

Aspect inside PLACE PPs*

Christina Tortora

City University of New York (College of Staten Island
and The Graduate Center)

Spanish and Italian (and other Romance languages) exhibit minimal pairs of place PPs (to be distinguished from path, or directional, PPs), where one member of the pair can be characterized as “complex,” and the other as “simplex.” The complex PP involves a lexical preposition in combination with the grammatical preposition *a* (e.g., Italian: *dietro all'albero* ‘behind a the tree’), while the simplex counterpart occurs without *a* (e.g., Italian: *dietro l'albero* ‘behind the tree’). This paper examines a number of different (locative) lexical Ps that can appear in these complex/simplex pairs in both Spanish and Italian, and shows that there is a systematic semantic and syntactic difference between the complex type and the simplex type, which suggests a unified cross-linguistic analysis, despite the fact that Italian seems to differ in certain respects from Spanish. Abstracting away from the differences (which are attributed to, among other things, the different nature of the grammatical preposition *a* in the two languages), the generalization is the following: while the complex PP denotes a space that is unbounded, the simplex PP denotes a space that is bounded (or ‘punctual’). The data and analysis support the view that place PPs, like VPs (and NPs), have their own functional structure, which contains an Aspectual Phrase (the head of which encodes the boundedness feature, instantiated by *a* when the feature has no value). Beyond the syntactic analogy between locative prepositions and nouns and verbs, we also find a semantic analogy, whereby (non-linear, two- and three-dimensional) space is linguistically conceptualized as either bounded or unbounded, much in the way entities (count vs. mass) and events (delimited vs. undelimited) are.

* I am indebted to so many wonderful people for taking the time to discuss Italian, Spanish, Portuguese, French, and Catalan data with me, including Paola Benincà, José Camacho, Ivano Caponigro, Anna Cardinaletti, Guglielmo Cinque, Federico Damonte, Raffaella Folli, Federico Ghedin, Mary Kato, Roberta Maschi, Jaume Mateu Fontanals, Jairo Nunes, Rafael Nuñez-Cedeño, Francisco Ordóñez, Andrea Padovan, Nicoletta Penello, Acrisio Pires, Jean-Yves Pollock, Cecilia Poletto, Liliana Sanchez, Cristina Schmitt, Laura Sgarioto, Marina Tortora, and Raffaella Zanuttini. I should note that some of the Italian data do not reflect all speakers’ judgments. I report the judgments nevertheless, in the spirit of working towards a description of a possible grammar, and I hope that future work will lead to a better understanding of variation in judgments. Future work will also include a discussion of the relevant Portuguese, French, and Catalan facts shared with me by some of the colleagues listed above.

1. Introduction

Based on a subtle interpretive difference between semantically related pairs of locative prepositional phrases in Romance, I argue that space, much like entities and events, are linguistically conceptualizable as either bounded or unbounded, and that this difference has a syntactic reflex.

As an introduction to the problem, let's consider the fact that Spanish and Italian (and other Romance languages) exhibit minimal pairs of PLACE PPs (to be distinguished from PATH, or directional, PPs), where one member of the pair can be characterized as "complex," and the other as "simplex." The complex PP, which can be seen in (1a) for Spanish and in (2a) for Italian, involves a lexical preposition in combination with the grammatical preposition *a*. The simplex counterparts ((1b) and (2b)) occur without *a*:

- | | | | |
|-----|----|--|---------|
| (1) | a. | <i>Juan se había escondido</i> [<i>bosque adentro</i>]. | SPANISH |
| | | Juan se had hidden [forest a.inside] | |
| | b. | <i>Juan se había escondido</i> [<i>dentro del bosque</i>]. | |
| (2) | a. | <i>Gianni era nascosto</i> [<i>dietro a ll'albero</i>]. | ITALIAN |
| | | G. was hidden [behind a the.tree] | |
| | b. | <i>Gianni era nascosto</i> [<i>dietro l'albero</i>]. | |

In this paper, I examine a number of different (locative) lexical Ps that can appear in these complex/simplex pairs in both Spanish and Italian, and show that there is a systematic semantic and syntactic difference between the complex type (1a/2a) and the simplex type (1b/2b), which suggests a unified cross-linguistic analysis, despite the fact that Italian seems to differ in certain respects from Spanish. Abstracting away from the differences (also to be discussed, and to be attributed to, the different nature of the grammatical preposition *a* in the two languages), the generalization is the following: while the complex PP (1a/2a) denotes a space that is unbounded, the simplex PP (1b/2b) denotes a space that is bounded (or "punctual"). The data and analysis I discuss support the view that PLACE PPs, like VPs (and NPs), have their own functional structure, which contains an Aspectual Phrase (the head of which encodes the boundedness feature, instantiated by *a*). Beyond the syntactic analogy between

I would also like to thank Paola Benincà and Marcel den Dikken for reading and (very helpfully) commenting on previous versions of this work, as well as the two anonymous reviewers, and Berit Gehrke, Andrew McIntyre, Peter Svenonius, and the other participants at the Utrecht Conference on the Syntax and Semantics of Spatial P, for exciting discussion. This article, which follows up on Tortora (2005), is a development of Tortora (2006) (which was published as a working paper). This work was supported by two grants from the City University of New York PSC-CUNY Research Award Program (Grants #67317-0036 and #68496-0037).

locative prepositions and nouns and verbs, we also find a semantic analogy, whereby (non-linear, two- and three-dimensional) space is linguistically conceptualized as either bounded or unbounded, much in the way entities (count vs. mass) and events (delimited vs. undelimited) are.

The paper is organized as follows: in section 1, I give a brief overview of the Jackendovian conceptual categories *PATH* and *PLACE* (as subcategories of the supercategory *SPACE*), the notion of (un)boundedness of *PATH*, and the idea that (un)boundedness is also relevant to the category *PLACE*. In section 2 I give an overview of PP data from Italian, examined in Tortora (2005), which confirm that *PLACE* (which represents regions of any dimensionality (including 2D and 3D)), much like *PATH* (1D), is linguistically conceptualizable as either bounded or unbounded, and that this aspect of *PLACE* is encoded syntactically. In this part, I sketch a possible syntactic analysis for the data under investigation. Then, in section 3, I consider similar PP data from Spanish, where we find that the “ground” in the presence of *a* gets a “mass” interpretation (which I claim is connected to the unbounded interpretation of the space); I also discuss semantic and syntactic similarities and differences with Italian, and in section 4 I investigate Italian PPs with mass/plural arguments. In section 5 I conclude.

2. Bounded *PATH*, bounded *PLACE*

Here I review the idea that *PATH* is linguistically conceptualizable as bounded or unbounded (Jackendoff 1983). Given this possibility for *PATH*, I introduce the question of whether boundedness is also relevant to the category *PLACE* (despite the fact that it differs from *PATH* in that the latter represents linear space, while the former represents two- or three-dimensional space). Preliminary linguistic data from Italian suggests that *PLACE* is in fact conceptualizable as such.

To put the discussion in context, consider Jackendoff’s proposal that the conceptual categories *PATH* and *PLACE* underlie locative PPs (where (3a) contains both *PATH* and *PLACE* categories, while (3b) contains the *PLACE* category (examples from Jackendoff)):

- (3) a. *The mouse ran into the room.*
 [Path TO ([Place IN ([Thing ROOM])])]
 b. *The mouse is under the table.*
 [Place UNDER ([Thing TABLE])]

The idea that *PATH* and *PLACE* are two different categories has most recently been pursued (and executed in elaborate syntactic structures) by Koopman (1997) and den Dikken (2003), who argue that the syntax of locative PPs in Dutch can only

be understood if such PPs involve *PATH* and/or *PLACE* as projecting syntactic categories (see section 2).

Now, for the present purposes, we must consider Jackendoff's (1983) observation that the representation of *PATH* does not necessarily involve motion, or "traversal" of the path. Contrast, for example, (4a) with (4b) (from Jackendoff 1983: 168).

- (4) a. *John ran into the house.*
 b. *The highway extends from Denver to Indianapolis.*

While both (4a) and (4b) involve a path, only the former denotes an eventuality that involves any temporal succession (i.e., (4b) is a state, and not an event, in Bach's 1986 terms). Crucially, however, it is important to note that paths which participate in states (i.e., non-motion eventualities) are still conceptualized as either bounded or unbounded. Compare the stative sentence in (4b), which contains a bounded path, with the stative example in (5b), which involves an unbounded path (much like the event example in (5a); examples from Jackendoff):

- (5) a. *The train rambled along the river (for an hour).*
 b. *The sidewalk goes around the tree.*

Sentences such as those in (4b) and (5b) thus illustrate that the linguistic concept of *path*, which is a kind of space, does not have to be associated with any temporal succession. These examples further illustrate, though, that even such non-temporally organized paths are treated as either bounded or unbounded (regardless of the fact that they denote states). Note for example that (5b) can be followed by "...for a piece, and then continues in a straight line" (see footnote 7 in Tortora 2005). Thus, we have evidence that *PATH*, a kind of space, is conceptualized as bounded or unbounded (independent of whether the eventuality that it is a part of is stative or not).

A question which arises, then, is whether the category *PLACE* (which is the other type of linguistic space) is likewise conceptualizable as bounded or unbounded. If so, this would mean that any *PLACE* specified in a stative eventuality (such as (3b), for example) is either bounded or unbounded, much like *PATH* (which is bounded in (4b) and unbounded in (5b)). If this idea is on the right track, what we would find is that boundedness is relevant not only to *entities* (mass vs. count) and *events* (undelimited/delimited), but to a third category, *space* (in the spirit of Jackendoff 1991), which encompasses both *PATH* and *PLACE*. Before I discuss PP data from Italian (and Spanish) which indicate this idea is right, I would like to briefly introduce some Italian data from Cinque (1971) (and subsequently found in Vanelli 1995) which already point in this direction.

As Cinque (1971) notes, Italian has two morphemes for 'here' (and two for 'there'): *qui* and *qua* 'here' (and *lì* and *là* 'there'). For the most part, *qui* and *qua* can be used in the same environment (the same holds for *lì* and *là*). So, if one wishes

to express something like ‘Put the book here,’ either morpheme (*qui* or *qua*) would be appropriate:

- (6) a. *Metti il libro qui.*
 b. *Metti il libro qua.*

Despite the grammaticality of both (6a) and (6b), however, Cinque notes that *qui* (like *lì*) denotes a space which is “punctual,” while *qua* (like *là*) denotes a general, “uncircumscribed” region. As such, there are certain circumstances where use of *qui* (and *lì*) will yield ungrammaticality, as in (7b) (data from Cinque 1971):

- (7) a. *Girava qua e là senza meta.*
 they roamed **qua** and **là** without any purpose
 b. **Girava qui e lì senza meta.*

The sentence in (7b) is unacceptable because roaming around requires open-ended (uncircumscribed) space, something which the morphemes *qui* and *lì* do not denote. And as mentioned above, while there are circumstances under which either (set of) morpheme(s) can be used, the choice of one (*qua* / *là*) over the other (*qui* / *lì*) yields entirely different spatial (aspectual) interpretations. Consider in this regard another example from Cinque (1971):

- (8) a. *I libri erano sparsi qua e là.*
 the books were dispersed **qua** and **là**
 b. *I libri erano sparsi qui e lì.*
 the books were dispersed **qui** and **lì**

Specifically, the sentence in (8a) denotes that books were strewn all over the place, while the sentence in (8b) denotes that there were books in two defined, distinct points (e.g., two distinct piles of books).

The data from Cinque (1971) thus show us that language does encode two kinds of two- and three-dimensional (i.e., non-linear) space: one which we can characterize as punctual (or bounded), and another which we can encode as non-punctual (or unbounded).

In the following section, I will show that language does not restrict this distinction to single lexical items (so, the distinction is not merely encoded in the lexicon). Rather, this distinction shows up in PP syntax, suggesting that aspect (i.e., (un)boundedness) is found among the extended projections of lexical prepositions as well.

3. Prepositions in Italian

As observed by Rizzi (1988), there are certain (what I will term here “lexical”) prepositions in Italian (e.g., *dietro* ‘behind’ or *dentro* ‘inside’) that may occur with

or without the grammatical preposition *a*. This can be seen in (9a) vs. (9b), respectively (examples from Rizzi 1988: 522):

- (9) a. *Gianni era nascosto dietro all' albero.*
 G. was hidden **behind** a.the tree
 b. *Gianni era nascosto dietro l' albero.*
 G. was hidden **behind** the tree

I have deliberately chosen stative examples, to make it clear that the relevant type of space under discussion is PLACE (and not PATH).

I have not provided glosses for this set of examples, because their subtle difference in meaning requires some discussion, which I engage in to some extent here (for issues not touched upon here, including a discussion of the question of which lexical prepositions may occur optionally with the grammatical preposition *a*, see Tortora 2005). P. Benincà notes (p.c.) that (9a) can refer to an event that takes place in a “wider” space, while (9b) can only refer to an event taking place in a “punctual” space. In what follows, I present and discuss various pairs of examples with different lexical prepositions which allow us to isolate this semantic difference more precisely.

3.1 The lexical preposition *dietro*

The examples in (10) isolate the semantic difference between (9a) and (9b) more precisely (note that although these are not stative eventualities, *giocare* ‘play’ is an activity verb, and the PP adjunct ‘behind the tree’ is interpreted as a location (PLACE), not a path):

- (10) a. *Vai a giocare dietro a quell' albero.*
 go.2SG a play **behind** a that tree
 ‘Go play behind that tree.’
 b. **Vai a giocare dietro quell' albero.*
 go.2SG a play **behind** that tree

The ungrammaticality of (10b) can be readily understood in light of the semantic difference noted for (8a) and (8b). That is, predicates such as ‘play’ and ‘run’ denote activities that require a wide, open-ended, unbounded space, which is something that the structure in (10a), with the grammatical preposition *a*, denotes. The *a*-less prepositional phrase in (10b), on the other hand, denotes a bounded (or punctual) space, and as such is incompatible with such predicates. Of course, the predicate in (9) (‘be hidden’) denotes a state that is compatible either with a wide or a punctual space, which is why both prepositional phrases (with and without *a*) are possible.

Understanding the semantic difference between the two possibilities allows us to grasp another set of examples provided by Rizzi (1988: 522) (the interpretation of which he does not discuss):¹

- (11) a. *Vai dietro al postino, che è appena passato.*
 go.2SG **behind** a.the postman, that is just passed
 ‘Go after the postman, he just passed by.’
 b. **Vai dietro il postino, che è appena passato.*
 go.2SG **behind** the postman, that is just passed

As can be seen by the translation, the salient interpretation of (11a) is that the hearer should pursue the postman; this is highlighted by the phrase ‘he just passed by’ (which explicitly suggests that the postman is moving along). It is precisely the presence of *a*, which denotes an unbounded space (i.e., a space that is allowed to flexibly expand and change shape, size, or dimension), that suggests the postman’s onward movement. The example in (11b), on the other hand, cannot be interpreted as ‘follow the postman’; that is, the absence of *a* forces an interpretation in which the space behind the postman is bounded (and hence not allowed to expand or change shape or size). This is why adjunction of the phrase ‘he just passed by’ is nonsensical, yielding ungrammaticality.

In this regard, it is worth considering the grammaticality of the *a*-less PP in (9b) without adjunction of the phrase ‘he just passed by’:

- (12) *Vai dietro il postino.*
 go.2SG **behind** the postman
 ‘Go behind the postman’

The sentence in (12) is interpretable (and grammatical) in, say, a picture-taking event, where the hearer is being asked to place himself directly behind the postman in the photo line-up. Again, here we see that the *a*-less PP is compatible with an event (or state) that takes place in a bounded (circumscribed) space.

To conclude this section on *dietro*: we have seen that the absence of *a* in the PP headed by *dietro* yields an unbounded interpretation, much like we saw with the morphemes *qua* and *là*. This is confirmed by the following contrast, where we

1. The reader may notice that this and some subsequent examples involve motion verbs, so that a path might also be involved in the interpretation of the locative PP; nevertheless, it is the interpretation of the embedded PLACE constituent that is at issue; if we separate PATH from PLACE in the structure (as Jackendoff 1983 and den Dikken 2003 do), then the nature of the PLACE (bounded or unbounded) holds, independently of the nature of the PATH. See also section 2.3 and note 5 below.

find that *qua* (the proform denoting unbounded space) is not compatible with the *a*-less PP (which denotes a punctual space); see (13b):

- (13) a. *Gianni era nascosto qua, dietro all'albero.*
 G. was hidden **qua, behind** a the.tree
 b. ??*Gianni era nascosto qua, dietro l'albero.*
 G. was hidden **qua, behind** the.tree
 c. *Gianni era nascosto qui, dietro l'albero.*
 d. *Gianni era nascosto qui, dietro all'albero.*

The compatibility between *qui* and both the simplex and the the complex PP in (13c) and (13d) is expected (for (13d), this is because the complex PP can also denote a punctual space).²

Thus, unboundedness of space not only has a lexical realization, but a syntactic reflex as well. As we will see in the following subsection, this phenomenon is not restricted to the lexical preposition *dietro*.

3.2 The lexical preposition *dentro*

The semantic difference between (14a) and (14b) is subtle but discernable:

- (14) a. *Vai dentro alla stanza.*
 go.2SG **inside at**.the room
 'Go inside the room.'
 b. *Vai dentro la stanza.*
 go.2SG **inside** the room
 'Go inside the room.'

The use of *a* with *dentro* 'inside' is preferred if one wishes to refer to the entire internal space of the container (considering all points of the contained space); thus, (14b) is preferred in describing an event in which there is a simple passage from the outside to the inside of the room, without any reference to the internal space of the room (this intuition on the part of the speaker is replicated with similar Spanish data; see section 3 below, discussion of example (35b)).

2. The fact that *qua* and *là* (the proforms that denote unbounded space) end in *-a* makes it tempting to imagine that these forms are bi-morphemic, and that the *-a* is none other than the morpheme *a* we find in the complex PPs (something also suggested by an anonymous reviewer). However, there are two facts that deter me from this conclusion: first, some speakers who have both the forms *qui* and *qua* (and *lì* and *là*) do not exhibit any distinction between the simplex and complex PPs (see note 4 below). Second, while the complex PP can denote both a bounded and unbounded space, this is not the case for *qua* (and *là*); these proforms only denote and unbounded space.

Let us consider some more examples involving *dentro* which highlight which kind of circumstance calls for the presence of *a*, and which kind of circumstance calls for its absence:

- (15) a. *Mettilo dentro la scatola.*
 put.2sg.it inside the box
 ‘Put it inside the box.’
- b. *Guarda bene dentro alla scatola.*
 look.2sg well inside a.the box
 ‘Take a good look inside the box.’ (‘...maybe you’ll find it in there.’)
- c. *Dentro alla mia stanza ci sono delle piante.*
inside a.the my room there are of.the plants
 ‘Inside my room there are plants around.’

Consider (15b) and its translation. Here we have a situation in which the hearer is being asked to consider the box’s entire inner area (which may be obstructed by other objects in it), as the object being looked for could be in any part of that space. In this case, the lexical preposition requires presence of *a* (which allows us to flexibly consider all the space inside the box). This is similar to the case in (15c), where the room is being described as having plants all around in it; thus, the entire inner area of the room is being considered (hence the use of *a*).³ This contrasts with the example in (15a), which does not contain *a*; here instead we have a situation in which the hearer, being asked to place an object inside a box, will naturally have to choose a specific, ‘punctual’ spot inside the box’s inner area.

Before moving on, I would like to consider one final set of examples with *dentro* not considered in Tortora (2005) (and which I owe to C. Poletto, p.c.). Note that the verb *correre* ‘run’ can occur with a PP, yielding either a goal of motion interpretation, or a location of motion interpretation. Here I would like to consider both, beginning with the former. In this regard, consider the examples in (16):

GOAL OF MOTION:

- (16) a. *Corri dentro al parco.*
 run.2sg inside at.the park
 ‘Get into the park’ [NO SPECIFIC POINT IS CONCEPTUALIZED]
- b. *Corri dentro il parco.*
 run.2sg inside at.the park
 ‘Get into the park’ [TO A SPECIFIC POINT, EITHER TO THE MIDDLE OF IT OR JUST INSIDE, CLOSE TO THE ENTRANCE]

What is noteworthy here is the following: while both (16a) and (16b) denote ‘Run into the park’, the former (with *a*) is interpreted with no specific point in mind.

3. See section 4.1 for further discussion of this type of example.

In contrast, (16b) (without *a*) is interpreted with a specific point in mind (e.g., either the running has to culminate in the middle of the park, or perhaps at a point close to the entrance). Once again, the absence of *a* forces the conceptualization of a point in space, while the presence of *a* allows for an interpretation of the space as uncircumscribed.⁴ Note that this distinction is replicated even when this sentence has a location of motion interpretation. In this regard, consider (17):

LOCATED MOTION:

- (17) a. *Corri dentro al parco.*
 ‘Engage in the activity of running inside the park’
 [WHEREVER YOU WANT]
- b. *Corri dentro il parco.*
 ‘Engage in the activity of running inside the park’
 [BUT IN A SPECIFIC PLACE, LIKE A TRACK, OR ALONG THE PARK’S
 PERIMETER]

Thus, while *corri dentro il/al parco* can also mean ‘engage in the activity of running around inside the park’, (17a) (with *a*) is again interpreted with no specific point in mind (the listener can run around wherever she likes). In contrast, (17b) (without *a*) is interpreted with a specific point in mind (e.g., a track, or along the park’s perimeter). Here we again see the absence of *a* forcing the conceptualization of punctual space, where the presence of *a* allows for an interpretation of the space as uncircumscribed.

In section 3, after a discussion of data from Spanish, I discuss Italian examples with plural/mass arguments, which further illustrate the semantic effect of the presence (or absence) of the grammatical preposition *a*. For the moment, however, I would like to turn to a syntactic analysis of these PPs.

3.3 A syntactic analysis

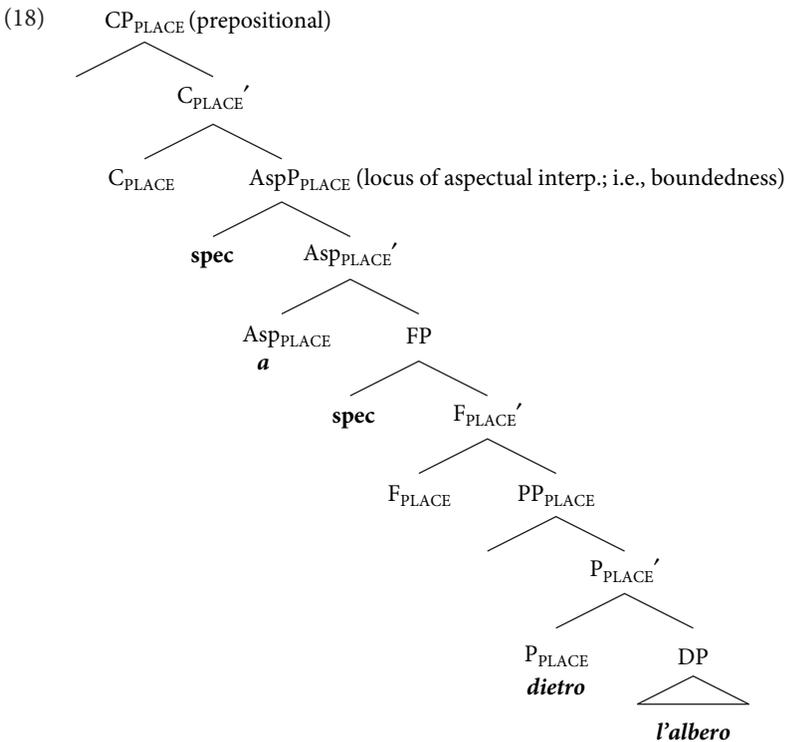
The data examined until now suggest that the aspectual concept of *boundedness* be extended to the spatial domain. In this section, I provide an analysis (developed in Tortora 2005) which instantiates this idea syntactically, and which allows us to account for the data in sections 2.1–2.2.

In particular, I adopt the idea, developed by Koopman (1997) and den Dikken (2003) (following work by van Riemsdijk 1990) that locative prepositions, like

4. I thank Ivano Caponigro and Raffaella Folli for noting (p.c.) that the judgment for this particular set of examples is not shared by all speakers. While a discussion of (and an account for) the varying judgments for these examples is beyond the scope of this work, it is important to ultimately pursue an understanding of the different grammars that speakers may form with respect to PPs with and without *a* (in this regard, I should note that some speakers in fact find no difference in interpretation between (9a) and (9b), even though they may exhibit the difference between *qui* and *qua*).

verbs, nouns, and adjectives, are dominated by a series of functional projections. As argued by these authors, whose goal is to explain the complex semantic and syntactic behaviors of prepositions, postpositions, and circumpositions in Dutch, these extended projections of the preposition parallel (at least loosely) the functional structure of DP and CP.⁵

Following these authors, I propose for Italian that it is the lexical preposition that projects the (PLACE) PP, while the grammatical preposition, when present, heads an AspP which is among the extended projections of the PP. This is sketched in (18), which is the underlying structure for the place PP *dietro all'albero* in (9a).⁶



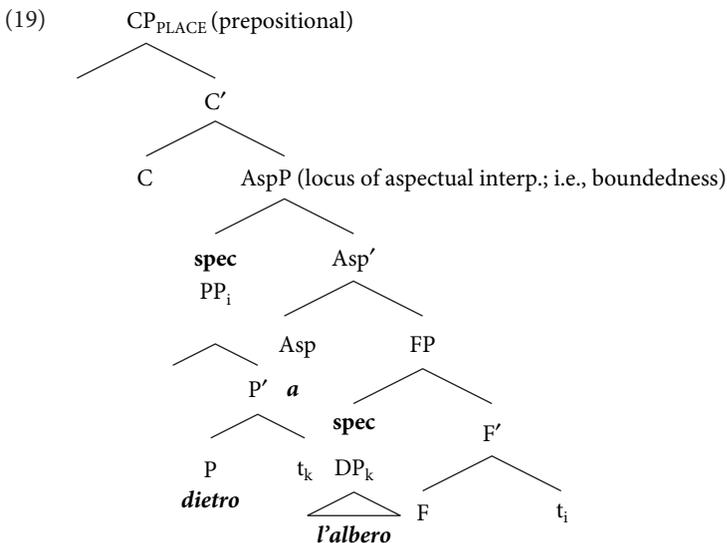
5. In what follows, I simplify their proposals a great deal for the sake of argument. The structures den Dikken (2003) proposes for directional PPs, for example, are highly articulated and involve two types of preposition, P_{LOC} and P_{DIR}, each projecting its own functional architecture (ending in CP_{PLACE} and CP_{PATH} respectively; in this regard, his proposal is an extension of Jackendoff's 1983 idea that PATH embeds PLACE in directional PPs).

6. Note that this structure would be embedded under a PATH PP if we were dealing with a PP that denoted a path (as in (16a) or (3a)). The PATH PP would contain its own series of functional projections, which of course could also include an AspP.

I would like to suggest that the Aspectual Phrase is the locus of the aspectual feature [bounded]. To account for the data discussed in sections 2.1–2.3, I propose that the presence of *a* reflects the presence of the underspecified feature [bounded], which, when applied to a lexical preposition that denotes place (such as *dietro* ‘behind’), yields the interpretation of the location (e.g., in (9a)) either as spatially unbounded or bounded. The absence of *a*, however, reflects the presence of the (positively valued) [+bounded] feature; this, in turn, accounts for the interpretation of the location (in e.g., (9b)) as necessarily spatially bounded.

It is worth noting that this previously unexplored semantic difference between pairs like (9a) and (9b) reveals that the grammatical preposition *a* is arguably merged to the left of the lexical preposition, despite surface indications to the contrary (the proposal offered here is reminiscent of Kayne’s (1999, 2001) recent interpretation of *a* (and *di*) as an infinitival complementizer; see Tortora 2005). A question which arises of course is how the surface order exhibited in (9a) is derived.

Given that the configuration proposed for the grammatical preposition in (18) is similar to the proposal offered by Kayne (1999, 2001) for grammatical prepositional complementizers, it would not be unreasonable to pursue a derivation for the surface word order found with the lexical PP (*dietro all’albero*) that is similar to the remnant movement derivation Kayne proposes for his prepositional complementizer cases. In particular, I propose that first, the DP *l’albero* moves to the specifier of the FP in (18) (perhaps for reasons of Case), leaving t_k in (19). Then, subsequent movement of the remnant PP (headed by *dietro*) to the specifier of AspP obtains, leaving t_i . Thus, the surface order *dietro all’albero* is derived:



Perhaps PP movement obtains for interpretive reasons; i.e., the locative PP receives the unbounded interpretation by virtue of landing in the specifier of the aspectual head.

Note that the proposal offered here is reminiscent of Kayne's (1999) recent interpretation of the so-called infinitival complementizers *a* and *di* (which are not taken to be complementizers *per se*, but rather to instantiate heads inside the functional structure projected by the verb). In what immediately follows, then, I say a few words in support of the idea that grammatical prepositions do not project their own PPs, but rather reside as heads of functional projections.

3.3.1 The "complementizers" *a* and *di*

It is well known that in Italian (as well as other Romance languages), grammatical prepositions appear in places other than prepositional phrases. In particular, depending on the matrix verb, they may or may not introduce embedded infinitivals. Some infinitival-embedding verbs, i.e., modal verbs, do not occur with a grammatical preposition at all. These can be seen in (20):

- (20) *dovere, volere*
 must, want
 (*Gianni deve mangiare*. 'Gianni must eat.')

However, some verbs that take infinitival complements obligatorily appear with the grammatical preposition *di*; these can be seen in (21):

- (21) *sperare, tentare, dimenticare, cercare...*
 hope, try, forget, seek
 (*Gianni spera di cantare*. 'Gianni hopes to sing.')

Still other verbs which take infinitival complements obligatorily appear with the grammatical preposition *a*; these can be seen in (22):

- (22) *venire, andare, continuare, cominciare, provare...*
 come, go, continue, begin, try
 (*Gianni prova a cantare*. 'Gianni is trying to sing.')

If we look at the three groups of verbs in (20), (21), and (22), we see a parallel with the three groups of lexical prepositions discussed in Tortora (2005). That is, Italian employs ϕ , *di*, or *a* with embedded infinitivals, just as it does with lexical prepositions.⁷ Given this parallel, we can hypothesize that *a* and *di* are structurally similar in both domains.

7. This is something also noted by Starke (1993), who takes the grammatical prepositions that occur with lexical prepositions to be Complementizers within the DP complement of the lexical preposition.

Independent support for the idea that *a/di* are similar types of creature in both cases comes from an observation made by Manzini (1991). She notes that certain verbs that take infinitival complements, such as *convincere* ‘convince’ and *persuadere* ‘persuade’, select either *a* or *di*. She further reports that the choice of grammatical preposition (*a* or *di*) determines the temporal interpretation of the embedded infinitive; in particular, when these verbs take *a*, the embedded infinitive is interpreted as future. Compare (23) and (24):

- (23) *Ho convinto / convincerò Gianni ad andarsene.*
 have.1SG convinced / convince.FUT.1SG Gianni a go.SE.NE
 ‘I convinced / I will convince Gianni to leave.’
 (convince = induce a decision to do something)
- (24) *Ho convinto Gianni di essermene andato.*
 have.1SG convinced Gianni di be.ME.NE gone
 ‘I convinced Gianni that I had left.’
 (convince = induce a belief in the existence of an event)
- (25) **Ho convinto / convincerò Gianni di andarsene.*
 have.1SG convinced / convince.FUT.1SG Gianni di go.SE.NE

Both (23) and (24) contain the verb ‘convince’ with an embedded infinitival. Only the infinitival preceded by *a*, however, can be interpreted as a future (this is confirmed by the ungrammaticality of (25), with *di*, which can only mean that “I convinced (or will convince) Gianni that he left” (which is strange, since Gianni should know whether he left or not).

Given the hypothesis that tense (like aspect) is instantiated by a functional head, it is not unreasonable to conclude that *a* instantiates a temporal functional head. The facts in (23–25) thus suggest that *a* has a similar function in both the extended projections of the verb and the extended projections of the (lexical) preposition. It also suggests that Kayne’s (1999) proposal that such “complementizers” are morpho-syntactic instantiations of functional heads in the extended projection of the verb is on the right track.⁸

Another piece of evidence that *a* has a similar function in both the extended projections of the verb and the lexical preposition derives from an observation made in Penello (2003) regarding the Northern Italian dialect spoken in Carmignano di Brenta. Specifically, Penello notes that in contrast with Italian,

8. R. Kayne observes (p.c.) that French lacks the possibility of *a* both with the equivalent of *convincere/persuadere* and with the equivalent of *dietro*, further suggesting that *a* in Italian has the same status in both the lexical PP and in the verbal domain.

Carmignano does not have a “complementizer” (in Kayne’s sense); this can be seen in (26a) and (26b):

- (26) a. *Vao (*a) casa.*
 I-go home
 ‘I’m going home.’ (Ital.: *Vado a casa*)
- b. *A settimana che vien ndemo (*a) catar Mario.*
 the week that comes we.go meet Mario
 Next week we’re going to see Mario. (Ital.: *andiamo a trovare Mario*)

Penello notes that this is consistent with the fact that *a* is strongly dispreferred with PPs; that is, in contrast with Italian, Carmignano does not have complex PPs with *a*:

- (26) c. *sotto (??a) la tola* (Ital.: *sotto alla tavola*)
 under the table

Penello’s generalization can be understood in light of the proposal made here: *a* instantiates a particular kind of head inside the functional structure projected by both PPs and VPs (so if a variety does not instantiate the head in the VP domain, it will also be absent in the PP domain).

4. PLACE PPs in Spanish

The proposal that *a* is merged to the left of the lexical preposition (and that it is the reflex of the unspecified feature [bounded] in Asp) may find support from Spanish, an idea that I pursue in this section.

Plann (1988) discusses sets of Spanish examples which to me seem to exhibit a pattern whereby a monomorphemic lexical preposition (e.g., *dentro*) corresponds to a bimorphemic lexical postposition which contains the grammatical preposition *a* (e.g., *adentro*):

- (27) a. *trás, atrás (detrás)* ‘back; behind’
 b. *bajo, abajo (debajo)* ‘below’
 c. *(en), dentro, adentro* ‘in(side)’
 d. *fuera, afuera* ‘outside’
 e. *delante, adelante* ‘ahead; in front’

For Spanish there is of course the question of how productive these pairs are. Both Plann & Pavón (1999) discusses many examples of the complex version (i.e., the P with *a*) which seem to have fixed, idiomatic, meanings; consider for example the following:

- (28) a. *La piedra rodó montaña abajo.*
 the stone rolled mountain a.down
 ‘The stone rolled down the mountain’

- b. *Los niños estaban bajo la cama.*
the kids were under the bed
- (29) a. *El ejército marchó tierra adentro.*
the army marched land a.inside
'The army marched inland'
- b. *El bolígrafo estaba dentro la bolsa.*
the pen was inside the bag
- (30) *Hay que seguir camino adelante.*
have to go on way a.front
'You have to keep going'
- (31) *Es difícil correr cuesta arriba.*
it's hard to run uphill
'It's hard to run uphill'
- (32) *El novio vivía río abajo.*
the boyfriend lived river a.down
'Her boyfriend lived downstream.'

Note for (31), for example, there is no corresponding form *riba*. Nevertheless, I would like to show that it is possible to construct less idiomatic pairs, which I discuss shortly. I would like to suggest that the bimorphemic cases (i.e., the “complex” PP) could simply be taken to be cases where the grammatical preposition *a* precedes the lexical preposition (as in the d-structure for Italian *dentro a* ‘inside’, which is *a dentro*). Interestingly, in the case of Spanish, the lexical prepositions with *a* are syntactically postpositions (although see example (40a) below), with the complement necessarily a bare noun; consider in this regard the following example:

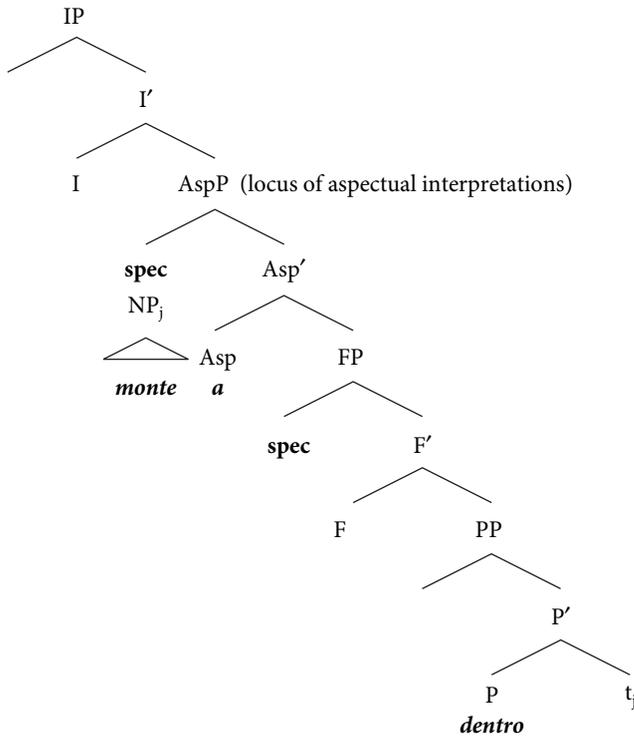
- (33) *Los cazadores cazaban monte adentro.*
the hunters hunted wilderness a.inside
'The hunters hunted inside the wilderness.'

Thus, if we consider the structure in (18), it seems that in Spanish, the (bare) NP moves to the left of *a* (in the specifier of AspP), in contrast with Italian (where it is the (remnant) PP that moves; perhaps it is the bare nature of the Spanish NP that requires it to move to Asp, instead of the PP). The PP remains in situ (in contrast with Italian), yielding the order grammaticalP+lexicalP.

Of course, this analysis would only make sense if it turned out to be the case that Spanish PPs with and without *a* semantically differed in the same way that the Italian complex (with *a*) and simplex PPs differ. In what follows, I will discuss a number of pairs of Spanish examples which indicate that there are some striking similarities with the pairs of Italian examples discussed in section 2.⁹

9. As we will see in a moment, there are also some notable differences between Spanish and Italian. One similarity between the two however is that like Italian, Spanish has pairs of proforms

(34) Structure for Spanish *monte adentro* (cf. (33)):



which denote 'here' (*aquí, acá*) and 'there' (*allí, allá*). According to Sacks (1954), the *-á* version of each pair (*acá* and *allá*) is compatible with motion verbs (such as *venir* 'come'), while the *-í* version (*aquí* and *allí*) is compatible with stative verbs. However, I believe it is necessary to pursue a study of the grammars of individual speakers, because a preliminary investigation reveals that some speakers find the distinction between *aquí* and *acá* (and *allí* and *allá*) to be strictly analogous to that found in Italian for *qui* and *qua* (and *lì* and *là*). That is, *acá* and *allá* denote what Sacks and Pavon would call a "vague" space (our "unbounded" space), while *aquí* and *allí* denote what they would call a "specific" space (our "punctual" space). L. Sánchez (p.c.), for example, reports this distinction for her grammar (and also reports an additional semantic dimension for *allá*, namely, denoting a place that is "more distant than *allí*" – perhaps akin to non-standard *yonder* (further away) vs. *there*). Thus, Sánchez reports the following minimal pair, which is entirely analogous to the Italian pair in (8) in section 1 above:

- i. *Los libros estaban dispersos por acá y por allá.*
the books were scattered for **acá** and for **allá**
[books all over the place]
- ii. *Los libros estaban dispersos por aquí y por allí.*
the books were scattered for **aquí** and for **allí**
[books in two specific points]

Let us first (re-)consider the complex PP in (33) (with *a*), repeated here as (35a), together with its simplex counterpart (without *a*) in (35b):

- (35) a. *Los cazadores cazaban monte adentro.*
 the hunters hunted wilderness a.inside
 ‘The hunters hunted inside the wilderness.’
 [THE BOUNDARIES/PERIMETER OF THE WILDERNESS ARE NOT
 CONCEPTUALIZED IN SPEAKER’S MIND; THE HUNTERS ARE TOWARD
 THE CENTER OF THE WILDERNESS]
- b. *Los cazadores cazaban dentro del monte.*
 the hunters hunted inside of.the wilderness
 ‘The hunters hunted inside the wilderness.’
 [THE BOUNDARIES/PERIMETER OF THE WILDERNESS ARE CONCEPTUALIZED
 IN SPEAKER’S MIND; SIMPLE OPPOSITION TO ‘OUTSIDE’]

As can be seen by the translations, both (35a) (with *adentro*) and (35b) (with *dentro*) denote ‘The hunters hunted inside the wilderness.’ However, there is a difference in the interpretation of the space. Specifically, in (35a) (with *a*), the speaker conceptualizes the hunters as being far inside the wilderness, with the boundaries or the perimeter of the wilderness not conceptualized. In contrast, with (35b) the speaker conceptualizes the boundaries or the perimeter of the wilderness, and the hunters could be taken to be close to the perimeter. Some speakers spontaneously report that (35b) can be used simply to indicate that the hunters are hunting inside the wilderness, as opposed to outside. This simple ‘opposition’ interpretation is reminiscent of that reported spontaneously by Italian speakers for example (14b) – without *a* (*Vai dentro la stanza* ‘Go inside the room’). The difference in interpretation between (35a) and (35b) is replicated with the following two sets of examples in (36) and (37):

- (36) a. *Se había escondido bosque adentro.*
 se had hidden forest a.inside
 ‘He hid inside the forest.’
 [FROM THE SPEAKER’S PERSPECTIVE, HE IS HIDING AWAY
 TOWARDS THE CENTER]

A datum from Pavón (1999: 609) confirms this bounded vs. punctual difference between the pair in *-á* vs. the pair in *-í*; as can be seen, the former can be modified by *más* (indicating that the space is flexible), while the latter cannot (indicating the punctual nature of the space):

- iii. *Colócalo unos centímetros más acá.* *aqui
 Put it some centimeters more here
- iv. *Llévatelo unos pasos más allá.* *alli
 Take it some steps more there

- b. *Se había escondido dentro del bosque.*
 se had hidden inside of.the forest
 ‘He hid inside the forest.’
 [THE BOUNDARIES OF THE FOREST ARE SALIENT IN SPEAKER’S MIND]
- (37) a. *Los barcos están mar adentro.*
 the boats are sea a.inside
 ‘The boats were inside the sea.’
 [FAR AWAY FROM THE SHORE, WHERE YOU DON’T SEE ANY LAND; THE
 BOUNDARIES OF THE SEA ARE NOT CONCEPTUALIZED IN SPEAKER’S MIND]
- b. *Los barcos están dentro el mar.*
 the boats are inside the sea
 ‘The boats were inside the sea.’
 [CAN SEE LAND; IN THE SEA, AS OPPOSED TO BEING OUTSIDE OF THE SEA]

There are two properties exhibited by all three sets of examples above (35–37) that are worth discussing, especially since these properties do not seem to be exhibited in the Italian sets of complex/simplex examples. First, most Spanish speakers report that examples with *a* require a space that is sufficiently large. So, the lexical postposition (in this case *adentro*) is most felicitously used with a space like the sea, or the wilderness, or a forest; some speakers report a resistance to examples where the object of the complex preposition represents a smaller space, like a park, for example, so that sentences such as that in (38a) are not accepted by all speakers:

- (38) a. %*Los niños jugaban parque adentro.*
 the kids played park a.inside
 ‘The kids played inside the park.’
 [FROM THE SPEAKER’S PERSPECTIVE, THEY ARE PLAYING
 TOWARDS THE CENTER]
- b. *Los niños jugaban dentro del parque.*
 the kids played inside of.the park
 [THE BOUNDARIES OF THE PARK ARE CONCEPTUALIZED;
 THE LIMITS OF THE PARK ARE SALIENT]

J. Camacho notes (p.c.) that the issue is not necessarily the size of the space so much as the ability to interpret it as both large and homogeneous. Thus, while a city may be large, *ciudad* is not possible in this configuration for some speakers, given the fact that a city (unlike a sea or the wilderness) is conceptualized as having distinct sub-parts:

- (38) c. %*Ellos caminaban ciudad adentro.*
 they walked city a.inside

Other speakers, however, report (38c) as grammatical, but imagine the city as an undifferentiated “jungle-like” space. Note that speakers who reject (38a) (or (38c)) have no trouble accepting (38b) (thus, this requirement on the size of the space – and its

homogeneity – only holds when *a* is present in the structure). This restriction does not exist in Italian (as can be seen, for example, by the grammaticality of (17a), *Corri dentro al parco* ‘Run around inside the park’).

Second, in contrast with the Italian examples with *a*, the Spanish examples with *a* in (35–37) involve an interpretation whereby the ‘figure’ is to be found someplace along a trajectory towards the inside of the ‘ground’ (from the speaker’s point of view). This is not the case with the (b) examples (without *a*). In other words, in the Spanish complex PPs in (35–37), the presence of *a* forces the speaker to conceptualize a trajectory away from himself and toward the center of the ‘ground’.

Concerning this later property (not exhibited in Italian), I conjecture that this is related to the fact that Spanish (in contrast with Italian) does not use the preposition *a* statively (see, e.g., Torrego 2002):

- | | | | |
|------|----|-------------------------------|---------|
| (39) | a. | <i>Estamos en / *a Paris.</i> | SPANISH |
| | b. | <i>Siamo a Parigi.</i> | ITALIAN |

It could be, then, that the restriction responsible for the ungrammaticality of *a* in (39a) is the same restriction that disallows a “purely” stative reading of the (a) examples in (36–37); that is, although (36) and (37) are clearly stative, given the “grammar of *a*” in Spanish, the speaker is forced to conceptualize a trajectory in these examples.

Concerning the former property (namely, that Spanish speakers require sufficiently large and homogeneous spaces – such as seas, or forests, or the wilderness – in order to be able to use the PP with *a*): I will leave this issue open for future research but I would like to suggest that this property of the Spanish PPs with *a* is related to the requirement that the NP be bare (which is of course something that in itself must be understood); that is, the bare nature of the NP yields a mass-like interpretation of the space (I return to the issue of mass NPs and Italian shortly).¹⁰

Despite these differences between Spanish and Italian (which of course need to be better understood), it is important to note that there are striking similarities between the two languages: both have a subset of lexical prepositions which may occur (optionally) with the grammatical preposition *a*, and the presence of *a* in both languages yields a semantic interpretation of the space denoted by the PP that

10. A (perhaps related) problem is that in Italian, the presence of *a* does not *require* that the space be interpreted as unbounded. So, (9a) for example can indicate either a bounded (punctual) or unbounded (non-punctual) space. In Spanish, on the other hand, the presence of *a* only yields one interpretation (unbounded). Another (again, perhaps related) problem is that in Italian, the boundedness of the space can be characterized in terms of ‘punctuality’ (so that in many of the examples discussed in section 2, the space in the examples without *a* is conceptualized as punctual (point-like)). It is not clear that this is the case for the Spanish examples.

is aspectually distinct from the semantic interpretation of the space denoted by the *a*-less PP. As such, we will tentatively maintain that the PPs with these particular lexical Ps in both languages have similar underlying structures (as in (18)), with different derivations ((19) vs. (34)) yielding different surface word orders.

I would like to make one final observation here regarding the Spanish data, before returning to Italian, and a discussion of some novel facts. Given that the presence of *a* seems to correlate with the post-positioning of the lexical preposition (and with the presence of a bare NP), one might wonder whether it is in fact the syntactic position of the postposition (or the presence of a bare NP, for that matter) which is responsible for the particular interpretation of the space (and not, as we have been asserting, the presence of *a* itself). In this regard, I would like to consider the following example, allowed by some speakers:

- (40) a. %*Los niños corrían afuera del parque.*
 the kids ran a.outside of.the park
 ‘The kids ran around outside the park.’
 [WHERE THE BOUNDARIES OF THE PARK ARE NOT CONCEPTUALIZED IN
 THE SPEAKER’S MIND; THE RUNNING IS OUTSIDE THE PARK SOMEPLACE,
 BUT DOES NOT HAVE TO BE NEAR]
- b. *Los niños corrían fuera del parque.*
 the kids ran outside of.the park
 ‘The kids ran around outside the park.’
 [PERIMETER OF PARK CONCEPTUALIZED IN THE SPEAKER’S MIND; CLOSE TO
 THE SURROUNDINGS OF THE PARK; RELATED TO THE PARK IN SOME WAY]

Not all speakers allow *afuera* ‘outside’ (with *a*) to be used as a *pre*-position (with a full DP complement). However, those who do allow (40a) also spontaneously report a clear semantic distinction between (40a) and (40b) (without *a*). Specifically, (40a) is taken to denote that the running is outside the park someplace, but that the location is not necessarily related to the park (so that the boundaries of the park are not conceptualized).¹¹ In contrast, (40b) is taken to denote that the running is taking place in a location close to the surroundings of the park, so that the space is taken to be related to the park in some way, with the perimeter of the park conceptualized as part of the space.

What these data show us is that it is the presence of *a* (and not the position of the preposition, or the presence of a bare NP) that is responsible for the unbounded interpretation of the space. Of course, the fact that some speakers allow the form with *a* to be used *pre*-positionally (and with a full DP) suggests that the

11. This interpretation of *afuera* correlates with the fact that *afuera* (but not *fuera*) can be modified by *más* ‘more’; see note 9 above.

form *afuera* for these speakers is itself ambiguous between a bimorphemic and monomorphemic form (so that *a+fuera* is analyzed either as two distinct syntactic entities, or as a lexicalized form). I raise this possibility, because for the speakers who allow (40a), the post-positional configuration (with the bare NP) is also possible:

- (40) c. %*Corrían parque afuera.*
 ran park a.outside
 ‘They ran around in the outskirts of the park.’
 [FROM THE SPEAKER’S PERSPECTIVE, WHICH IS TOWARDS
 THE CENTER OF THE PARK]
 ‘They ran towards the outskirts of the park’
 [FROM THE SPEAKER’S PERSPECTIVE, WHICH IS TOWARDS
 THE CENTER OF THE PARK]

However, although (40c) is also possible for the speakers who allow (40a), the above example is interpreted as involving a trajectory (both with the activity reading and with the directed motion reading of ‘run’; see translations and bracketed qualifications above). This is in contrast with (40a), where no such trajectory is necessarily conceptualized. Thus, when *afuera* is analyzed by the speaker as bimorphemic (and appears as a post-position), the morpheme *a* contributes the concept of trajectory; however, when *afuera* is analyzed by the speaker as monomorphemic (and appears as a pre-position), there is no separate morpheme *a*, so no trajectory interpretation is entailed.

5. Back to Italian (and some notes on English): mass, plural, and geometrically complex ‘figures’

As we just saw, the presence of *a* in Spanish generally requires that the argument of the locative P be a bare NP (and that it appear to the left of the *a*+lexicalP complex). While this is not the case for Italian, I would like to discuss the fact that the nature of the argument (and whether it is interpretable as a mass or plural argument) is relevant to whether or not a simplex or complex PP is used. In the discussion, we will thus see another way in which lexical Ps are analogous to Vs. That is, it is well known that with events, the nature of the argument affects the aspectual interpretation of the event, so that mass or plural objects give rise to events that are interpreted as undelimited:

- (41) a. John drank the beer in one hour. Count Noun object
 b. John drank beer for hours. Mass Noun object
 c. John ate grapes for hours. Bare Plural object

In this regard, let us first consider the lexical prepositions *dentro* and *dietro* in Italian, and consider how the nature of the argument affects the aspectual interpretation of the PLACE PP.

5.1 *dentro; dietro* (INSIDE; BEHIND)

Consider the following two pairs of examples with *dentro* ‘inside’, in which the “figure” (in the sense of Talmy) is a plural:

- (42) a. *Dentro alla mia stanza ci sono delle piante.*
 inside a.the my room there are of.the plants
 ‘Inside my room there are plants around.’ or
 ‘There are plants all inside my room.’
- b. *Dentro la mia stanza, ci sono delle piante.*
 inside the my room there are of.the plants
 ‘Inside my room there are some plants (in one spot)’
- (43) a. *Ci sono delle penne dentro al cassetto.*
 there are of.the pens inside a.the drawer
 ‘There are pens all inside the drawer.’
- b. *Ci sono delle penne dentro il cassetto.*
 there are of.the pens inside the drawer
 ‘There is a bunch of pens inside the drawer.’

In both sets of examples, the figure (‘some plants’ in (42) and ‘some pens’ in (43)) can be interpreted either as being distributed throughout the space denoted by the PP ((42a) and (43a)), or it can be interpreted as being point-like, located in a specific spot within the space denoted by the PP.¹² What is noteworthy is that the distributed interpretation (which I have translated with a PP modified by *all*) obtains with the complex PP (i.e., in the presence of *a*), while the point-like interpretation obtains with the simplex PP. Thus, if the object is to be conceptualized as a mass, a PP with *a* is required, while if it is to be conceptualized as a discrete point (or as a count entity), a PP without *a* is required.

The same can phenomenon can be found for DPs that refer to entities which are conceptualizable as aggregates. As can be seen in (44) with the preposition *dietro* ‘behind’, the first example contains a PP with *a* (hence, one that denotes an unbounded space), and as such allows for a distributed interpretation of the object (again in this case, the figure ‘the bees’); the second example (44b), without *a*, however, yields a point-like interpretation of ‘the bees’, so that they are conceptualized as consisting of a bounded entity.

12. When understood from this perspective, the concept of unbounded space becomes reminiscent of Jackendoff’s (1990: 104) “distributed” (vs. “ordinary”) location.

- (44) a. *Ci sono delle api dietro all' albero.*
 there are of.the bees behind a.the tree
 [BEES ARE SPREAD OUT IN A WIDE SPACE, PERHAPS FLYING AROUND]
- b. *Ci sono delle api dietro l' albero.*
 there are of.the bees behind the tree
 [BEES ARE IN ONE SPOT TOGETHER, PERHAPS SITTING ON THE TREE]

Likewise, inherently mass nouns such as ‘mold’ can get a mass or count interpretation, depending on whether the “ground” they are related to (i.e., the space denoted by the PP) is linguistically marked as unbounded or bounded. So, the sentence in (45a) (with *a*) can be used to describe a situation in which a box has mold (mass) covering all of its interior, while the sentence in (45b) (with a simplex PP) describes a situation in which the mold is in one spot (for example, in a microbiology laboratory setting in which someone is indicating that a discrete sample of mold (count) is sitting in a particular box).

- (45) a. *C'è della muffa dentro alla scatola.*
 there's of.the mold inside a.the box
 ‘There’s mold all inside the box.’
- b. *C'è della muffa dentro la scatola.*
 there's of.the mold inside the box
 ‘There’s mold (right) inside the box.’

To summarize, it appears that plural and mass NPs get a bounded (count) interpretation with the simplex PPs. This is something we expect if the PP without *a* indeed denotes a punctual (bounded) place.

5.1.1 A note on English

Note (e.g., (45)) that the English translations of the unbounded PLACE PPs can be rendered with modification by *all* (45a), while the bounded (punctual) PLACE PP can be rendered in English with modification by *right* (45b). What is worth mentioning is that not all prepositions in English allow modification of *all* in this way. So while *inside*, *under(neath)*, *along*, *through(out)*, and *around* (as PLACE prepositions; see (46a–f)) all allow modification by *all* (thus yielding an unbounded interpretation), the prepositions *near*, *behind*, and *next to* do not allow modification by *all* (see (46f)):¹³

- (46) a. all inside the box
 b. all under(neath) the table

13. It is worth noting that although *along* denotes a linear location, it is arguably not fundamentally a PATH preposition, but rather a PLACE preposition which happens to denote a space that is linear. Note, for example, that it does not not necessarily entail directionality (or a trajectory):

- (i) Mary ran back and forth along the tracks.

- c. all along the ledge Talmy (1983)
 d. all through(out) the aquarium "
 e. all around the house
 f. There were flies **all near / *all behind / *all next to* the house

This suggests that the lexical preposition has its own aspectual determination, so that the preposition itself plays a role in determining what kind of AspP it projects. That is, certain prepositions (e.g., those in (46f)), are not compatible with an unbounded AspP. The same can also be said for the bounded interpretation. As can be seen in (47a–e), *inside*, *under(neath)*, *near*, *behind*, and *next to* allow for modification of *right* (compatible with punctual, or bounded space), while *through(out)* and *around* are incompatible with this point-denoting modifier:

- (47) a. right inside the box
 b. right under(neath) the table
 c. right near the house.
 d. right behind the house.
 e. right next to the house.
 f. There were flies **right through(out) / *right around* the house.

If certain lexical prepositions can only denote a place that is bounded, while others can only denote an unbounded place, that means that the prepositions themselves are lexically specified with their own “aspect.” It is difficult at this stage to draw an obvious analogy between the aspectual type associated with these PLACE PPs and the aspectual types found in the realm of verbs (achievement, state/activity), but as a first pass we might think of the PPs in (46a–e) (which can denote an unbounded space) as analogous to state or activity verbs, while we might think of the PPs which only allow for a punctual interpretation (46f) as analogous to achievement or punctual verbs.

As a matter for future research, we might take the preposition’s own lexical semantics to explain why, in Italian for example, certain locative prepositions do

This suggests that the defining characteristic of a PATH is not linearity, but rather directionality (i.e., that there is a trajectory). As such, *through* in contrast would denote a true PATH:

- (ii) **Mary ran back and forth through the tunnel.*

While Jackendoff (1991) suggests that 1-dimensional spaces are necessarily paths, the observation here suggests that places can also be 1-dimensional. This should be unsurprising, given that it would be arbitrary (and inexplicable) for PLACE to involve regions of any dimensionality except for the first dimension.

not allow for the presence of *a*, while others obligatorily appear with *a* (see Tortora 2005 for a brief overview of these two groups). It might turn out to be the case that the former group is such that their lexical semantics are “punctual,” while the latter group is lexically specified as unbounded.¹⁴

5.2 *sopra* (OVER/ABOVE/ON)

Before I conclude, I would like to make one final observation concerning structures which involve a so-called “geometrically complex” figure, in the sense of Talmy (1983). As Talmy notes, the “figure” (in contrast with the “ground”), is commonly represented or conceptualized as point-like. This can be seen for example in (48), where *the bike* is taken to be a point, while the garage’s inside is geometrically complex:

- (48) The bike is *near / behind / inside* the garage.

However, Talmy observes that certain PP expressions can highlight the linear or planar geometry of the figure. This can be seen in (49a), where the figure (the board) is linear, and in (49b), where the figure (the tablecloth) is planar:

- (49) a. The board lay *across* the railway bed. figure is linear
 b. The tablecloth lay *over* the table. figure is planar

Why do I raise these types of cases here? Because in Italian, the choice of the simplex vs. complex PP bears on the question of whether or not a figure (or the ground, as we will see momentarily) is interpreted as geometrically complex or not. Specifically, we find that the presence vs. absence of *a* with *sopra* ‘over’ forces or suppresses (respectively) the complex geometry of the figure. Consider in this regard the examples in (50):

- (50) a. *Ho messo la tovaglia sopra al tavolo.*
 I put the tablecloth **on** a.the table
 [THE TABLECLOTH IS SPREAD OUT OVER THE TABLE]
English: The tablecloth lay over the table
 The tablecloth is on the table. (ambiguous in English)
- b. *Ho messo la tovaglia sopra il tavolo.*
 I put the tablecloth **on** the table
 [THE TABLECLOTH IS FOLDED UP ON THE TABLE]
English: The tablecloth is right on the table. (unambiguously point-like)

As can be seen in (50a), the presence of *a* inside the PP yields an interpretation of the tablecloth (the figure) as planar (i.e., the tablecloth is spread out). Given that

14. This might be similar to the fact that certain abstract nouns are (arbitrarily) lexically specified as being either mass or count, despite the fact that there is nothing concrete that would determined this classification (cf. mass *advice* (**advices*) vs. count *threat* (*threats*)).

the presence of *a* in all other cases yields an unbounded interpretation of the space denoted by the PP, it is reasonable to conclude that the interpretation of the figure as geometrically complex is a manifestation of the unboundedness of the space denoted by the PP. In (50b), on the other hand, we see that the absence of *a* inside the PP yields an interpretation of the tablecloth as point-like. Given that the absence of *a* in all other cases yields a punctual conceptualization of the space denoted by the PP, it is equally reasonable to conclude that that the interpretation of the figure as point-like is a corollary of the punctuality of the space denoted by the *a*-less PP. Thus, without *a* the planar nature of the figure is suppressed, and we are forced to conceptualize the figure as point-like. This is analogous to the variable status of plural and mass NPs, which may be conceptualized as point-like, as we saw above.

What is interesting to note is that in English, the modifier *right* (which, as we saw in section 4.1.1, only modifies punctual space), like the absence of *a* in Italian, (expectedly) yields the unambiguous interpretation of the tablecloth as point-like (*the tablecloth is right on the table* can only mean that the tablecloth is all folded up; this is in contrast with *the tablecloth is on the table* (without *right*), which is ambiguous between the tablecloth being spread out on the table and being folded up).¹⁵ Once again, then, it seems that *right* serves the same function as the absence of *a* does in Italian (namely, to denote a point-like space).

Thus, it seems that planar figures are treated like mass/plural NPs. This is reminiscent of an issue discussed in Tenny (1994) in the realm of the VP. In particular, Tenny notes that a sentence such as *Mary painted the wall* involves, for some speakers, a delimited reading, while for other speakers it involves a non-delimited reading. This ambiguity seems to be due to the fact that a wall is conceptualizable either as geometrically complex (i.e., planar, and therefore unbounded), or as point-like (i.e., bounded).

5.3 *sotto* (UNDER)

Note that the question of geometrical complexity (or not) arises with respect to the ground as well. In this regard, consider the following examples with the lexical preposition *sotto* ‘under’ in Italian:

- (51) a. *Ho messo il tovagliolo sotto alla tovaglia.*
 I put the napkin under a.the tablecloth
 [SPEAKER CONCEPTUALIZES THE TABLECLOTH AS SPREAD OUT
 ON THE TABLE]

15. It might help to imagine the sentences in (i) and (ii) as answers to the question “I want to get the dining room ready for dinner; where’s the tablecloth?”

- (i) The tablecloth is on the table. (ambiguous between spread out and folded up)
 (ii) The tablecloth is right on the table. (must be folded up)

- b. *Ho messo il tovagliolo sotto la tovaglia.*
 I put the napkin under the tablecloth
 [SPEAKER CONCEPTUALIZES THE NAPKIN AS FOLDED UP UNDER A FOLDED
 UP TABLECLOTH (IN A PILE)]

Note that the presence of *a* entails the geometrical complexity of the tablecloth, which this time is the ground in (51a). In contrast, the absence of *a* yields an interpretation of the tablecloth as point-like (so the eventuality in (51b) is interpreted with a folded-up tablecloth). So here again we see that in the context of an object which is potentially conceptualizable as geometrically complex (planar), the unboundedness feature lines up with planar conceptualization.

6. Conclusion

To summarize the discussion in this paper: The PP data from Italian suggest that PLACE, like PATH, can be conceptualized as bounded or unbounded, and that this has a reflex in the grammar. This extension of the 'boundedness' feature to PLACE allows for the more general claim that SPACE (the supercategory that subsumes PATH and PLACE; Jackendoff 1991) can be conceptualized as bounded or unbounded. This in turn reveals that boundedness is relevant to not only *events* and *entities*, but to *space* as well, suggesting that these three super-categories themselves are all potentially treatable, in the abstract, in a similar way (whatever the general linguistic and specific syntactic analyses of boundedness ultimately ends up being). This itself is consistent with the tradition, initiated by Bach (1986) (among others), and expanded upon by Jackendoff (1991), of unifying major linguistic categories under one abstract semantic system.

Furthermore, the particular details regarding the behavior of the Italian PPs (i.e., presence vs. absence of the grammatical preposition *a*) suggest that PPs are unified with NPs and VPs in terms of clausal architecture (i.e., functional syntax). That is, the data discussed in this paper supports the claim (proposed by e.g., van Riemsdijk 1990) that Ps are syntactically like Vs and Ns (projecting similar types of functional categories). This similarity across categories is further corroborated by the discussion in section 4, where we see that the nature of the argument (e.g., plural vs. singular) can affect the aspectual interpretation of the entire PP. And finally, this view opens a line of thought regarding the proper syntactic (and semantic) treatment of PPs that apparently contain a grammatical P in Spanish. Although there are a number of differences between Italian PPs with *a* and Spanish PPs with *a*, the similarities between the two languages warrant exploring a unified analysis.

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