1971: 45).

Secondly, there are many verb-particle combinations (with *up* and *down*) for which it is impossible to reconstruct a full PP:

- (41) a. The balloon went up.
 b. She picked the cat up.
 c. He took her hand and kneeled down.

For such sentences, no NP can be furnished as an understood object—you cannot ask, for example, up what it is that the balloon went.

On the basis of these and other arguments, Declerck (1976: 22) concludes that “intransitive literal verbs like *jump over* may be considered to be generated as such in the base component and not as transitive combinations (*jump over the wall*) from which the object is deleted in the course of transformations.” In later work, Fraser (1976: 49) still claims that *up*, *down*, and *out* in the following examples are only apparent particles because they are derived, although now not through PP reduction but through adverb reduction:

- (42) a. He threw the ball up.
 b. The engineer moved the lever down.
 c. Pull the knob out.

Fraser (1976: 49) claims that *up*, *down*, and *out* in these examples are “reductions of *upwards*, *downwards*, and *outwards*, respectively.” In other words, he seems to have recognized that, to use the words of Declerck (1976: 21), “though the use of literal adverbial particles in most cases presupposes the presence of an object in the linguistic or extralinguistic context, there are some cases in which an object simply need not and cannot be thought of.” However, an analysis in terms of a *-wards* deletion probably does not fare any better. Consider (41b) and (41c): would we really want to claim that *pick the cat up* derives from [?]*pick the cat upwards* or that *kneel down* derives from [?]*kneel downwards*?

A further argument against the reductionist stance comes from language acquisition research. Wegner and Rice (1988), whose work is referred to in Den Dikken (1995: 96), observe that particles which alternate as prepositions are usually acquired later than their homophonous prepositions, except for *down*, *off*, and *up*, for which the use as a particle comes in at an earlier stage than the use as a transitive preposition. The first half of this observation might perhaps be taken as evidence that particles other than *down*, *off*, and *up* are transformationally derived from their related prepositions. That is, it would seem reasonable to suppose that children still construct full underlying PPs once they have learned to master Fraser’s transformational rule to form particles. However, although this seems likely, there is no logically cogent reason to infer this. On the other hand, if the use of *up*, *down*, and *off* as a particle is acquired prior to their use as a preposition, it would strain credulity to claim that these particles are in fact initially PPs with a deleted object and that only at a later stage does the child learn not to drop the object. Jackendoff (2002b: 253, note 12) points out that some particles, e.g., *up*, even occur at the one-word stage of child language. Jackendoff notes: “At this point the child probably uses *up* to denote upwardly directed motion, so it is verb-like rather than relational in its semantics” (cf. also Bates and Goodman 1997: 18).¹¹ What this comes down to is that *Up!* might be a shortened version, if you like, of *Verb (me) up!* but not of *Verb (me) up NP!*.

Finally, it will be shown in the following section that certain particles (*viz.* *across*, *along*, *over*, and *through*) bias an event’s value for temporal (un)boundedness, whereas their corresponding PPs do not. For example, *walk across* implies that whatever is walked across is walked across completely; by

contrast, *walk across NP* allows for a reading where the landmark is only walked partway across. If the particles in question were simply derived through a transformation, we would have no way of explaining how their intrinsic (un)boundedness comes about. This unpredictable feature of particles can be adduced as a sufficient ground on which a derivational model of linguistic representation should be rejected (cf. Croft 1998). Under such a model, the semantic usage (U1) of any given particle would be exhaustively predictable from the semantic usage (U2) of its prepositional counterpart. According to Croft (1998: 162), “the derivational model can be excluded by some degree of semantic irregularity in the derivational relation between meanings U1 and U2.” Since the (un)boundedness value of particles does not follow from the meaning of their corresponding prepositions, we have to consider particles as non-derived, independent entities.

6. On the claim that particles have the same meaning as their related prepositions

As has already been hinted at in the previous section, it is not true that “the prepositions which are particles have the same meanings in both usages” (Emonds 1972: 548). It is precisely this claim which is responsible for a common misconception, namely that the choice between a particle and its formally related preposition merely depends on whether or not the semantic reference object (i.e., the landmark) is inferable (e.g., has been mentioned already in the context).

This assumption, which is especially strong in discourse-functional approaches, is again based on the economy principle—only this time, the linguist appeals to pragmatics rather than to syntax to keep things as simple as possible. For example, O’Dowd (1998: 4) asks:

“Why should the same lexical form – [e.g.,] *up*, *along*, or *through* – have membership in two different lexical categories? And why should *through* in [(43b)] have a different categorial status here than in [(43a)], an utterance which differs only in that the understood object (*the window*) is left unspecified?”

- (43) a. They could send a bullet right through the window.
 b. If you roll an animal onto your hood, I’m sure that it would come roaring through.
 (O’Dowd 1998: 3)

Lee (1999: 136) similarly points out that the difference between particles and prepositions has to do with how much need there is for the speaker to specify the object:

In many cases, they [i.e., particles and words such as *here, there, then*, etc. – B.C.] can be paraphrased by PPs. In this sense the relationship between intransitive prepositions and PPs can be seen as similar to that between pronouns and NPs. The circumstances in which the pronoun *she* can be substituted for the NP *Mary*, for example, are very similar to those in which *there* [or *in* – B.C.] can be substituted for the PP *in the garden* (that is, when the context makes the fuller specification unnecessary). (Lee 1999: 136)

Sinclair (1990: 164, 169) also quite simply says that a preposition is used if the reference object requires mentioning; and that a particle is used if the reference object is recoverable from the context.

Although it *is* often possible to use a particle instead of a preposition, we should realize that prepositions and their related particles occasionally carry slightly different meanings. Declerck (1976: 74–75) observes that, for example, *along* is interpreted as ‘further’, ‘onwards’ if there is no NP following (e.g., *We just walked along for a while*). In other words, used as a particle, *along* does not imply the presence at all of any prolonged object along which movement proceeds. Conversely, the particle *down* implies that movement goes from some point to a lower point, whereas this implication may be overridden when *down* is used as a preposition, as in the following sentence, where the movement is presumably only horizontal:

(44) After dinner, we walked down the banks of the river Seine.

Even if the object of the preposition were contextually available, omitting it would be inappropriate, since the sentence would then wrongly imply downward motion. The object cannot even be made explicit by means of a full PP at the end (the exclamation mark indicates nonsensicality): *After dinner, we walked down, down the banks of the river Seine.*

Cappelle and Declerck (2004) discuss another circumstance in which a preposition *has* to be used even if its object is supplied by the context or the situation of speaking. Consider the following examples:

(45) a. On one occasion she walked across the desert for seven days.

(<http://www.eskimo.com/~recall/bleed/0512.htm>, accessed 11 May 2002)

- b. [The vastness of the desert didn't frighten her.] *On one occasion she walked across for seven days.
- (46) a. So small is the island that you can hike along the coast in less than half a day.
(<http://www.geocities.com/Yosemite/Rapids/1528/Yato.html>, accessed 22 February 2004)
- b. [The beach makes for a nice walk.] *You can hike along in less than half a day, so small is the island.
- (47) a. [The supersonic aircraft Concorde will make its first test flight from London on Tuesday since the fleet was grounded following a crash in Paris last year, which killed 113 people.] British Airways has confirmed that the plane will fly over the Atlantic for nearly three and a half hours before returning to its base.
(<http://web12.cri.com.cn/english/2001/Jul/22883.htm>, accessed 11 May 2002)
- b. [The supersonic aircraft Concorde will make its first test flight from London on Tuesday since the fleet was grounded following a crash in Paris last year, which killed 113 people.] *British Airways has confirmed that the transatlantic plane will fly over for nearly three and a half hours before returning to its base.
- (48) a. He ran through the forest for hours and finally met with her.
(<http://www.swt.edu/~JL37627/>, accessed 11 May 2002)
- b. [He entered the forest where he had seen her disappear among the trees.] *He ran through for hours and finally met with her.

The reason for these contrasts has already been announced in the previous section. *Along* on the one hand and *across*, *over*, and *through* on the other express an unbounded and a bounded path, respectively. As a result, the motion events in which they feature are unbounded and bounded, respectively. This is illustrated in the following pairs of sentences, which show the distribution of '{*in / for*} X time' temporal adverbials, a standard test for (un)boundedness—as well as (a)telicity:¹²

- (49) a. She walked along for a while and thought about hopping a bus home.
(http://www.morbidoutlook.com/fiction/stories/2001_04_love-song.html, accessed 7 May 2002)
- b. *She walked along in twenty minutes and thought about hopping a bus home.
- (50) a. Hovercraft are being used as passenger ferries, for instance across the English Channel, where they transport passengers, goods and vehicles across in less than half an hour.
(http://www.links999.net/Science/links999_hovercraft.html, accessed 2 May 2002)
- b. *We were transported across for half an hour.
- (51) a. In 1979, Ji Ming, the youngest of the three brothers, swam over in only five hours.
(http://www.geographical.co.uk/geographical/features/june_2000_spidermen.html, accessed 2 May 2002)
- b. *Ji Ming swam over for five hours.
- (52) a. Although most passengers walk through in less than five minutes, Customs in Miami has seized 6,000 pounds of narcotics from passengers this year.
(<http://govinfo.library.unt.edu/npr/library/status/closeup/boxss3.htm>, accessed 2 May 2002)
- b. *The passenger walked through for five minutes.

Some (but not all) paths make reference to (i.e., presuppose, imply) a landmark serving as the basis for the path. (As we have observed above, a path expressed by the particle *along* does not, for example, nor does the path expressed by *up* in, e.g., *The balloon went up*.) The landmark, if there is one conceivable, also has an intrinsic (un)boundedness value, which may be opposed to the (un)boundedness of the path. If this landmark is expressed syntactically in the form of an object of a preposition, the path's (un)boundedness may be overridden by the (un)boundedness of the landmark, as for example in the PP *across desert land*, which makes a motion event inevitably unbounded, in spite of the inherent boundedness of *across*:

- (53) She walked across desert land {for / *in} seven days.

The point is that even if the hearer knows that *desert land* is being talked about, the speaker cannot omit this NP whilst retaining the motion event’s unboundedness. As soon as the NP is dropped, *across* forces its boundedness on the motion event:

(54) She walked across {*for / in} seven days.

In short, some particles have an inherent, unalterable (un)boundedness value, while their corresponding prepositions ‘inherit’ the (un)boundedness value from their NP objects. This is a subtle but crucial semantic difference between certain particles and their related prepositions, one which brings it about that a particle cannot always be used instead of its homophonous preposition if the landmark is contextually or otherwise given.

7. Conclusion

The conclusion from the previous three sections is that directional particles are different from directional prepositional phrases. Though directional particles may, for reasons of terminological economy, be called ‘intransitive prepositions’, they have different distributional properties from directional PPs, ought not to be analyzed as reduced directional PPs, and do not always have the same meaning as formally related directional PPs. Calling them a sort of prepositions blinds us to these facts.

If directional particles are not just prepositions, it must follow that particles *in general* are to be kept distinct from the class of prepositions as well. This is so because the falsity of a general claim—in this case, *all* particles are just a sort of prepositions—is logically entailed by the proved falsity of a weaker, more specific claim—in this case, *some* particles, namely directional ones, are just a sort of prepositions. Particles, in other words, are a kind of their own.

Notes

1. In Dutch (and Flemish), there is comparable *prima facie* structural parallelism between postpositions and particles:

- (i) a. *Gielke liep een zware helling op.*
 Jill ran a heavy slope up
 ‘Jill ran up a heavy slope.’
 b. *Gielke liep een zware valling op.*
 Jill ran a heavy cold up
 ‘Jill caught a bad cold.’

See Cuyckens (1991: 117–118) for arguments to maintain a distinction between postpositions and particles.

2. It just so happens that an NP object preceding the particle is rather awkward and infrequent with *run up*, although this ordering is not impossible, as is shown by the following authentic example:

- (i) She ran a bill up at her brother Steve Walkers store.
 (<http://freepages.history.rootsweb.com/~pearidger/families/childress/stuartn.htm>,
 accessed 21 April 2003)

Given that certain verb-particle combinations disprefer (or sometimes even rule out) the ordering in which a full NP occurs before the particle, we cannot always rely on the contrast given in (2a)–(3a) to know whether we are dealing with a V + [P + NP] or a V + Prt + NP combination. The contrast given in (2b)–(3b), involving pronouns rather than full NPs, serves as a better diagnostic.

3. Far-fetched and rather dubious candidates are *keep [to an agreement]* (‘stick to it, follow it’) – *[keep tó] all the doors* (i.e., keep them shut); *draw [on previous experience]* (‘use it’) – (of waves) *[draw ón] the floating bottle* (i.e., move it onwards); *hit [on a brilliant idea]* (‘discover a brilliant idea’) – *[hit ón] my glasses* (i.e., put my glasses on [my face] by hitting them, as it were); and *set [about a new job] with some gusto* (‘tackle it’) – *[set about] all the poles* (i.e., erect them all around).

4. In Cognitive Grammar, a ‘landmark’ is what can be expressed as the object of a preposition with a spatial meaning, for example *the house* in the prepositional phrase *around the house*. ‘Elaboration’ is the process by which concrete words fill a structural position. The function of a landmark is to specify the location of a so-called ‘trajector’, which may or may not be a moving object (or ‘theme’). The trajector-landmark relation is a special case of what psychologists refer to as the figure-ground relation.

5. See Declerck (1976: 14) for similar citations from Sweet (1891) and Strang (1962).

6. The reader should not take *specify* and *specifier* too strictly. What is called a *specifier* might be dubbed more accurately a *pre-specifier*, in view of sentences like *She jumped into the water but jumped right back out*, where *back* is a specifier to *out*, and *right* a pre-specifier to *back out*.

7. If the particle is (implicitly) contrasted with another, end placement is more acceptable: *His throwing of the ball up (instead of down) was stupid.* (cf. Fraser 1976: 3)

8. This difference is formulated as a tendency, in order to allow for the occurrence of stereotyped expressions like *There’s {no place / nowhere} to go but {up / down}* (‘The situation can only {improve / get worse}’).

9. Some might argue that we lose descriptive unification by treating directional particles and directional PPs as two different kinds of entity. After all, as observed, they can both be

preceded by *right*, they can both prepose, they can be found after the same range of verbs, and so on. In Cappelle (in preparation), I present a way in which we can capture these generalizations.

10. See Declerck (1976: 5, fn. 1) for references and citations; e.g., Gruber (1965: 77): "The adverbial particles such as *up*, *down*, *across*, *over*, *through*, *away*, as noted may all be considered prepositional phrases in the prelexical structure, which become manifested as single morphemes."

11. The page reference in Bates and Goodman (1997) is to the pdf version available online: <http://crl.ucsd.edu/~bates/papers/pdf/bates-goodman-1997.pdf>.

12. See Declerck and Cappelle (in preparation) for ten complications in applying this test.

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