

ON THE CATEGORIZATION OF LOCATIONAL EXPRESSIONS: A FUNCTIONAL ACCOUNT*

ANA IBÁÑEZ MORENO
Universidad de La Rioja

ABSTRACT. *This paper consists of a critical review of how spatial prepositions and adverbial particles have been treated in the literature. After examining traditional grammars' description of locational expressions until the present moment, some of the main and most recent ideas related to spatial analysis of prepositions and adverbs are put forward. These two opposed positions in relation to the way of categorizing them are presented and discussed. As a result of the data gathered, and starting from a functional paradigm, a new classification of such items is proposed. Therefore, clear boundaries are established to account for the distinction between prepositions and adverbs.*

KEYWORDS. *Locational expressions, intransitive preposition, prepositional adverb, adjunct preposition, argument preposition.*

RESUMEN. *Este artículo consiste en un repaso crítico al modo en que se han tratado las preposiciones de lugar y las partículas adverbiales en la literatura. Después de examinar el trato que las gramáticas descriptivas tradicionales han dado a estas expresiones de lugar hasta ahora, se presentan algunas de las más importantes y recientes ideas acerca del análisis de las mismas. Así, se comentan estas dos posiciones opuestas en relación con el modo de categorizar las expresiones de lugar. Como resultado de los datos reunidos, y partiendo de un paradigma funcional, se propone una nueva clasificación de dichos elementos léxicos. Por tanto, se establecen límites claros que dan cuenta de las diferencias entre las preposiciones y los adverbios.*

PALABRAS CLAVE. *Expresiones de lugar, preposición intransitiva, adverbio preposicional, preposición de adjunto, preposición de argumento.*

1. INTRODUCTION

This work revises the literature related to the classification of locative expressions until the moment. The reason is the lack of agreement among the different schools, and even authors, in the way of categorizing and defining them. Traditionally, spatial adverbs

and prepositions have been considered as interrelated word classes. However, this idea is based on a rather superficial criterion: the fact that they share many of their forms. On one side, they are distinguished in terms of their syntactic organization. Thus, prepositions are said to be followed by an object complement, and adverbs to appear alone or complemented by any object which is not a noun phrase (hereafter NP). Thus, prepositional objects have to be, according to tradition, NPs. However, more recent discussions have emerged in the past years: some authors like Huddleston & Pullum (2002) defend the view that locational prepositions can be followed by any type of object complement which performs any function, such as a prepositional phrase –henceforth PP–. Even more, these authors (2002), as well as others (Van Valin & LaPolla 1997) state that prepositions can appear alone. In this sense, they can be transitive, if they are followed by an object complement, or intransitive, if they are not¹:

- a. Peter put the book *down the table*
 - b. Peter put the book *down*
1. *Different uses of the locational word down.*

Down in (1.a) functions as a transitive preposition, while in (1.b) it works as an intransitive one. This new classification brings about a number of problems for the grammatical organization of languages. Therefore, it is critically examined in this paper. This review is done under the framework of functional grammars, in the line of Role and Reference Grammar –hereafter RRG– (Jolly 1991; Van Valin 1993; Van Valin & LaPolla 1997) and Functional Grammar –hereafter FG– (Hengeveld 1992; Dik 1997; Samuëlsdorff 1998). Additionally, some cognitive notions in the line of Talmy (1975) and Jackendoff (1983) are also applied in order to explain the conceptual factors that underlie human orientation, which are relevant for the categorization of locative expressions.

2. THEORETICAL ISSUES AND REVIEW OF THE LITERATURE

Traditionally, grammars (Quirk *et al.* 1985; Downing and Locke 1992; Givón 1993)² have conceived spatial and temporal adverbs and prepositions as interrelated words or functions. Therefore, both an adverb (phrase) and a PP are understood as modifiers in the clause. In fact, they share many of their forms, especially those adverbs or prepositions related to deictic concepts, that is, space and time. Focusing on the dimension of space, Downing & Locke (1992) show how *outside*, for instance, can function as a preposition or as an adverb. This is exemplified in (2):

- a. It was raining *outside* just a moment ago.
 - b. There is a cat *outside* the garage that doesn't stop crying.
2. *Locational expressions performing different functions*

According to these grammars, in (2.a) *outside* functions as an adverb, while in (2.b) it functions as a preposition, since it is followed by a prepositional complement, the NP *the garage*. The whole PP is modifying the argument *cat*. By contrast, *outside* in (2.a) is not followed by any complement, so it cannot be a preposition. Since it modifies the whole clause, it is classified as an adverb. Semantically, both the PP and the adverb are functioning as modifiers here; what changes is the scope of the clause they modify. Due to the close relationship between these two word classes, a word such as *outside* without a complement is called *prepositional adverb*. The recent controversial issue has emerged in relation to this: authors such as Van Valin & LaPolla (1997) and Huddleston & Pollum (2002) have redefined the functional scope of articulation of both locational expressions in the clause.

Focusing on the traditional classification, the syntactic functions of PPs are said to be the following, according to Quirk *et al.* (1985: 657-658):

(3)

I. **Postmodifier in a NP:** The girl *in black*.

II. **Adverbial:**

a. Adjunct: That girl was singing *in the street*.

b. Subjunct: *In my view*, this is not correct.

c. Disjunct: *In fair terms*, she did not pay us well.

d. Conjunct: *In the second place*, I will talk about war films.

III. **Complementation:**

a. Of a verb: I am looking *at this picture*

b. Complementation of an adjective: She is good *at maths*

As can be observed in (3.II), an important range of PPs are said to function as adverbials. That is, the adverbial functions can have the same structure of PPs. Then, I here focus on both the semantic and syntactic structure of all those expressions that perform locative functions.

In this line, Givón (1993) approaches this issue from a different perspective, though he arrives at the same idea: syntactically, prepositions are markers of the role of indirect object in the clause in English, and he considers that they may be treated as prefixes of the NP that follows them. Semantically, prepositions can perform a number of semantic roles, which are outlined in (4):

(4)

location, beneficiary, duration, time, instrument, manner, company, agent.

Some of these roles can also be performed by adverbs, whose semantic roles are, according to Givon (1993), the ones given in (5):

(5)

modifier, manner, time, epistemic, evaluative, emphatic.

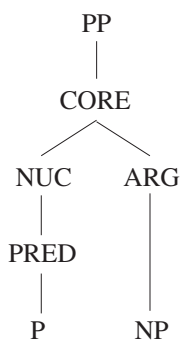
Since there are some aspects of Givón's (1993) classification that deserve more attention, they are further developed in section 3.

3. CRITICAL PERSPECTIVE OF WELL-ESTABLISHED PRINCIPLES

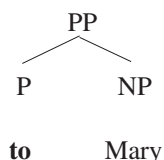
There are interesting questions in the statements made by Givón (1993), mentioned in section two above, which are going to be developed here: in the first place, this author (1993) defends the traditional view that the object complement of the preposition has to be a NP. In the second place, the fact that he (1993) defines prepositions as indirect role markers is in line with functionalism. However, it is also a too reductionist position, since the function of the NP complement of a preposition is not always an indirect object. In this sense, the RRG framework is more precise, since a distinction is established between marking and non-marking prepositions. Marking prepositions function as case markers of the NP. Such NP is an argument of the verb and an indirect object, in the sense that it is introduced by such preposition into the clause. This preposition does not introduce any meaning into the clause, but it depends on the verb. Non-marking prepositions, on the other hand, have independent meaning from the verb, and their complement NP is not an argument of it. The PP as a whole modifies the whole clause, and it has an independent grammatical status, where the preposition is the nucleus of the predicate and the NP is its argument. Let us see an example of both in the illustrations below:

(6)

a. Non-marking preposition

**in** the library

b. Marking preposition



As can be seen, prepositions are analyzed differently in each of these examples, since the syntactic and semantic structure of the PP in (6.a) and in (6.b) is not the same. Givón (1993) only refers to prepositions as in (6.b), where *to* marks the role of indirect object in a sentence such as *I gave the book to Mary*. However, this author (1993) does not take into account prepositions such as the one in (6.a), which neither mark an indirect object nor depend on the verb. This is evidenced by the fact that if they are changed the meaning of the whole PP changes. That is, it is not the same to say *in the library* or *outside the library*. In (6.b), by contrast, no preposition other than *to* can fit the head of such PP if the verb is *give*. This is because it is the verbal predicate itself which determines the preposition in question, and the fact that such preposition is used depends on the case-marking system of the language. Locational prepositions are of both the marking and the non-marking type. Going further, it is important to remark that there is another kind of PP which stands in the middle between the two types explained. It is called argument-adjunct PP (in RRG terms), because the preposition marks an argument of the verb, as marking prepositions do, but the prepositional head is predicative –that is, it has a meaning which is independent from the verb–, as occurs to non-marking prepositions. However, since I am not dealing with clausal structures, they are all considered equally in this piece of research.

Another interesting issue is that Givón (1993) does not include the semantic role of location for adverbs, while he (1993) does for prepositions. This is not correct, for a number of reasons: in the first place, this author includes the semantic role of time for adverbs, but by ignoring the locative role he does not take into account the interrelation of the temporal and the spatial dimension³. Cognitively, it could be said that time is a metaphorical space point. In the second place, he implicitly ignores the fact that spatial adverbs such as *here* or *there* exist. Thus, his classification of adverbs is incomplete.

Focusing now on the syntactic structure of locative expressions, in (6) we should pay attention to the fact that both prepositions are followed by a NP complement. As for adverbs, they either occur alone or are followed by an object complement other than a NP. Therefore, PPs and adverbial phrases –AdvPs– are structurally complementary. The fact that they are interrelated is demonstrated when we substitute the PPs in (3.II) by AdvPs. This is shown in (7):

(7)

- a. Adjunct: That girl was singing *there*.
- b. Subjunct: *Apart* from that, this is not correct.

- c. Disjunct: *Fairly*, she did not pay as well.
- d. Conjunct: *Secondly*, I will talk about war films.

In (7.a) the deictic adverb *there* carries out the same function of location as the PP does in (3.II.a). In the case of (7.b) we have an AdvP, since the adverb *apart* is complemented by the PP *from that*. This classification seems to be coherent, but as I have mentioned above, not all authors agree with this distribution. As a result, and once seen that traditional functional views on spatial expressions are not so well established, I will review the perspective of recent grammatical models.

4. CRITICAL VIEW OF THE RECENT CATEGORIZATIONS OF SPATIAL EXPRESSIONS

Despite the traditional classification of spatial adverbs, it must be recognized that adverbs are a very heterogeneous and puzzling word class. As a result, more recent alternative views from the one presented so far have emerged. A salient one is Huddleston and Pollum's (2002), which consists of a reduction of the scope of the functions of adverbs, and a subsequent broadening of the functions of prepositions. Thus, they (2002: 598) note: "In our framework we substitute 'noun phrase' for the traditional 'noun or pronoun'". Apart from simple terminological matters, what is controversial and innovative is that they "adopt a significantly different conception of preposition", in the sense that they can be heads of phrases that admit dependents of different kinds, not only NPs. This is illustrated in (8):

- (8)
 - a. He run *up* *to the church* [PP]
 - b. I was thinking *about* *where you bought that shirt* [Interrogative clause]
 - c. They took me *for* *dead* [AdjP]
 - d. I have not known anything about that *until* *yesterday* [AdvP]

The words *up*, *about*, *for* and *until* in these clauses would traditionally be labelled adverbs, which, together with the complements following them, would be called AdvPs. Let us revise these examples in order to see which position –whether the traditional or the innovative one– is more accurate.

In the first place the clause in (8.a) is ambiguous: we may consider *run up* as a phrasal verb and *to the church* as a PP of the prototypical⁴ kind, where *to* is the preposition and *the church* is the NP complement of that preposition. On the other hand, we may consider *run* as the verb alone and *up to the church* as a locational expression, where the complement of the prepositional head *up* is a PP. I consider *up* in this clause an adverb, and not a preposition, for the following reason: *up* functions here as a modifier of the verb, while the PP following it affects the whole clause. *Up*, therefore, cannot be the head of a complement if it has a different scope of influence. Besides, the

PP *to the church* is more important for this clause. *Up* indicates the direction of the action, but it does not provide the clause with a goal, as the PP does. If the PP *to the church* is omitted, then the *Aktionsart*⁵ interpretation of the verb changes: it is not an active accomplishment, but just an activity. However, if the adverbial particle *up* is omitted, the verbal *Aktionsart* remains. All this is exemplified in (9):

(9)

- | | | | |
|-------|---------------|---------------|-----------------------|
| a. He | run up | to the church | |
| | [+dynamic] | [+telic] | ACTIVE ACCOMPLISHMENT |
| b. He | run [...] | to the church | |
| | [+dynamic] | [+telic] | ACTIVE ACCOMPLISHMENT |
| c. He | run up | [.....] | |
| | [+dynamic] | [-telic] | ACTIVITY |
| d. He | run [...] | [.....] | |
| | [+dynamic] | [-telic] | ACTIVITY |

As is observed above, the PP whose head is *to –to the church–* has more influence on the clause than *up*. As a result, this particle cannot be considered to be the prepositional head of such PP. Thus, this particle can not be the adverbial head of such PP either. *Up* is just an adverb which modifies the verb but which does not affect its mode of action. After analysing fifty sentences more with this similar structure I have reached the conclusion that whenever there are two locational expressions together of the type “P” (particle/preposition), in O’Dowd’s (1998) terminology, –that is, words that can either be a preposition or an adverbial particle depending on the context– the one which is nearest to the phrasal complement functions as a preposition and the other as an adverbial particle. There can not be two prepositions together. Therefore, it can be stated that prepositions can not take a PP as a complement.

With respect to the clause in (8.b), I consider that *about* functions as a preposition, even if its object complement is not a NP. The reason is that it works as a linker between the verbal predicate and the subordinate clause. This idea goes against the traditional view. At this point, a redefinition of prepositions is required: a preposition is, in my view, a linker between two elements in the clause, which are generally the verbal predicate and an argument. Prepositions may take phrasal complements of any word category, with the only requirement that they are referential. Thus, a preposition is followed by a referential landmark and an adverb is followed either by a predicative landmark or it occurs alone.

With respect to the example in (8.c), it has been extracted from Huddleston & Pollum (2002: 599), who also defend that prepositions can be complemented by an adjective (phrase). In this case I disagree with these authors (2002) in considering *dead* a complement of the preposition *for*, since the expression *to take someone for* plus an adjective is idiomatic and can not be assumed to be representative of all constructions of the type [preposition + adjective]. Even more, not all prepositions which appear beside

an adjective in a clause form a PP. The preposition is usually dependent on the verb and it is usually attached to it in the idiomatic relationship mentioned.

Finally, with respect to the example in (8.d), we have a preposition complemented by an adverb. Huddleston and Pollum (2002: 599) give the following example in this respect:

(10)

I did'nt know about it [*until recently*]

If we compare this example with the one given in (8.d), we can observe that in both cases the preposition is *until* and in both cases the adverb is of time –*until* is a preposition attached to temporal adverbs–. The reason is that the only adverbs that can function as complements of a preposition are of space and time, since they are the only types which possess referential properties. They do not only orient, but they also link what is predicated in the clause to a situation. Martín Arista & Ibáñez Moreno (2004) have already noted the referential potential of time and space adverbs. In this line, they state that FG should recognize the existence of the adverbial term phrase, which stands in a middle position between reference and predication: it resembles satellites in its modifying quality, and resembles term phrases in its referential quality. Prepositional complements must be referential and adverbial complements must be predicative. It should be remembered that the concepts of *reference* and *predication* as elementary basic for any linguistic explanation come from functional theories such as Dik's (1997) FG.

5. COMPLEMENTATION PATTERNS FOR LOCATIVE EXPRESSIONS:

THE DISTINCTION BETWEEN REFERENCE AND PREDICATION

In relation to time and space adverbs there are also some contradictions in recent categorizations. Van Valin and LaPolla (1997) neglect the existence of spatial adverbs, and call them *intransitive prepositions* instead. However, they do not reject the existence of time adverbs. This is not admissible, since time and space are interrelated categories and must not be classified into two separate word classes. Besides, focusing on the dimension of space, those spatial words that do not take complements cannot be considered prepositions because they carry inherent referential properties, which means that they stand in a paradigmatic relation with PPs themselves:

(11)

- a. Put the book *here* (in this *place*)
- b. Put the book *there* (in that *place*)
- c. Take the ball *downstairs* (down the *stairs*)
- d. Take the ball *upstairs* (up the *stairs*)

As is observed in (11), adverbs are used refer to first order entities in the world –*place* in (11.a) and (11.b) and *stairs* in (11.c) and (11.d)–. These entities, in terms of FG, are represented by terms, which are referential and prototypically realized through nouns or NPs. This shows that spatial adverbs usually perform the function of PPs, since they link two elements in the clause, though not explicitly, since the referential argument which is linked is included within the adverbial meaning. If we accept spatial adverbs as adverbial term phrases, we cannot neglect their relevance for functional grammars. Besides, Van Valin and LaPolla (197) only propose to consider prepositions as transitive or intransitive in the conceptual field of space and time, which provides further evidence for the inconsistency of such a proposal.

To consider a locative item a preposition or an adverb depending on whether its complements are referential or predicative (respectively) is more coherent with a functional perspective of language, which attempts to accommodate to the dynamics of language use. Thanks to it, constructions such as interrogative clauses are admitted as prepositional complements, as well as place and time adverbs are recognized. A description of language by avoiding established closed-class categories with closed, fixed up syntactic patterns is more productive and explanatory.

6. CONCLUSIONS

Once revised the two currents (the traditional and the innovative) of discussion in relation to spatial expressions, it has been seen that none of them is totally accurate. A middle point should be established between the two positions. Traditionally, only NPs were considered to be the possible complements of prepositions. This is because the noun is the prototypically referential word class. Opposite to this view, recent approaches ignore the category of adverbs and claim that prepositions can take any type of complement. However, after revising different constructions functioning as complements of prepositions or adverbs, we see that PPs cannot be prepositional complements, contrarily to what Huddleston & Pollum (2002) defend, since they are predicative.

With respect to AdjPs, they can neither be complements of prepositions. The preposition in question is an operator of the verbal predicate, and the AdjP is independent from it. As for adverbs, only time and space adverbs can behave as complements of a preposition, due to their referential properties. The key to decide whether any linguistic construction is the complement of a preposition or of an adverb is to look at its referential properties: if it is referential or allows for the possibility of being substituted by a pronoun –which is prototypically referential–, it is a prepositional complement. If it is predicative, it is an adverbial complement. Prepositions link, while adverbs situate⁶. Prepositions, due to their linking properties, always take a complement, while adverbs allow for the possibility of appearing alone, since they have situating properties –and their linking quality is implicitly tied to the situation, not to the elements of the clause–. In fact, neither

are NPs the only possible complements of prepositions nor can all types of phrases carry out such a role.

NOTES

* This paper has been funded through the research project ANGI 2003/08.

1. This idea, as can be realized, is controversial in the sense that the function of adverbs as locational is eliminated and substituted by the function of spatial prepositions. For more information on this issue, see Ibáñez Moreno (2004).
2. See Martín Arista (1999) on different functional schools.
3. For more information on the issue of the relation of the temporal and the spatial axes see Martín Arista & Ibáñez Moreno (2004).
4. The notion of prototypicality is drawn from Taylor (1989), and it is used in accord with the traditional perspective of PPs.
5. The notion of *Aktionsart* –taken from Vendler (1957[1967]) and Van Valin & LaPolla (1997)– is used here to explain and describe the semantic features of verbs. It is a decompositional process which prevents this study from redundant or circular explanations.
6. Adverbs also have inherent linking properties. They link the referents of the clause to the situation they present themselves. This was already noted by Harder (1992). However, in this case I am referring to explicit linkage of elements within the same clause.

REFERENCES

- Dik, S. 1997. *The Theory of Functional Grammar*. Edited by K. Hengeveld. Berlin and New York: Mouton de Gruyter.
- Downing, A & P. Locke. 1992. *A University Course in English Grammar*. London: Prentice Hall.
- Givón, T. 1993. *English Grammar: a Function-based Introduction*. Amsterdam and Philadelphia: John Benjamins.
- Harder, P. 1992. "Parts of speech". *Layered Structure and Reference in a Functional Perspective*. Eds. M. Fortescue, P. Harder and L. Kristoffersen. Amsterdam and Philadelphia: John Benjamins.
- Hengeveld, K. 1992. *Non-verbal Predication: Theory, Typology, Diachrony*. Berlin and New York: Mouton de Gruyter.
- Huddleston, R. & G.K. Pullum. 2002. *The Cambridge Grammar of the English Language*. Cambridge: Cambridge University Press.
- Ibáñez Moreno, A. 2004. "A semantic analysis of locative expressions: The problem of intransitivity in prepositions". *Taiwan Journal of Linguistics* 2: 27-44.
- Jackendoff, R.S. 1983. *Semantics and Cognition*. Cambridge: MIT Press.
- Martín Arista, F.J. 1999. "La gramática de Dik y las teorías funcionales del lenguaje". *Nuevas perspectivas en Gramática Funcional*. C. Butler, R. Mairal, J. Martín Arista and F.J. Ruiz de Mendoza. Barcelona: Ariel.
- Martín Arista, F.J. & A. Ibáñez Moreno. 2004. "Deixis, reference and the functional definition of lexical categories". *Atlantis* 26, 2: 63-74.

- O'Dowd, E.M. 1998. *Prepositions and Particles in English. A Discourse-Functional Account*. Oxford and New York: Oxford University Press.
- Quirk, R., S. Greenbaum, G. Leech and J. Svartvik. 1985. *A Comprehensive Grammar of the English Language*. London and New York: Longman.
- Samuelsdorff, P.O.1998. "Pronouns, adpositions, adverbs and the Lexicon". *The Structure of the Lexicon in Functional Grammar*. Eds. H. Olbertz, K. Hengeveld and J. Sánchez García. Amsterdam: John Benjamins. 267-278.
- Talmy, L. 1975. "Semantics and syntax of motion". *Syntax and Semantics 4*. Ed. J. Kimball. New York: Academic Press. 181-238.
- Taylor, J. 1989. *Linguistic Categorization: Prototypes in Linguistic Theory*. Oxford: Oxford University Press.
- Van Valin, R.D. (ed.). 1993. *Advances in Role and Reference Grammar*. Amsterdam and Philadelphia: John Benjamins.
- Van Valin, R.D. & R. LaPolla. 1997. *Syntax: Structure, Meaning and Function*. Cambridge: Cambridge University Press.
- Van Valin, R.D. 2001. *An Introduction to Syntax*. Cambridge: Cambridge University Press.
- Vendler, Z. 1957 (1967). *Linguistics in Philosophy*. Ithaca: Cornell University Press.