A cognitive analysis of the use of prepositions and adverbial particles in English

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The present paper discusses motivations for the distinction between the use of prepositions and adverbial particles in English. To that end, it analyzes the frequency of prepositions and their adverbial particles in the *British National Corpus* (*BNC*), specifying four factors that motivate each preposition's tendency to be used either as a preposition or a particle. As shown in previous literature, prepositions' complement NPs are not linguistically expressed in particles (Bolinger 1971). Examples of prepositions and particles are shown in (1) and (2).

(1a) He came <u>in</u> *the room.*　　　(2a) He came <u>in</u>.
(1b) He put the glove <u>on</u> *his hand.*　　　(2b) He put the glove <u>on</u>.
(1c) He wiped the dirt <u>off</u> *the table*.　　　(2c) He wiped the dirt <u>off</u>.

In cognitive linguistics, the distinction between prepositions and particles has been captured in terms of the foregrounding and backgrounding of landmarks (LMs) in image-schemas (Lakoff 1987; Langacker 1987; Lindstromberg 2010). Though prepositions and particles share the same image-schema, prepositions highlight landmarks, while particles do not (see figures below). However, under what conditions LMs are foregrounded or backgrounded has rarely been discussed in cognitive linguistics. To address these issues, this study investigates the ratio between prepositional and adverbial uses of 45 major prepositions in the *BNC*, and attempts to find cognitive motivations that influence the distinction between these uses.

The results are shown in the table 1 below, which gives the frequency of prepositions and adverbial particles, and their percentage in the *BNC* (examples were collected using the *BNC* 'parts-of-speech' tag). The table suggests that some prepositions, such as *out*, *up*, *down*, *off*, and *below*, tend to be used as particles while others, such as *of*, *to*, *for*, and *with*, are exclusively used as prepositions. The different percentages in the table suggest that four characteristics about trajectors (TRs) and LMs might motivate prepositional and adverbial uses of prepositions. First, dynamic prepositions tend to be used adverbially more than static prepositions. That is, a movable TR is more prominent than a static TR because the path of the TR is also focused. So the relative importance of a LM decreases and the complement NP is not expressed, e.g., *She fell down* vs. *The cat is under the table* (Boers 1996: 36). Second, prepositions illustrating goal-directed movement, e.g., *at*, *for*, and *to*, tend to be used as prepositions more often than those illustrating non-goal-directed movement, e.g., *up* and *down*, because a goal is likely to function as a LM. Third, source-oriented directional prepositions are more likely to be used adverbially than goal-oriented ones. Source is usually marked with one of three prepositions: *from*, *off*, and *of*. So source-oriented directional prepositions such as *out*, *off*, and *away*, are often used adverbially – in combinations such as *out of*, *off of*, and *away from*, while goal-oriented prepositions usually take a complement NP that shows the goal of a path. Fourth, some static prepositions, e.g., *below*, *above*, and *around*, tend to be used adverbially when their LM refers to a deictic centre, e.g., *mentioned <u>above</u>*, *protesters are gathering <u>around</u>*. With these findings, this paper sheds light on the cognitive motivations for the use of prepositions and particles.

References

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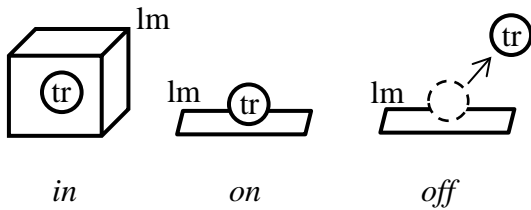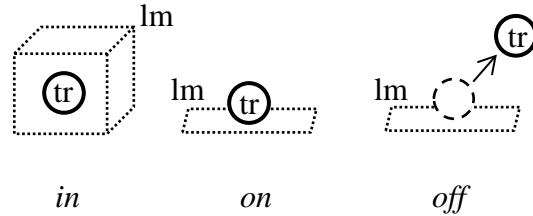
in *on* *off*

Figure 1. Image-schemas of prepositions

in *on* *off*

Figure 2. Image-schemas of adverbial particles

#	prepositions	Prep. use	Adv. use	% Adv.	#	prepositions	Prep. use	Adv. use	% Adv.
1	*out*	3963	148892	97%	24	*within*	44420	1280	3%
2	*up*	22542	177054	89%	25	*by*	504476	7216	1%
3	*down*	17465	84943	83%	26	*without*	44270	509	1%
4	*off*	29452	59121	67%	27	*after*	96537	938	1%
5	*below*	5391	8710	62%	28	*between*	88930	306	0%
6	*around*	25986	30082	54%	29	*beside*	5359	14	0%
7	*over*	80369	83677	51%	30	*of*	2885104	0	0%
8	*along*	13607	12629	48%	31	*to*	912104	0	0%
9	*above*	13214	9317	41%	32	*for*	824012	0	0%
10	*about*	150569	52096	26%	33	*with*	639485	0	0%
11	*before*	45272	13635	23%	34	*at*	465764	0	0%
12	*through*	75106	18614	20%	35	*from*	404197	0	0%
13	*on*	650431	127259	16%	36	*into*	157446	0	0%
14	*behind*	19073	3280	15%	37	*against*	54816	0	0%
15	*across*	20704	3344	14%	38	*during*	43515	0	0%
16	*under*	54804	8276	13%	39	*toward(s)*	28395	0	0%
17	*since*	20203	2810	12%	40	*upon*	22802	0	0%
18	*near*	13479	1585	11%	41	*among*	22439	0	0%
19	*beyond*	10137	1181	10%	42	*until*	20227	0	0%
20	*like*	101950	8749	8%	43	*despite*	14350	0	0%
21	*in*	1807475	151256	8%	44	*onto*	6047	0	0%

| 22 | *beneath* | 4403 | 368 | 8% | 45 | *till* | 2870 | 0 | 0% |
| 23 | *throughout* | 11451 | 809 | 7% | | | | | |

Table 1. The percentage of the frequency of prepositions and adverbial particles