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## Aspects of prepositions and prepositional aspect

### Sally A. Rice

#### 1. Introduction

This paper is a small part of a large-scale empirical investigation into the syntax and semantics of the English prepositions, the theoretical implications that their multivariate behavior has on models of lexical representation, and whether the prepositions form a homogeneous or heterogeneous word class.<sup>1</sup> I will focus here on aspectual properties of prepositions using concepts and notation from Cognitive Grammar (Langacker 1987, 1990, 1991) and drawing on insights by Talmy 1985 and 1991, Rauh 1991, and others about the wide-ranging behavior of prepositions in English.<sup>2</sup> This research fits squarely in the realm of cognitive linguistic analyses which explore the historical and logical order of senses or "grammaticalization channels" or "paths of metaphorical extension" of individual lexemes.

As a word class, the English prepositions are known to have quite pronounced grammaticalized functions in addition to their regular prepositional duties (cf. Talmy 1985, Rauh 1991, Langacker 1992a and b). For example, many prepositions appear in constructions in which their canonical lexical usage (usually coded as the head of a prepositional phrase which marks the location of an entity or an event) is, by and large, irrelevant. Rather, in their guise as grammatical *particles*, they can mark quite diverse functions (e.g., case, causation, subordination, and periphrasis).<sup>3</sup> Consider the examples in (1–5), which pair a lexical and grammatical usage of a preposition:

- |     |   |                     |
|-----|---|---------------------|
| (1) | a. Mary flew <i>to</i> London.<br>b. Mary wants <i>to</i> leave.                    | INFINITIVE MARKER   |
| (2) | a. John drove <i>by</i> the store.<br>b. John was sued <i>by</i> the store.         | AGENT MARKER        |
| (3) | a. Audrey cooked <i>over</i> a hot stove.<br>b. Audrey <i>overcooked</i> the pasta. | COMPARATIVE PREFIX  |
| (4) | a. He climbed <i>up</i> the ladder.<br>b. He used <i>up</i> all the toilet paper.   | COMPLETIVE PARTICLE |
| (5) | a. I killed him <i>with</i> a hammer.   |                     |

- b. I kissed him *with* abandon.

MANNER MARKER

Taken collectively, we find prepositions used in construction types like the following (which by no means constitutes an exhaustive list):

- (6) a. HEAD OF PREPOSITIONAL PHRASE  
*in* the box, *on* the table
- b. HEAD (?) OF ADVERBIAL PHRASE  
*at* risk, *on* fire
- c. COMPONENT OF PHRASAL VERB  
yell *at*, depend *on*
- d. COMPONENT OF VERB-PARTICLE CONSTRUCTION  
call someone *up*, turn it *off*, run someone *over*
- e. VERBAL PREFIX  
*underestimate*, *overeat*, *outrun*
- f. NOMINAL PREFIX  
*afterthought*, *outgassing*, *in-crowd*
- g. PREDICATE  
I'm *down* today; They *outed* that politician
- h. ADVERB/ADJUNCT  
He stayed *in*; He continued *on*

When considering the full array of prepositional behavior, one cannot help but wonder whether a preposition is always a preposition in its meaning and function. Most researchers simply say, ‘No, it's not’, and admit that, Janus-like, they play both lexical and grammatical roles – a conclusion that's neither adequate given the full range of usage types nor helpful in explaining why there is so much semantic and categorial diversity afflicting this word class. Indeed, the lexical items which we call prepositions show up in such a wide variety of constructional frames in English that it is tempting to adopt Talmy's (1985) practice of referring to some of their instantiations as part of a broader class of verbal *satellites* and despair of ever linking their behavior to inherently prepositional properties.

Despite the temptation to distinguish between use types of these lexemes on purely formal grounds and leave it at that,<sup>4</sup> there remain a number of very important theoretical questions concerning the so-called lexical/grammatical alternations exhibited by adpositions in many languages and clearly manifested in the English prepositional system: (i) Are these target lexemes always prepositions? (ii) Are they equally meaningful in all applications? (iii)

Are the various usages or functional alternations of a preposition related lexically? Rather than accept unconditionally the descriptively convenient but explanatorily unsatisfying position that such alternations really do indicate a lexical/grammatical split between true prepositions and quasi-homophonous satellites or particles, let us assume that the meanings and usages of a given prepositional form are multidimensional in some vague, as yet undetermined way. For now, let us simply refer to the usages in the (a) sentences in (1–5) as basic and primarily spatial, while treating the (b) usages as extended and primarily non-spatial, bearing in mind that this distinction is more continuous than categorical. In addition, I will refer to these target lexemes as *prepositions* in the remainder of this paper, no matter what may be their particular lexico-syntactic manifestation in a given context. Persson 1988 and Lichtenberk 1991 call instances like this of purported grammaticalization of a lexical item by the not altogether transparent term, *heterosemy*, invoking it where “two or more meanings or functions that are historically related, in the sense of deriving from [perhaps] the same ultimate source, are borne by reflexes of the common source element that belong in different morphosyntactic categories” (Lichtenberk 1988: 476).

Indeed, many cognitive linguists have long argued for recognition of prepositional polysemy, for one can reliably posit multiple, yet related meanings for individual prepositions even in their purely locational, that is, inarguably lexical usages (cf. Bennett 1975, Brugman 1981, Hawkins 1984, Herskovits 1986, Vandeloise 1991, Rice 1992, among others). Moreover, few dispute the fact that most prepositions have grammaticalized into functional particles or grams, to use Joan Bybee's (1988) term. I would, therefore, like to add another variable to the preposition/non-preposition debate and argue for both prepositional polysemy as well as what I will call prepositional *polygramy* or *polyfunctionality*, to adopt Janssen's (1993) term. These terms are more or less equivalent notions to *heterosemy*, but neither the underlying concept of related meaning despite cross-categorial function nor an agreed-upon descriptive term has attracted much theoretical attention or terminological consensus as of yet.

Semantic extension from spatial meaning into the temporal domain is fairly ubiquitous among the English prepositions. What is of concern in this paper is an even less spatial, partially temporal, and clearly grammaticalized function of certain prepositions in English. In the remainder of this paper, I will address one such polygramous, polyfunctional, or heterosemous usage, that of aspectual particle, arguing that in addition to their myriad other usages and

senses, many prepositions play a discernible aspectual role or at least convey aspectual meaning as well. By no means do I assume that the preposition is a fully grammaticalized aspectual marker in English or that it is unequivocably functioning to signal aspect. But indicating some sort of aspectual meaning is part of the preposition's function in the sentences under examination here. In some cases, the preposition is solely responsible for the aspectual interpretation that the sentence receives. Signalling aspect isn't such a strange or unexpected function for prepositions to have, considering that their aspectual meanings seem to be natural extensions of certain spatial meanings. Just as they can modulate the location of an entity in space or highlight the relevant contours or topography of a landmark object, so too can they modulate or reshape the contours of an event.

Prepositions have long figured prominently in philosophical and linguistic work on verbal aspect since Vendler 1957 invoked them as a test for determining the inherent aspectual categories of verbs and sentences. Specifically, temporal expressions with *in* and *for* have usually been compared. *Accomplishments* or verbs and their complements denoting completed or culminated events readily combine with temporal PPs headed by *in*, whereas verbs and their complements denoting *activities* (that can, in principle, continue without limit) tend to combine with phrases headed by *for*. Some contrasting pairs are given in (7) and (8):

- |     |  |                |
|-----|--|----------------|
| (7) | a. Mozart wrote the opera <i>in</i> / * <i>for</i> 6 weeks.          | ACCOMPLISHMENT |
|     | b. Mozart wrote operas <i>for</i> / * <i>in</i> 26 years.            | ACTIVITY       |
| (8) | a. Ever the insomniac, I (finally) fell asleep <i>in</i> 6 days.     | ACCOMPLISHMENT |
|     | b. Ever the narcoleptic, I (?finally) fell asleep <i>for</i> 6 days. | ACTIVITY       |

Moreover, the traditionally labelled verb particles, *up* and *out*, are regularly associated with perfective or completive aspect. However, although they both carry roughly the same aspectual meaning, their use is heavily contingent on particular verbs and complements:

- |      |   |
|------|---|
| (9)  | a. I filled <i>up</i> / * <i>out</i> the drawer.          |
|      | b. I emptied <i>out</i> / * <i>up</i> the drawer.         |
| (10) | a. She straightened <i>up</i> / * <i>out</i> the room.    |
|      | b. She straightened <i>out</i> / * <i>up</i> the blanket. |

- (11) c. She straightened *up* / \**out* her husband.  
 (11) a. I tore *up* the letter.  
 (11) b. I destroyed (\**up*) the letter.

We find the same holds true for the prepositions under examination in this paper. I will ignore aspectual-temporal phrases like those in (7) and (8) containing *in* and *for* as they have received extensive treatment elsewhere (although not necessarily from a lexical semantic point of view).<sup>5</sup> I likewise refer the reader to Lindner 1981 for an exhaustive study of the perfective verb particles *up* and *out* in English like those given in (9–11).

In this paper, I will concentrate instead on the semantics of a number of other prepositions such as *after*, *on*, *away*, and others. Assuming that prepositions do indeed form heterosemous categories, I would like to build on existing work that has investigated one path of grammaticalization or metaphorical extension from concrete to abstract meaning and function, namely, the path from spatial motion to temporally situated action. I will suggest that aspectual usages represent a small detour or extension along this path. Next, I will look at a handful of prepositions and discuss the type of aspectual categories they seem to correlate with as evidenced by the types of verbs, inflectional aspects, and complement types that they co-occur with. Finally, I will speculate why certain prepositions have come to take on an aspectual function or why they seem to resonate aspectual properties present in some verbs. I propose that since prepositions are already so inherently flexible semantically and syntactically, they represent a fairly cheap and readily available resource for indicating minor aspectual categories for which English otherwise does not have a verbal inflection. In most cases, the prepositions under examination simply complement or reveal the inherent aspectual character of the underlying event. In present-day English, they are still restricted to certain predicates, argument structures, or inflectional aspects, but they seem to be gaining in productivity. Nevertheless, when taking both diachronic and synchronic evidence into account, certain prepositions are clearly undergoing specialized grammaticalization towards marking aspect.

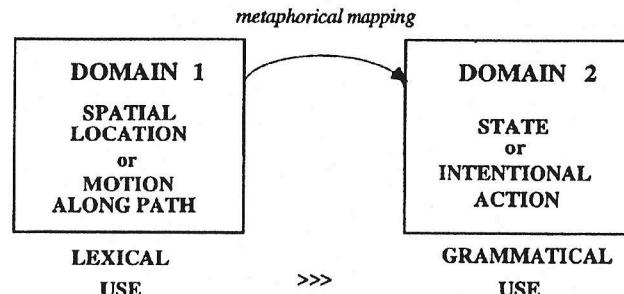
## 2. Diachronic evidence for semantic shift and grammaticalization

In the past decade, much research in cognitive linguistics has set about demonstrating the wide-ranging syntactic and semantic behavior of prepositions

in English, French, German, and other languages, both synchronically (cf. Lindner 1981; Talmy 1985; Radden 1985; Rice 1993; and Langacker 1992a, b) and diachronically (Traugott 1978, 1982; Sweetser 1986; Genetti 1986). Researchers have invoked conceptual operations such as construal, schematization, image-schema transformations, metaphoric extension, contextualization, etc., to account for the extension of these lexical items from purportedly basic uses in expressions of location, orientation, or direction, to extended uses in expressions of time, manner, comparison and various abstract functions. There are fairly compelling historical reasons for why the extensions happened in the way and direction that they did from concrete to abstract and objective to subjective/expressive usages.

It has been shown, both historically and cross-linguistically, that distribution in time is readily conceived of in terms of distribution in space. In addition, few cognitive linguists would deny that there is a relationship between lexical and grammatical meaning, or in George Lakoff's (1990) terminology, that there is some preservation of image-schematic structure as the constructs associated with one domain are metaphorically mapped into another. Even Talmy (1985: 103) concedes that prepositional satellites in English "are mostly involved in the expression of Path", thus, perhaps, evoking vestiges of their basic spatial meaning. However, although certain kinds of inferential structures are preserved across meaning shifts like this, there is usually only a partial mapping. In fact, during the mapping, some new meanings may be gained. In the interest of space, I will be necessarily schematic about the exact nature of the mapping from the domain of space to the domain of action or the grammatical extension from spatial to aspectual usage for the prepositions being examined. The argument that prepositions in English behave aspectually and that their aspectual function is a natural and motivated extension of their basic lexical function is only convincing to the extent that I can demonstrate general similarities holding across the various prepositions and elucidate the regularity of the correspondence between location or motion in space and location or motion in time.

Many historical linguists have argued that grammaticalization processes involve fairly regular semantic shifts, usually brought about through metaphorical extension (cf. Heine et al. 1991 for an extensive overview). One of the most common shifts cited has been that linking some property of the source domain of space (here, spatial location or motion along a path) with some property of the target domain of time (here, a state or the unfolding of intentional action) as schematized in Figure 1.



*Figure 1.* A common path of semantic extension and grammaticalization

In this vein, Traugott (1978, 1982), Bybee (1988), and Sweetser (1988) have demonstrated how it is possible to get aspectual meaning out of spatial terms via temporal usages. Furthermore, they believe that synchronic associations often recapitulate historical developments. I shall not summarize their arguments here. They have looked at some of the more obvious cases in English in which the preposition has actually lost most of its spatial thrust, as in the case of *before* or *after* or cases in which phonological or orthographic changes have precipitated or accompanied the addition of temporal or aspectual meaning, as in the case of *against* > *again* or *through* > *throughout* > *thoroughly*. What I would like to do is demonstrate the same phenomenon for less obvious cases, cases that have not undergone morphological mutation, or cases in which the propositions are still overwhelmingly spatial in their canonical usages.

### 3. The data

### 3.1. *After* and RETROSPECTIVE aspect

I begin by looking at an unfamiliar case, but one which I hope will illustrate the aspectual potential of certain prepositions. In dialects of English spoken in Newfoundland and Ireland, one finds idiomatic, yet productive expressions with *after* like those given in (12):

- (12) a. I'm *after* breaking my leg / \*I've *after* broken my leg.  
b. They're *after* closing down the fish plant and now everybody's out of work.

- c. You're *after* spilling it on the floor and now you want me to clean it up?!
- d. The Provincial Government's *after* setting up this offshore petroleum impact committee.  
[St. John's Evening Telegram; 17 March 1980]
- e. Look what he's *after* doing now!
- f. How many times am I *after* tellin' you?

Roughly, these constructions take the form [*be after V-ing*] and involve progressive inflected aspect with *after* inserted between the auxiliary *be* and the present participle. There are a number of semantic properties associated with this construction. First, the construction emphasizes that the event occurred in the immediate past and that it has current implications. As such, *after* can take a specifier like *right* or *just*, but modifying expressions signifying the distant past make little sense, as shown in (13):

- (13) a. I'm just/right *after* breaking my leg.  
b. I'm *after* hurting my back (\*last year)

Thus, we could call *after* an indicator of retrospective aspect. Secondly, the construction conveys a notion of unexpectedness or that the event has or will have negative consequences.

The source of this aspectual usage probably stems from the sense of sequentiality that is ever-present in both its spatial and temporal usages. Consider the purely spatial and temporal usages of *after* in (14) and (15), respectively:

- (14) a. He came *after* Tom in line.  
b. My house is just *after* the turn in the road.
- (15) a. I'm usually home *after* 8 pm.  
b. They went out for coffee *after* the concert.

We could schematically represent the extension of *after* from subsequence in space to subsequence in time (where the TR in the target domain of action is understood to be some state or process) as in Figure 2.

There are, in addition, constructions in standard English that more readily illustrate a close association between *after* and perfective meaning with progressive inflection, as shown in (16), so we should not be too surprised to find this same association in dialectal usages like those given above in (12).

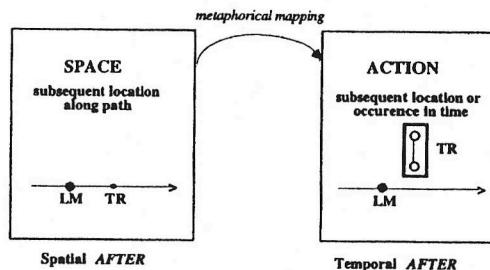


Figure 2. Metaphorical origins of aspectual AFTER

- (16) a. After lunch, he took a nap.  
b. After eating lunch, he took a nap.  
c. After having eaten lunch, he took a nap.

*After* even shows up as a sort of perfective conjunction in *afterwards*:

- (17) *Afterwards*, he took a nap.

The point that I want to emphasize, though, is that in the *after* construction in Irish and Newfoundland dialects, the perfective is being signaled exclusively by *after*. The preposition undeniably has an aspectual function since its overall effect is to contradict the inflected aspectual morphology of the verb. In most of the other cases discussed below, the preposition more closely resonates aspectual properties present in the verbs, either by complementing them or by revealing the inherent aspectual character of the underlying event.

### 3.2. Away and CONTINUOUS aspect

As a prepositional particle, *away* also has a clearly aspectual function, marking the continuation of an already ongoing activity, as shown in the examples in (18):

- (18) a. I've been working *away* on a new novel.  
b. They'll be partying *away* tonight as usual.

One can make a few preliminary observations about its distribution. First, it shows up most frequently with verbs inflected for progressive aspect, thus it

nicely resonates semantically with overt verbal morphology. Compare (18a) with the sentences in (19):

- (19) a. ?I worked *away* on a new novel all of last year.  
      b. \*I have worked *away* on a new novel, but haven't made much progress.  
      c. ?I will work *away* diligently all evening.

Secondly, it is confined to intransitive verbs (or transitive verbs with an omitted object):

- (20) a. He's really snoring *away* in there.  
      b. She's eating *away* like there's no tomorrow.  
      c. \*I'm still writing *away* a new novel.  
      d. I'm still writing *away* on a new novel.

Moreover, it tends to co-occur with verbs denoting some sort of canonical, *overt* action:

- (21) a. \*He's learning/teaching *away* like crazy this semester.  
      b. \*Don't bother him – let him think *away* in peace and quiet.  
      c. ?Just look at him dreaming *away* in there.

Finally, it strongly disfavors verbs of motion with which it could take on an exclusively directional interpretation:

- (22) a. ?You want to drive – drive *away*!  
      b. \*He's such a maniac behind the wheel – he just speeds *away* no matter what the speed limit.  
      c. \*He just went *away* reading his book.

This last restriction is probably related to its spatial, source-oriented origins, as schematized in Figure 3.

What might motivate an aspectual usage of *away* which highlights the continuation of some action? *Away* is used both prepositionally and adverbially to denote movement away from a source, whether that source location is specified or not. Some examples are given in (23):

- (23) a. He moved *away* (from the farm).  
      b. She took their plates *away* (from the table).  
      c. He's finally going *away* (from here).

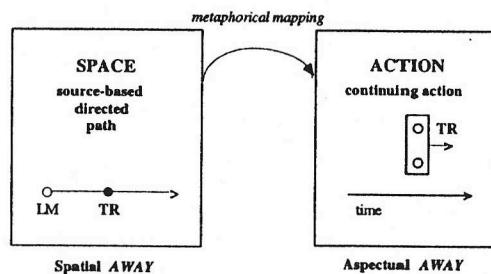


Figure 3. Metaphorical origins of aspectual AWAY

- d. *Away* with him!  
      e. Take it *away*, boys! [in show business sense]

These source-oriented, directional usages might help explain why aspectual *away* cannot co-occur with transitive verbs, which would otherwise invite a goal-oriented, perfective interpretation. Nevertheless, *away* figures in many transitive constructions of the form, [*to V NP away*] or [*to V away at NP*], as shown in (24), in which the verb usually expresses some sort of disintegrating activity. *Away* contributes something more to the overall meaning of these constructions than its aspectual sense, although it is present and salient.

- (24) a. Termites are eating my woodpile *away* / Termites are eating *away* at my woodpile.  
      b. He kept on hammering *away* at the stack of bills.  
      c. Government officials beavered *away* at the new legislation all winter.

These somewhat transitive constructions may sanction, or indeed contaminate, certain imperative transitive usages like *You want to use my computer? Use it away!*, but the majority of usages with aspectual *away* are intransitive and imperfective, as further exemplified in (25). These represent some of the more common usages of aspectual *away*.

- (25) a. He's saving *away* for a new house.  
      b. She's planning *away* for her retirement.  
      c. He's still smoking *away*, despite the doctor's warnings.  
      d. Do you hear those two cats? They're really screwing *away* like crazy out there!

- e. You need to keep typing your report on my computer? Go ahead, type *away* / \*type it *away* / \*type on it *away*!

In general, the emphasis is on an activity that is or was in progress and far from over. Except in a few imperative forms, it doesn't really convey incipience, rather more of a sense that some event is ongoing and continuing along as planned or expected, but without any real endpoint or goal.

### 3.3. *On* and RESUMPTIVE aspect

Turning now to a different case, that of *on*, we can make a few general observations. First, aspectual *on* signals a slightly different type of imperfectivity than does aspectual *away*. Whereas *away* signals what I might call “unfettered” continuation of an activity – a sort of default progressivity, *on* tends to signal a perseverance in the face of disturbance or an expectation of stopping, thus conveying a more effortful or purposeful *resumptive* progressivity. The difference is subtle, but fairly perceptible. Compare the pairs in (26):

- (26) a. She studied *away* / *on* all night.  
 b. We were forced to toil ?*away* / *on* despite the many hardships.  
 c. We staggered ?*away* / *on* in the dark in search of shelter.

As described in the previous section, *away* conveys a slightly more effortless or purposeless continuation than does *on*, which suggests that, as an aspectual particle, *on* selects more force-dynamic predicates. This may be more evident in the examples in (26b and c). A second observation has to do with verbal aspect. Curiously, *on* slightly disfavors progressive verb forms, preferring simple tense inflection instead:

- (27) a. He read *on* (despite the noise).  
 b. \*He has read *on*.  
 c. ?He is reading *on*.

Third, unlike the case of *away*, it is perfectly acceptable with verbs of motion like *go*, *come*, or *move*:

- (28) a. He went *on* reading.  
 b. Come *on*! We'll be late.  
 c. He's finally moving *on*.  
 d. She drove *on* while looking for an exit.

Four, because the emphasis is on the continuation of a process itself, *on* strongly disfavors overt direct objects, although there may still be a sense of an implicit object or goal:

- (29) a. He sang *on* (to the end of his song), despite their criticism.  
 b. \*He sang his song *on*, despite their criticism.  
 c. \*He sang *on* his song, despite their criticism.
- (30) a. ?She drove the car *on*, while searching for an exit.  
 b. \*She drove *on* the car, while searching for an exit.
- (31) a. \*He cooked *on* with his soup.  
 b. ?He cooked *on*, despite our nasty comments about his culinary talent.

We should not be at all surprised, then, that aspectual *on* also tends to disfavor verbs which are inherently telic (the way phrasal verbs are). It is not used with verb-particle constructions or with phrasal verbs, whether they contain *on* or not:

- (32) a. \*He spent the morning trying *on* shoes *on*.  
 b. \*He depended on her *on*, even though they no longer lived together.  
 c. \*She's still yelling at him *on*, despite the complaints from the neighbours.

Aspectual *on* may have originated with spatial usages tied to continued motion, as indicated in Figure 4 and discussed below. Nevertheless, the aspectual meaning conveys a sense that the action continues despite a possible interruption or expectations of cessation, as indicated by the broken line in front of the processual TR.

The link between continued motion and continued actions seems especially strong in the case of *on*. First of all, there are many expressions in English with prepositional *on* used to indicate an ongoing journey through space:

- (33) a. *on* one's way  
 b. *on* a trip / an errand / a mission  
 c. an *ongoing* journey  
 d. *Onwards!*

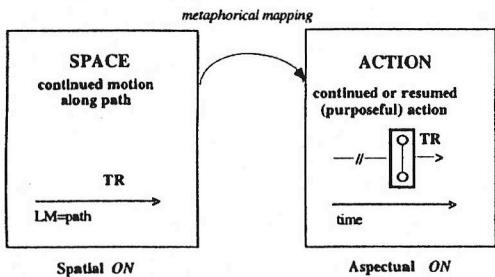


Figure 4. Metaphorical origins of aspectual ON

More relevant, however, may be the fact that in earlier stages of English, one form of the progressive was overtly locative, formed with a verbal noun preceded by a locative preposition, most often *on*, but *at* and *in* also. In (34), I have given an example from the OED from the 14th century:

- (34) While þe masse is on syngynge; [...] while þe gospel was on redyngne. (1387)

As Hatcher 1952, Bybee 1988, and others have noted, vestiges of this usage live on in colloquialisms like those in (35):

- (35) a. *A-hunting we will go.*  
b. *I'm a-hoping to see him before he leaves.*  
c. *He's a-fixin' to get a spanking.*

or paraphrases like those in (36):

- (36) a. *He is living / He is alive.*  
b. *He is praying / He is at prayer.*

The point is, *on*, a locative term, has a long association with present participles, if not progressive aspect. Let me add that aspectual *on* may also have its origins in a host of idiomatic phrasal verbs with *on* like *keep on*, *carry on*, *come on*, *go on*, *hold on*, *take on*, *continue on* which denote continuity and which sometimes take gerundive complements. Many of these phrasal verbs with *on* can be paraphrased by a verbal form of the gerundive complement and aspectual *on*.

- (37) a. *Keep on smiling* ( $\approx$  *Smile on*).

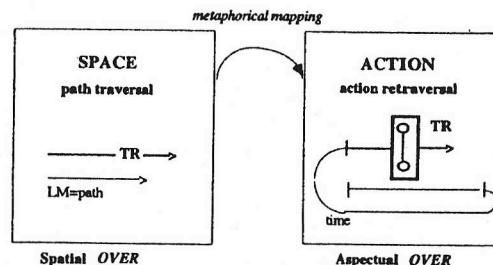


Figure 5. Metaphorical origins of aspectual OVER

- b. Carry *on* (working), soldier ( $\approx$  *Work on*, soldier).
- c. Continue *on* (with what you were doing).

### 3.4. Over and SEMELITERATIVE (“CORRECTIVE”) aspect

Let us examine one more locative preposition that definitely carries aspectual meaning, the preposition, *over*. In general, aspectual *over* conveys a sense of iteration, originating no doubt from a spatial sense of traversing a path or, more exactly, retraversing an established path. This spatial sense seems to be metaphorically extended to the domain of intentional action to convey a sense of action reversal, as shown in Figure 5. But unlike inflectional aspects or morphemes which signal iterative or habitual action, *over* tends to indicate a single, second occurrence of an action, i.e., semeliterative aspect. There is, however, something more to the meaning of *over* in its aspectual usage. It conveys a sense that the activity is being repeated for corrective purposes and that it is or was being completed in a slightly different way the second time around:

- (38) a. He did it *over* ( $\approx$  He redid it in a different way).  
b. I'm making the bed *over* as the blanket has come undone.

Let me first note some co-occurrence restrictions. First, the verbs *over* co-occurs with must be transitive and only semi-perfective, as shown in (39):

- (39) a. I made it *over* / \*I made *over*.  
b. I wrote my paper *over* / \*I wrote *over*.

By semi-perfective, I mean that the emphasis must be to a lesser degree on the final stages of the event and more on the process itself, since *over* entails a correction. But, unlike the case with aspectual *on* or *away*, the process must be construed as bounded or able to reach some sort of conclusion so that it can be judged as successful or not, that is, as having necessitated repeating in the first place. Secondly, aspectual *over* does not co-occur with ditransitives or phrasal verbs, which tend to be inherently telic and, moreover, semelfactive (occurring only once and consisting of a single act):

- (40) a. \*I gave John a haircut *over*.  
      b. ?She is crocheting the sweater for me *over*.  
      c. \*We talked about the proposal *over*.  
      d. \*I cut up the chicken *over*.

Finally, being semeliterative (occurring only twice), *over* cannot occur with verbs prefixed by the iterative, *re-*:

- (41) a. \*I returned the book *over*.  
      b. \*They re-printed the book *over*.  
      c. \*I had the book re-covered *over*.

Perhaps it is easier to compare aspectual *over* with the aspectual meaning of *again*, a closely related, but different aspectual particle, than it is to characterize it directly. Both forms presuppose an original traversal of some path, that is, a completed turn, if you will. Unlike *again*, though, *over* is restricted to a fairly small class of verbs with particular properties. *Over* is very sensitive to a small "degrees of realization" window and only a single, second occurrence of the activity. Moreover, it requires volitionality on the part of the agent and a discernibly different outcome. *Again*, on the other hand, is fairly insensitive to different "degrees of realization", it is infinitely iterative, no volitionality is assumed of the agent, and it does not require a different outcome after each iteration. Compare the paired examples in (42):

- (42) a. He did it *over / again*.  
      b. She fixed it ?*over / again*.  
      c. She took her turn *over / again*.  
      d. He played the cassette ?*over / again*.  
      e. He ruined it / wants it \**over / again*.  
      f. She failed / fell asleep / finished \**over / again*.  
      g. You seem to be resembling him \**over / again*.

- h. I repeated myself \**over / again*.

Next, we turn to some conjoined prepositions having aspectual import.

### 3.5. Conjoined prepositions

Some aspectually inclined prepositions or particles like *on*, *off*, *over*, and *again*, also surface in coordinated pairs which have their own aspectual force. Space does not permit me to go through these examples in detail, but I would like to note that many of these conjoined prepositions carry different specialized meanings than their singleton counterparts and that they are often used in contexts unavailable to the single form. Moreover, they signal very particular though, again, minor aspectual categories:

- (43) *On and on* and EXTENDED DURATIVE aspect  
      a. She droned *on and on*.  
      b. He worked *on and on* through the night.  
      c. She drove *on and on* looking for a motel.  
      d. He talked *on and on* (on many subjects).  
          [Compare: He talked *on* (\*on many subjects).]  
      e. He cooked *on and on*. [Compare: ?He cooked *on*.]
- (44) *On and off* and INTERMITTENT aspect  
      a. They're together *on and off* / \**on* / \**off* / \**on and on*.  
      b. He worked away at it *on and off*.  
      c. He cooks dinner *on and off*.  
      d. ?She likes him *on and off*.
- (45) *Over and over* and ITERATIVE aspect and *again and again* and HABITUAL aspect  
      a. He tried to fix it {*over and over / again and again / over and over again / \*over / again*}.  
      b. I repeated myself {*over and over / again and again / \*over / again*}.  
      c. They saw each other {*over and over / again and again / \*over / again*}.  
      d. He failed the exam {*over and over / again and again / \*over / again*}.  
      e. He fell asleep {*over and over / again and again / \*over / again*}.

- f. She burst into tears {*over and over / again and again / \*over / again*}.
- g. He took his turn {*over and over / again and again / over / again*}.

Unlike singleton *over* and *again*, the differences between *over and over* and *again and again* are not very significant. Indeed, they often combine to form the sequence *over and over again*, as exemplified in (45a), which means roughly the same thing and has the same distribution.

### 3.6. Prepositional conjunctions and INCREMENTAL aspect

Finally, I note in passing the existence of some conjunctive uses of the prepositions, *after*, *upon*, and *by*, which seem to carry an aspectual quality. In most cases, the conjoined elements are not restricted to time nominals, as shown in (46a–b), (47a), and (48a), for these prepositions can conjoin any nominal which figures as a salient component of some generic event or habitual activity, as shown in (46c–f), (47b) and (48b), or a nominal which stands metonymically for time, as in (48c–d). In general, these conjoined expressions convey a sense of incremental progression through and activity or even incremental accomplishment, depending on the meaning of the overall predication.

- (46) a. time *after* time / day *after* day (*after* day) / week *after* week  
(week \**before* / \**at* / \**on* / \**into* week)
  - b. one *after* another / step *after* step
  - c. She had dream *after* dream about her ex-husband.
  - d. He watched video *after* X-rated video.
  - e. Woman *after* woman gave birth to a stillborn baby in the contaminated area.
  - f. Baby *after* baby was born dead in the months following Chernobyl.
- (47) a. For week *upon* week, nothing happened.
  - b. He read book *upon* book about his hero.
- (48) a. After the operation, she felt herself getting stronger day *by* day.
  - b. One *by* one, the mourners filed past.
  - c. We'll succeed if we take things step *by* step (≈ a step *at* a time).
  - d. Little *by* little, we reached our destination.

### 4. Conclusion and prospectus

Perhaps we can best take stock of the fairly pronounced interaction between a preposition behaving aspectually, morphological aspect, inherent aspect, and verb transitivity, by looking at just a few paradigmatic cases, as given in (49). The point to emphasize is that the acceptability of each sentence in (49) is different depending on the particular preposition or coordinated prepositions used. Each of these prepositions or prepositional collocations, in its aspectual guise, has more or less found a unique ecological niche. Just as the prepositions carve up space differently, so too do they differentially partition the aspectual territory.

- (49) a. She fell asleep {\*away / \*over / \*on / again / on and on / on and off / over and over / again and again}.  
(*fell asleep* = INTRANSITIVE; INCIPIENT)
- b. He finished {\*away / \*over / \*on / again / \*on and on / \*on and off / over and over / again and again}.  
(*finished* = INTRANSITIVE; PERFECTIVE)
- c. She's continuing (?away / \*over / on / again / on and on / \*on and off / over and over / again and again).  
(*is continuing* = INTRANSITIVE; PROGRESSIVE)
- d. He blinked {away / ?over / on / again / on and on / on and off / over and over / again and again}.  
(*blinked* = INTRANSITIVE; ITERATIVE)
- e. She ran {\*away / ?over / on / again / on and on / ?on and off / over and over / again and again}.  
(*ran* = INTRANSITIVE; IMPERFECTIVE; DIRECTIONAL)
- f. He upset her {\*away / ?over / \*on / again / on and on / \*on and off / over and over / again and again}.  
(*upset someone* = TRANSITIVE; PERFECTIVE)
- g. She killed him {\*away / \*over / \*on / \*again / \*on and on / \*on and off / \*over and over / \*again and again}.  
(*kill someone* = TRANSITIVE; SEMELFACTIVE, TELIC)
- h. Since the police were unable to catch the serial killer, he murdered {away / ?over / on / again / on and on / on and off / over and over / again and again}.  
(*murder* = INTRANSITIVE; IMPERFECTIVE)

This paper has not been about grammaticalization of prepositions per se, since the prepositions are already highly grammaticalized. My aim has been to highlight one such grammaticalized role that is often overlooked in catalogues of prepositional function: that of aspectual particle. This function is evidenced by a number of the English prepositions. Such prepositional heterosemy or polyfunctionality allows us to extend the range of aspectual categories that we can code in English and to make several fine-grained aspectual distinctions that verbal inflection is not always capable of making. The data I have presented here do not exhaust the entire inventory of prepositions being used aspectually. For example, *along* and *back* are two prepositions that must also be examined for aspectual content. I note, too, that both *about* and *to* as in *She's about to have a baby* carry a definite prospective or impending quality. The point is that prepositions, as a class, have taken on the functional role in English of signalling aspect, especially for *minor* aspectual categories, and have done so rather seamlessly as extensions from their canonical spatial senses.

While there is no denying that, when used aspectually, the semantic content of the prepositions is fairly schematic, such meaning is, however, present and discernible. Though semantically schematic and overwhelmingly grammatical in function, these aspectual particles are no less important to the overall meaning of the predication than are their full-fledged lexical counterparts. And they do seem to be related to them semantically, although it remains to be seen empirically or experimentally how close or far native speakers assess the semantic relationships. While most cognitive linguists would probably never dismiss prepositions, in whatever guise, as empty particles, I urge that, among other use types, aspectual usages of prepositions be recognized and studied and integrated into the full panoply of prepositional meaning and function. It is only with a complete catalogue and understanding of *all* usage types that we can start to address the theoretical implications that the multivariate behavior of prepositions have on models of lexical representation and debates about prepositional monosemy, homonymy, polysemy, or far more probably, heterosemy.

## Notes

1. The research project of which this paper constitutes a part is supported by grant #410-930205 from the Social Sciences and Humanities Research Council of Canada.

2. This paper benefitted greatly from helpful discussion following its presentation at the third conference of the ICLA, in Leuven, Belgium. Many discussants suggested that I use the term *akitionsart* (to reflect what they felt was a clearly lexicalized coding of inherent aspect) rather than *aspect* (which is usually reserved for grammaticalized expression of inherent aspect) in my title and throughout my talk when referring to the aspectual contribution of the prepositions. I have not chosen to follow their suggestions, intending instead, in characteristically non-European fashion (cf. Comrie 1976: 6–7 or Frawley 1992, Chapter 7), that my use of *aspect* throughout this paper be interpreted neutrally to mean the way in which an event is construed as distributed through time (cf. Talmy 1985) rather than the more narrow sense of inflectional aspect marked on the verb.
3. Poustma 1926 used the term *particle*, which was defined as "inflectionally inert", to cover, among other things, prepositions being used grammatically.
4. Formal properties that have been used to distinguish satellites from prepositions, with which they share phonetic content, are closer placement vis-à-vis the verb, their receiving heavy stress vs. the light stress prepositions receive, their ability to not take an overt complement, and the possibility of their being "topicalized" or otherwise "dislocated". Cf. Talmy 1985 or Rauh 1991 for further discussion.
5. A number of arguments, such as the felicity of the proposed PPs, are usually advanced for treating the *in*-type phrases as verbal modifiers and the *for*-type phrases as sentential ones. Although such structurally-based distinctions hardly constitute a thorough semantic analysis, I will not be treating *in* and *for* phrases in this paper.

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