FUNCTIONAL PROJECTIONS MEET ADVERBS

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The aim of this paper is to prove that a linguistic theory combining Functional Categories and Incorporation may capture the lexical and syntactic properties of non agreeing elements, namely prepositions (Ps), prepositive locutions (PLocs) and adverbs (Advs). We will focus our attention on lexically related elements such as Sp. [$_p$ bajo]/[$_{PLoc}$ debajo] 'under' and [$_{Adv}$ abajo] 'down' or Cat. [$_p$ rera]/[$_{PLoc}$ darrera] 'behind' and [$_{Adv}$ endarrera] 'back'. We will argue that all the categorial labels concerned are derived, therefore the differences among members of the same paradigm should be attributed to the way in which the functional architecture selecting one single lexical item ([$_L$ baj-] or [$_L$ rer-] respectively) Case marks the internal argument. The main theoretical consequence that follows is that categorial labels such as Adv or P are in fact epiphenomena with no real grammatical import. Most PPs may be analysed as Case licensing FCs selecting an NP/DP complement, whereas Advs may be considered as non categorially defined lexical items selected by a licensing FC. According to this view, PPs and Advs are in a sense syntactically equivalent and properties traditionally considered as "adverbial" (intransitivity, non argumental status, etc.) follow naturally.

In recent developments of grammatical theory, one of the fields of research that has shown itself as highly promising and that has improved linguistic explanations is that of Functional Categories (FCs). Since Fukui (1986), Fukui & Speas (1986), Chomsky (1986a/b) and related

work, treating morphological affixes or boundaries of features[1] as heads of projections has had a number of theoretical and descriptive consequences. Among them: (a) the generalization of X-bar theory to all syntactically relevant categories; (b) a deeper insight into syntactic phenomena such as word order or the distribution of *ecs* making it possible to obtain more abstract and general explanations, and (c) a clearcut distinction betwen parametrically determined phenomena and those that can be attributed to UG. As proposed, parametric differences between grammars are all to be attributed to FCs, being the categories and properties of the Lexicon universal. Thus, the categories to be identified in the lexicon of a given language can be predicted on the basis of UG, the only idiosyncratic properties of a lexical item to be listed being those of lexical selection, and the other syntactic differences between items of the same lexical class can be reduced to the properties of the FCs selecting it. In Picallo (1991) a very strong version of Chomsky (1980)'s lexicalist hypothesis has been presented suggesting that the only categorial class present in the lexicon is L (for *Lexeme*), and its functioning as N or V is a distributionally conditioned syntactic property derived from the specific FC that selects L. One of those FCs could act as the *word marker* that in pretheoretical terms can be considered to give L the distributional properties that permit it to act as a syntactic word.

It is evident that a lot of work has been done in analyzing the properties of VPs, NPs and, to a much lower degree, APs, in the light of the FCs that have been proposed to be associated with them.

In sharp contrast with this, categories such as P or Adv have been much less studied. Their lack of agreement morphemes has been taken implicitly as an argument for treating them as lexical heads.[2] Nevertheless, their categorial and lexical status is far from clear. Ps have been studied

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[1] See Pollock (1988), Chomsky (1989), Belletti (1990) for argumentation in favor of decomposing IP into TP, AgrP; Abney (1986), Scabolczi (1983), Picallo (1991) and Ritter (1991) for the proposal of the FCs DP, NumP and GenP associated with NP.

[2] Possibly the only attempt to establish a distinction between lexical and functional Ps is van Riemsdijk (1990).

basically as Theta and Case assigners and appear to fit well in X-bar theory in spite of some facts that cast some doubts on their nature. First, in contrast to N, V or A, Ps are not an overt, lexically productive class. Second, there are important differences among them w.r.t. theta marking and Case. Third, some Ps have been demonstrated to behave like logical Operators (see Rigau (1990, 1992)), a property which can also be attributed to some FCs.

Concerning Adverbs (Adv) and Particles (Prts) it is not clear how they fit into X-bar theory and what their categorial and lexical status is. Advs have been studied mainly as Operators, secondary predicates (Zubizarreta (1982)) or indirectly in the argumentation for a specific hypothesis about word order (Pollock (1988)),but little has been said about their problematic properties. Take for instance the possibility of being selected by D (Cat.: *En temps de guerra* el demà *no compta* (lit. 'In war times *the tomorrow* does not count'); Sp.: *El doctor no visita* los jueves (lit. 'The doctor does not visit *the thursdays*')) or to appear in a subject position (Sp.: Hoy *es el día más feliz de mi vida 'Today* is the happiest day of my life').

The predicational value of Prts has been established by Kayne (1984) and Guéron (1990), but their categorial properties remain unclear.

The present paper is part of a wider investigation on Ps, Prepositional Locutions (PLoc), Prts and Advs, their categorial and lexical properties. What we are trying to assess is the functional or lexical nature of Ps, their relation to Advs and the general properties of non agreeing elements. Nevertheless, in this paper we will concentrate on a group of lexical elements, traditionally located in different lexical categories, which we will demonstrate that are lexically related and that are much better explained as a single and unique lexical category. We refer to such elements as Sp. *bajo, debajo* and *abajo*; Cat. *rere, darrere* and *enrere* or *endarrere*, and Ital. *dietro, indietro, addietro*. The differences in syntactic behaviour that justified previous analyses will be shown to be reducible to the FCs associated with them and the lexicon will be simplified so as to include only one of the related elements of each paradigm. W.r.t. Advs, one intuition that has to be implemented is that Advs, at least those that are diachronically derived

from As, have a descriptive and a functional morpheme. In connection with this twosided nature, Adverbsare distributionally equivalent to other categories such as PP or AP, an equivalence in which both the functional and the lexical content has to be taken into consideration.

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1. The Controversial Nature of Data

Such elements as Sp. *bajo* 'under', *debajo* 'under', *abajo* 'down', which are presented in (I) to (4) have received a controversial treatment in grammatical literature.

(1) a. Las mantas estan *bajo* la cama.   (Spanish)

        the covers are under the bed

      b. Mira *debajo* de la cama

         look under of the bed

         'Look under the bed.'

      c. Viven *abajo*.

         live-3pl downstairs

      d. El bote fue arrastrado río *abajo*.

         the boat was carried river down

(2) a. Viu *rere* l'estació.   (Catalan)

         live-3sg behind the railway station

      b. Mira *darrere* de la porta

         look behind of the door

         'Look behind the door.'

      c. Caminen *enrere*.

         walk-3pl backwards

         'They are walking backwards.'

(2)   d.   Carretera *enrere* havíem deixat el ferit.

        road back had-1pl left the wounded

        'Back in the road we had left the wounded man.'

Traditional grammars call the units in (a) *prepositions* (P), in (b) *prepositive locutions* (PLoc),
in (c) *adverbs* (Adv) and in (d) *postpositions* (Post).[3]

Among the different analyses that have been made of these elements, there is a line of
reasoning, that we call *reductionist*, which makes serious attempts to reduce the categorial
classes to which the elements are to be ascribed. Authors like Jespersen (1924), Jackendoff
(1972) or Ruwet (1982) went a big step further in the explanation by asserting that what has
traditionally been called an Adverb is a P which has no complement, an *intransitive P*. This
account runs into problems because the same unit which acts as an intransitive P can also
behave as a transitive lexeme: as a transitive preposition, which governs its complement to the
right or as a transitive postposition, which governs its complement to the left. Other types of
accounts could be called *analytic*. Plann gives a comprehensive an clear account of the
prepositional locutions in treating them as *substantives*. In her analysis, the nominal properties
of such elements are well explained and clarified, but at the cost of introducing a new category
into the lexicon and leaving aside the evident relation between it and the other elements of the
paradigm.

2.   Functional Prepositions and Case

In this section, we will argue that items like *bajo, debajo, abajo* have as a lexical basis, a
categorially undetermined lexeme, *baj-*, which acquires its different categorial status by means

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[3] Parallel paradigms can be found in Galician, Italian or French. Also, there is an interesting related situation in
Germanic languages such as German or Dutch. We will refer to German Postpositions in #2.2.1.

of the different FCs they are associated with and by the lineal order in which those FCs are affixed to the lexical head.

The following sections will be devoted to an explanation of the properties of each of the elements of the paradigm according to the structure we propose.

2.1. The So-called 'Locative Prepositions' and 'Prepositive Locutions'

2.1.1. Facing the Problem. Units such as Sp. *bajo* 'under', Gal. *baixo* 'under' and Fr. *dans* 'on', that belong to a closed list in all the languages under consideration, are usually treated as Ps. Like the other "real" Ps, they obligatorily select a DP complement which is marked with Oblique Case. On the other hand, prepositive locutions (*substantives* in Plann's words) have to be followed by a nominal headed by *de*, i.e. a Genitive nominal.[4] Compare (3) with (4):

(3)   a.   Ante *mí/*de mí/*yo/*me* lloraba Juan.   (Spanish)

            in-front-of me (Obl/*Gen/*Nom/*Acc) cried John

            'John was crying in front of me.'

   b.   *Ante lloraba Juan.

(4)   a.   Delante *de mí/*mí/*yo/*me* lloraba Juan.

            in-front-of me (Gen/*Obl/*Nom/*Acc) cried John

   b.   *Delante mí lloraba Juan.

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[4] For the moment we will leave the question of the exact nature of Genitive Phrases. Later in the text we will discuss whether Genitive Case is an Inherent or Structural Case and whether it can be assigned either to DPs or NPs. See section 2.1.2. and especially note 13.

There is an obvious lexical relation between *ante* and *delante*, the latter being the result of the historical integration[5] of three elements, originally Ps: [de (+en) + ante][6]. This relation is not a casual one: it can be found between *bajo* and *debajo* or between *rere* and *darrere*. Many PLocs share a compositional origin with Posts. Thus PLocs were former PPs as shown in (5):

(5) a. enfrente: ([p en][NP frente])   (Spanish)

    in front

  b. darrere: ([p de][NP rere])   (Catalan)

    of back

    'behind'

  c. embaixo: ([p en][NP baixo])   (Galician)

    in lower part

    'under' 'below'

Romance languages have a productive mechanism in order to generate PLocs. A new PLoc can be created by putting together a P and an NP meaning 'place' or 'position'. In the course of historical evolution PLocs such as Sp. *encima (de)*, *enfrente (de)* and *debajo (de)* have been formed. As semifrozen counterparts we find prepositional constructions like Sp. *en la punta (de NP)* 'on the tip (of NP)', *al pie (de NP)* 'at the foot (of NP)', *al lado (de NP)* 'beside (NP)' (lit. 'at the side (of NP)'). It should be pointed out that the choice of the P is far from irrelevant. In Sp., for instance, there seems to be no restriction concerning the selection of the P when a PLoc is involved, whereas Posts show a non accidental preference for the directional P *a* (see section 2.2.3.). Thus, current PLocs originated as syntactic PPs and in Old Spanish (OS) or

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[5] We are using here a pretheoretical term. Further on we will clarify the nature and functioning of the historical change.

[6] The difference between Old Spanish *denante* and Modern Spanish *delante* is due to a dissimilation rule.

Old Catalan (OC)[7] they still had a compositional sense, lost to MS or MC, as can be seen from the contrasts in (6) to (8):

(6)   a.   (si senten) que una pedreta caygue *dalt* criden.   (Old Catalan)

         '(if they hear) that a little stone fell *from-above* they shout.'

     b.   *Dalt de* la muntanya hi ha un pastor.   (Mod. Catalan)

         up of the mountain there is a shepherd

         'Up on the mountain there is a shephered.'

(7)   a.   Se parti *denant* ella.   (Old Catalan)

         SE went-3sg away *from-the-front-of* she

         'She left her.'

     b.   Els pares es barallaven *davant* dels fills.   (Mod. Catalan)

         the parents quarreled *in-front of*-the children

(8)   a.   El ruido venía *de bajo*.   (Old Spanish)

         'The noise came *from below*.'

     b.   El gato dormía *debajo de* la mesa.   (Mod. Spanish)

         'The cat was sleeping under the table.'

As we saw above, besides those "frozen" PPs, MC and MS have syntactically formed PPs with a Locative value, such as *al lado de* 'beside' (lit. 'at the side of'), *a la derecha de* 'to the right of', *als peus de* 'at the bottom of' (lit. 'at the feet of'), *a la vora de* 'near to' (lit. 'at the side of'). Given their incomplete compositional meaning, these constructions are also considered prepositional locutions by traditional grammars, but in a principles and parameters theory it is easy to take *debajo* or *lado* as a single class and to argue for the nominal character of both.

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[7] In general, in the XVIth. Cent. PLocs are consolidated, and "medieval" constructions appear as archaic.

On the other hand, everyone agrees in considering *bajo* a P. But there are some striking facts that one would like to explain. First, why *bajo* acts as a P when "alone" and as an N inside the complex element *debajo*. Secondly, why the ending of both *baj-o* and *debaj-o* are exactly the masculine agreement morpheme of Ns and As.[8] Thirdly, in some cases this *-o* ending manifests the adjectival character of the lexeme, as in (9), whereas in others it appears to be "frozen" and the lexeme functions adverbially, as in (10):

(9)   a.   Juana llevaba un vestido *claro*.   (Spanish)
               Joan wore   a   dress   clear
               'Joan was wearing a light dress.'

        b.   Tomás tiene un coche muy *rápido*.
               Thomas has a   car very quick
               'Thomas has a very quick car.'

        c.   L'Enric és molt *alt*.   (Catalan)
               the Henry is very tall

(10)   a.   Juana habla *claro*.   (Spanish)
               Joan speaks clear
               'Joan speaks clearly.'

        b.   No vayas tan *rápido*!
               not go so quick
               'Do not go so quickly!'

        c.   L'Enric parla molt *alt*.   (Catalan)
               the Henry speaks very loud
               'Henry speaks very loudly.'

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[8] In Catalan, where no overt masculine morpheme exists, the ending is lacking in ethymologically related elements and, in general, both Ps and PLs appear with the bare lexeme or with an epenthetical *-e*, the same as in As.

2.1.2. One Lexical Element and two Different FCs. Let us leave aside the adverbial uses of cases like (10) for the moment. For the other elements under consideration, we propose that the root of both elements, the P and the PLoc, was originally *baj-*, a categorially undetermined lexical unit labeled L and that the *-o* ending was the head of a FC, a (nominal) Word Marker. In the course of historical evolution *-o* could lose its syntactic value by being integrated into a single (but diachronically complex) word.[9] More precisely, in PLocs *-o* heads a FP, Word Marker (WM), which is responsible for the nominal character of the unit.[10] On the other hand, Ps such as *bajo* have the *-o* morpheme integrated into the lexeme, which is now *bajo*. Elements such as *bajo* are now "like" P but are not labeled P, but L, and are unable to assign Case by themselves. They assign Case by means of being selected by a FC, a functional Preposition in a structure like (11a). The head L raises to FP and from there it can assign Case by governement to the DP complement which in turn has raised to [Spec, LP] and thus structure (11b) is obtained:

(11)

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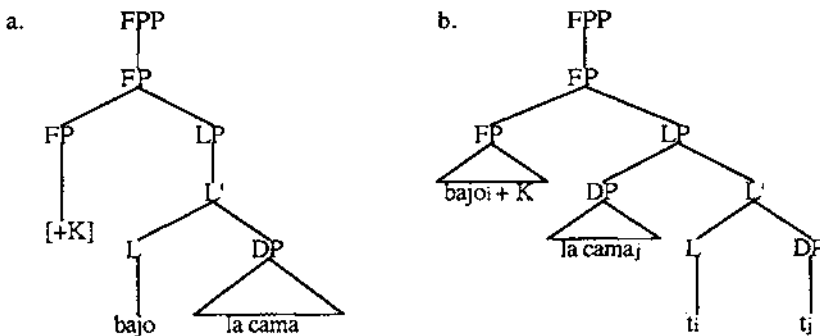
[9] The ordering of affixation among WM morphemes and Ps is probably the responsible for the syntactic properties of the resulting lexical unit. Thus, the question could be faced simply from a morphological point of view. Nevertheless, such an analysis would lack the explanation for important syntactic facts.

[10] Ls selected by a WM have a nominal character, but are not Ns. For an L to behave as a N it needs other functional projections, as will become clear later in the text.

In this new position, *bajo* plus the Functional Preposition can assign Case under government to the DP moved to the Specifier of the LP.[11]

In contrast with Ps, PLocs such as *debajo* are syntactically complex elements. The L root is *debaj-*, the ending *-o* being the head of a FP which we call Word Marker following Harris (1991) and Picallo (1991). This element is phonologically identical to the unmarked masculine nominal and adjectival morpheme. The structure we propose is the one in (12):

(12)
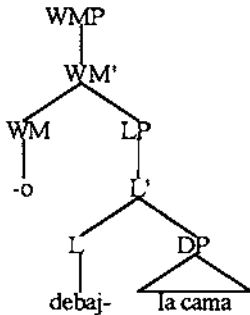
The WM enables *debajo* to act partially as a nominal element, but it acquires all "nominal" properties only when selected by a Number Phrase (NumP) and a DP which give it its referential properties.[12] Observe, for instance, that such elements as *debajo* or *darrere* can have a possessive as their complement, but in a manner different from that of DP. The mechanism of Case assignment goes as follows. *Debaj-* raises to the head of WMP to take the WM affix *-o*. The DP complement can raise to [Spec, LP] but WM is not an Oblique Case assigner and the

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[11] The question could be made as to why the complement DP does not raise to [Spec, FPP] and there receive Case by a Spec-head agreement mechanism. We assume that by economy an argument will stay in the landing site where it can receive Case. Thus in [Spec, LP] the DP can receive structural Case being governed by [L+FP]. Further raising to [Spec, FPP] is a last resort mechanism just for cases where no structural Case is available. See #2.2.

[12] See Longobardi (1992).

insertion of a "dummy" *de* is necessary. We can say also that WM can assign only a Genitive Case, which *de* manifests.[13] The structure obtained is presented in (13):

(13)
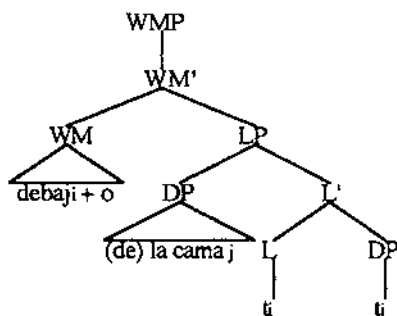
There are several arguments which support the analysis and the structures given above. We will explain them now.

A) A first argument is Case, which has already been presented. As we saw, Ps assign Oblique Case by means of taking the Functional P associated with them, whereas PLocs have a complement with Genitive Case which is due to the nominal WM -*o*. But there are some further points to be specified. Oblique Case requires adjacency between the Case assigner and its complement, whereas Genitive does not:

(14)   a.   Debajo mismo de la mesa.   (Spanish)
             under just   of the table
             'Just under the table.'

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[13] It is not the main purpose of this work to establish how Genitive Case is assigned. Nevertheless, it should be pointed out that all explanations referring the Genitive Case assignment are extremely inelegant, either in saying that the genitive P is *inserted* in the course of the derivation, either in saying that it *manifests* the Inherent Case assigned at DP. Another way to look at the nature of this "dummy" P is to say that it heads a Genitive Case Projection whose function is to assign Case without assigning a theta role. This possibility would have a number of interesting consequences, but we will no pursue it here.

(14)   b.   *Bajo mismo la mesa.

            under just   the table

This fact can be explained in terms of the presence vs. absence of an overt morphological Case marker.

B) Another contrast related to Case is that PLocs can be Case marked from an external position (15a), resembling true nominal categories (15b), whereas Ps cannot (15c):

(15)   a.   Els arbres *(de) *darrere de* la casa.   (Catalan)

            the trees   from behind of the house

      b.   Els arbres *(de) l'hort.

            the trees   from the kitchen-garden

      c.   Los árboles *(*de) tras* la casa.   (Spanish)

            the trees   from behind the house

There is a clear explanation in terms of the Case resistance Principle: being a Case assigner, the FP does not allow itself to be governed by another P. On the other hand, the WM is not in itself a Case assigner.

C) Also related somewhat with Case, is the behaviour of possessives. As we noticed, PLocs accept a possessive as their complement, but Ps do not. Unlike the situation in "real" nominals, nevertheless, possessives in PLocs are postposed and always adopt the unmarked masculine singular form:

(16)   a.   Un hombre corría detrás *mío*.   (Spanish)

            a   man   ran   behind *mine*

            'A man was running behind me.'

      b.   *Un hombre corría tras mío.

(16)　c.　En Joan anava davant *meu*.　　　　　　　　　　　　　　　(Catalan)

　　　　the John went before *mine*

　　　　'John preceded me.'

　　d.　*La* seva derrota ens afecta a tots.

　　　　the₊fem her/his ₊fem defeat₊fem to-us afects to all

　　　　'His/her defeat afects us all.'

The difference between "real" nominals and PLocs, which have nominal properties, can be
established by adopting Picallo's (1991) hypothesis for possessives in Catalan nominalizations.
Picallo proposes that possessives are given a theta role to the right of the head but raise by Spec
to Spec movement to [Spec, NumP], a position in which they agree with the head of NumP
(which also contains a Gender affix). This possibility is not available to PLocs, given that there
is no NumP. Nor can the possessive raise to [Spec, WMP] because this position is not an
agreement position, WMP not being a real gender marker. Because of this, the possessive has
to remain in [Spec, LP] where it is assigned Case under government. Notice that when one of
these elements is used in a DP, as in (17), the possessive can appear in pre-posed position and
agreeing with the head of DP:[14]

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[14] There is a difference w.r.t. possessives between Catalan and Spanish that could be considered a
counterargument to our analysis. In Catalan, apparent Ps admit a genitive possessive in postposed position just
like PLocs. Does this mean that in Catalan Ps also have a MWP selecting them or that there is no difference in
this language between Ps and PLocs? Following the arguments that we have given so far, there appear to be a
very restricted number of Ps in a number of Catalan dialects, the apparent Ps behaving as PLocs in spite of the
fact that they do not need a dummy Case assigner *de*. The majority of speakers prefer *dintre* to *dins* in the
following examples, but the following grammar is also possible. Apparently simple units like *dins* 'in' or *rere,
rera* 'behind' admit a possessive (ia), can be governed by a Case assigner (ib), and can be intransitive i.e. can be
used intransitively (ic):

(i)　　a.　*Dins seu* no hi ha lloc per a la pietat.

　　　　　in his/hers no there is place for the pity

　　　　　'There is no pity in him/her.'

(17) a. Els darreres de la casa són molt lluminosos.   (Catalan)

the $_{+masc +plur}$ backs $_{+masc +plur}$ of the house are very illuminated

'The back side of the house is very illuminated.'

   b. Els seus darreres són molt lluminosos.

the $_{+masc +plur}$ its$_{+masc +plur}$ backs$_{+masc +plur}$ are very illuminated

'Its back side is very illuminated.'

(i)   b. Els mitjons de *dins el calaix* són nets.
          the socks from into the drawer are clean
          'The socks inside the drawer are clean.'
      c. En Joan és *dins*.
          the John is in
          'John is inside.'

Aside from these properties, these elements require strict adjacency in Case assignment, as do Spanish Ps, and do not require *de*:

(ii) a. Ells eren dins (*mateix) la casa.
          'They were in (*just) the house.'
      b. Ells eren dins (de) la casa.
          they were in (of) the house

What these facts mean is that, within the paradigm studied, Ps constitute a very restricted class in M Catalan, showing, in its vast majority, nominal properties. Lexically simple units tend to behave the same as complex ones. In Old Catalan, nevertheless, elements such as *dins* and *dintre* had a clear prepositional character and assigned Oblique Case:

(iii) a. Les naus con han mal temps en la mar, no han la tempestat ni la tribulació *dins si metexes*. (R. Llull)
          'the ships when they have bad weather in the sea, they have not tempest nor tribulation *in themselves*.'
      b. '[...] bé's deu alegrar d'aquella que és *dintre si*.' (R. Llull)
          'he/she will be probably happy of that one which is *in herself*.'

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D) Campos (1991) has argued that the apparent stranding of P that the elements of the PLocs group show is due in part to its nominal character and in part to the possibility of reanalyzing with V at LF and so governing the variable. Aside from the fact that the possibility of stranding is neither general nor even widespread among Spanish speakers, and that all the speakers we have consulted found the sequences in (18) (from Campos (1991)) odd, the facts can also be explained in terms of our analysis without making recourse to reanalysis.

(18)   a.   La pastelería de la cual siempre he vivido detrás es buenísima.
            the pastry-shop of which always have-1sg lived behind is excellent
       b.   De qué estante puso encima los libros?
            of which shelf put-3sg on-top the books?

We saw that the "substantive" or nominal character of such elements is explained in terms of WMP and its way of assigning (Genitive) Case. The possibility of the variable being governed can be attributed to the way Case is assigned to the complement; Genitive Case supposes the marker *de* and so the preposed constituent would act as a PP.[15]

E) Another sharp contrast between Ps and PLocs is the fact that a Dative Clitic can be licensed in a sentence with a PLoc but not with a P:

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[15] A revealing fact is that many speakers would accept sentences like:

(i)   a.   ?En qué estante pusiste encima los libros?
            in which shelf put-2sg on-top the books?
       b.   ?En qué armario te escondiste dentro?
            in which wardrobe yourself hid-2sg in?

In Catalan, stranding is absolutely impossible.

(19) a. Eva le corría detrás.   (Spanish)

Eve him$_{dat}$ran behind

'Eve was runing behind him.'

b. *Eva le corría tras

c. A en Quim, tothom li va al darrere.   (Catalan)

to the Quim, everybody him$_{dat}$ goes behind

'Everybody runs after Joel.'

d. A en Quim, tothom li pren el pèl.

to the Quim, everybody him$_{dat}$ takes the hair

'Everybody laughs at Quim.','Everybody pulls Quim's leg.'

A complete explanation of these Datives is far beyond the purposes of this paper. One clear observation is that they behave exactly the same as Possessive Datives (Poss Dat). If we accept that Poss Dat are thematically related to a noun, this would explain the difference between P and PLoc. As with Poss Dat, there appears to be a sort of semantic reanalysis between the main V and the element which selects the dative.[16] The question could be put forth as to why a pure Gen DP does not alternate with a Gen clitic in these constructions, but rather with a Dat one. The same question arises with Poss Dats. We think that a line of reasoning would be to explore the fact that the dative clitic has an overt 3rd. person marker *[l]* necessary in order to express the personal meaning of the complement while the genitive clitic *en* is 3rd. person by default, but expresses no personal meaning (Vid. Bonet (1991)).

2.1.3. Some Apparent Counterarguments.

A) As we mentioned earlier, Ps always have to be transitive, whereas PLocs can be used intransitively, obtaining the appearance of an Adv. If the basic lexeme is the very same in all cases, the only diference being that of FCs, how is the Theta Criterion satisfied?

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[16] In some cases [Dat + V + PLoc] behaves as a frozen construction without a complete compositional meaning (*anar al darrere a algú* ='to go after sm.', 'to pursue sm.').

One way to solve the problem would be to say that in the apparently intransitive cases there is an *ec, pro*, which is licensed in the same way as the DP we studied. This element would have a deictic meaning.

Another way to look at it is to adapt Plann's solution. A Functional Projection with a head which is a Case Marker has to discharge its Case and needs the complement of the LP to do so. (Plann (1985:129)). In the case of PLocs, the head of WMP is simply not a(n inherent) Case marker.

B) Another question could be asked referring the possible modification by an A. We have said that PLocs have a "nominal" WMP. Why do they not accept being modified by an adjective? The explanation is, in a way, parallel to the one we gave for the behaviour of possessives. Adjectives require agreement and consequently the presence of all nominal morphemes (NumP and GenP). PLocs have only one "nominal" FC: WMP, and complete agreement is not possible.

2.2. *The Compositional Nature of the So-called* Postpositions

The interaction between Functional and Lexical categories has proved to be an adequate way to capture the lexical coincidence and the categorial differences between Ps and PLocs (see section 2.1.). If we are on the right track, this hypothesis will also explain a more complex construction lexically related to the ones examined above. According to the traditional term, we call the elements in the sequences in (20), *postpositions* (Post)[17].

---

[17] As we have seen in #1, these elements can be used "intransitively", without the preposed nominal element.

(i)   a.   (cuesta) arriba
        b.   (escales) avall

Contrary to what happens with other kinds of elements, like verbs, this contrast has not been considered trivial by some grammarians because it implies, according to them, a categorial change. The lexical item *plays* appearing in (ii) is always a verb independent of the presence or absence of the complement *the piano* (see Jespersen (1924)):

(20)	a.	cuesta *arriba*	(Spanish)
		hill up	
		'uphill'	
	b.	escales *avall*	(Catalan)
		stairs down	
		'downstairs'	

2.2.1. Postpositions and Case. It has been assumed (see, among others, Plann (1985:136)) that Posts assign Case to the left of the head. Notice, if this is true, that the construction illustrated in (20) would present strong evidence against the generalization that head initial word order holds strictly in Romance Languages. Furthermore, such an assertion leads us to conclude that Case and Theta marking are assigned to the right, but also to the left under particular conditions. This situation would be especially surprising since the lexical root [$_L$*baj*-], appearing in the Post *abajo*, has to assign its theta role —as we have assumed in section 2.1.— to its internal argument placed to the right. A similar problem arises for the claim that Case is assigned to the preposed DP/NP because there is no morphological evidence that case has been assigned.[18]

(ii)   He plays the piano

The paradox is that *arriba* and *avall* in (i) are classified as Advs when used alone, but they are Posts when they occur with a preposed complement.

[18] We will come back to this question later but, for the moment, notice that in languages like German, which have case inflection, the preposed NP is obligatorily inflected with Case, whereas Spanish does not allow pronouns in the same position. Remember that personal pronouns in Spanish are the only ones remaining which keep the Latin case system.

(i)	a.	*yo/*me/*mí abajo	(Spanish)
		I (nom)/me (acc/dat)/me (obl) down	
	b.	ihm gegenüber	(German)
		him (dat) towards	
		'towards him'	

It is clear that some Posts were once PPs historically. For example, Sp. *a-riba* 'upwards' (lit. 'to shore') and *a-delante* 'forwards' (lit. 'to front part') had the structures proposed in (21) where the NPs *riba* and *delante* were preceded by the preposition *a* meaning 'in the direction of'.[19]

(21) a.   [PP [P a][NP riba]]   (Spanish)

      b.   [PP [P a][NP delante]]

Notice that these segments have the same structure as the "real" PPs proposed in (22).

(22) a.   al lado: [PP [P a-][DP -l lado]]   (Spanish)
           to-the side
           'beside'

      b.   a l'esquerra: [PP [P a][DP l'esquerra]]   (Catalan)
           to the left
           'on the left'

There is some empirical evidence in Modern Spanish showing that *riba* and *delante* have lost their nominal abilities when appearing in their respective compositional forms *arriba* and *adelante*. The basic argument supporting this idea is that *arriba* , *adelante* and *abajo, in sharp contrast with PLocs*, are unable to assign Genitive Case to their internal argument.

_____

[19] A great number of PLocs share a compositional origin with Posts. This means that PLocs were also former PPs as shown in section 2.2.1. In spite of this common origin, we will see that PLocs and Posts differ radically in the way in which Case is assigned to the internal argument. Notice, however, that Genitive Case assignation is a fact clearly connected to the nominal activity of the NP included in the compositional element. This is why PLocs, which may be considered nouns (or elements with an active nominal WM) with a preposed P constitute an open list of items, whereas Posts, which have lost their nominal properties during the affixation process, and consequently their ability to assign Genitive Case, are members of a closed list of lexicalized elements.

(23) a. delante de la mesa   (Spanish)

            'in-front of the table'

     b. debajo de la cama

            'under the bed'

(24) a. *adelante de la mesa

     b. *abajo de la cama[20]

Another argument has to do with the possessive. As we have argued in section 2.1., possessive pronouns, as nominal modifiers, are only present if there is a nominal word marker phrase (Nominal WMP) allowing the possessive to raise to its Spec position, where it will be able to be identified by agreement features (see Picallo (1991)). Posts, unlike PLocs, are incompatible with possessive pronouns, as can be seen in the contrast between (25) and (26):

(25) a. delante suyo   (Spanish)

            in-front his/hers/theirs

            'in front of him/her/them'

     b. detrás mío

            behind mine

            'behind me'

(26) a. *adelante suyo

     b. *atrás mío

We can conclude that -o is not an active nominal WM because it does not project as a FC.

Nor do PLocs assign an oblique case as "real" prepositions do:

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[20] There is also a problem of selection. This will be explained in section 2.3.

(27)   a.   [p ante] mí   (Spanish)

       b.   [p tras] mí

(28)   a.   *adelante mf

       b.   *atrás mí

Given this situation, the theoretical consequence that follows is that there is no FC selecting Posts like *atrás* and *avall* in constructions like (28) that permits the Case marking of the internal argument. Remember that "real" Ps such as *tras* and *ante* in (27) raise to the head position of the FC in order to be attached to the Case features contained therein. From this position, they will be able to Case mark the internal argument moved to the Spec position of the lexical item in a Spec-head configuration (see #2.1.).

The ungrammaticality of (24), (26) and (28) does not lead us to affirm that the lexeme *baj-* has lost its selectional properties during the historical process. We will assume here that *baj-* is the same lexical element selecting the same internal argument in all contexts (P, PLoc and Post) and the explanation for the contrast shown above is the way in which Case is assigned to the internal argument.

Posts are the compositional result of an affixation process applied to the lexical item *baj-* during diachronic evolution. The ordering among the different rules of affixation will determine the behaviour of *abajo* as an unaccusative element unable to assign structural Case to its internal argument. Because of this, the internal argument will raise to a higher position in order to satisfy Visibility. We will try to show that this raising process may adopt several forms in different languages or different stages of evolution of the same language depending on the syntactic activity of the FCs associated to the affixes. In German, Dutch, Old Spanish and Old Catalan the anteposition of the internal argument may be considered a consequence of a syntactic movement from the complement position to the Spec position of the higher FC (later on, we will suggest some arguments in order to determine the nature of the FC involved in this structure). The raised DP will be able to be Case licensed in this position. On the contrary,

Contemporary Spanish, Catalan, Galician and Italian present a different situation. In these languages, the affixes attached to the head have lost their syntactic activity in the course of historical evolution, therefore they do not project as a FC. There is no syntactic movement to the Spec position of the FC anymore and the only raising process available is incorporation. Elements like Sp. *abajo* have a compositional origin but they behave today as a unitary item.

Thus, we do not have to postulate the existence of postpositional structures in Romance languages because the basic order is always head-initial as shown in (29).

(29) a. río abajo   (Spanish)

b. DS [Theta marking]

c. (Incorporation process)
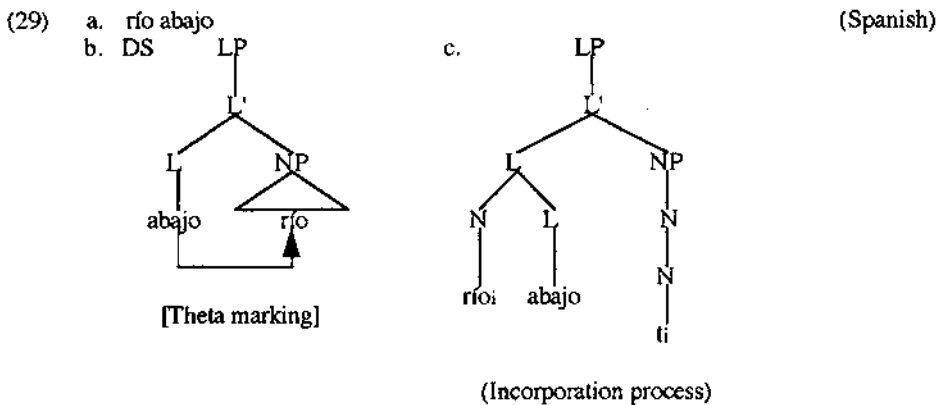
The incorporation process shown in (29c) adjoins the noun *río* to the left of its lexical governor *abajo*. The trace (t_i) satisfies ECP conditions because it is governed by the lexical head *abajo*.[21]

(30) a. Meiner Meinung nach   (German)

          my opinion_dat according

          'according to me'

---

[21] According to Baker (1988:229), "incorporation is the syntactic movement of an X^0 category to adjoin to its X^0 governor".

(30)

b.   DS   FP

        F

    F   LP

          L'

      L   DP

    nach   meiner Meinung

[Theta marking]

c.   FP

    DP   F

 meiner Meinung F   LP
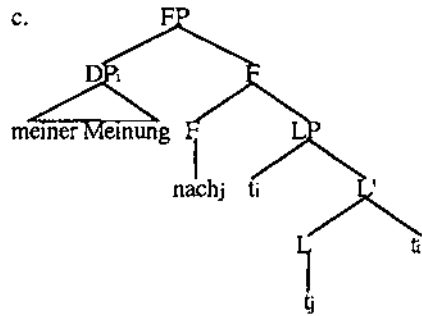
        $nach_j$ t_i L'

              L t_i

              t_j
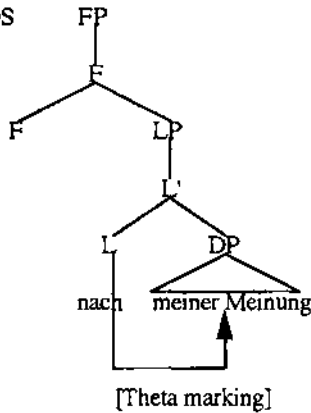
The structures above show the raising process that the internal argument *meiner Meinung* undergoes. At a DS level, the lexical head *nach* is able to assign its Theta role to the complement placed to the right but it is unable to assign case because the lexical item *nach* is not associated with a functional P (see section 2.1.). If the internal argument remains in its basic position, there will be no Case assigner available and the DP *meiner Meinung* will not satisfy Visibility. Because of this, the DP has to raise in order to be Case licensed. As (30c) shows, the DP moves up from the complement position of the lexical head to the Spec position, and then it raises to the Spec position of the FC. In turn, the lexical head *nach* will have to move up to the head position of the FC in order to be attached to the features therein.[22] The preposed DP *meiner Meinung*$_i$ and the lexical head *nach*$_j$ will be in a Spec-head agreement configuration and the DP will be Case licensed in this way.

Old Spanish and Old Catalan had the same construction as Modern German in which the argument is raised to the Spec of the Functional P. But it has to be pointed out that at least in Old Spanish the construction under consideration once alternated with another one preceded by the preposition *por* 'through'.

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[22] The nature of the features contained in the FC will be determined further on. See section 2.2.3.

(31) a. *Por el pinar ayuso* fallé una vaquera .(*Buen Amor*, v. 975a)

        to the pinewood down met-1sg a woman-who-tends-cows

      b. [...] sangriento trae el braço, *por el cobdo ayuso* la sangre destellando. (*Cid*, vv. 780-781)

        bloody   brings the arm, to the elbow down the blood sparkling

Sequences like the ones presented above are very residual in Contemporary Spanish but they show an interesting contrast with the postpositional construction studied here concerning the way in which Case is assigned to the preposed nominal element. We will suggest that the postpositions included in (31) are small clauses selected by the preposition *por*. This preposition is an external governor for the subject of the small clause, so this subject will get structural Case from the preposition following ECM mechanisms in the same way in which Case is assigned to the subjects *their boots* and *el río* in (32).[23] [24]

(32) a. They died [PP with [SC [DP their boots] [PP on]]]

      b. Nadaron [PP por [SC [DP el río] [PP abajo]]]   (Spanish)

        swam-3pl   through   the river   down

        '*They* swam downstream.'

_____

[23] Notice that the predicate of the small clause is unaccusative. Therefore, *their boots* and *el río* are derived subjects raised from a complement position as illustrated in (i). For further information see Guéron (1990).

(i)   a. [with [their boots$_i$ on t$_i$]]   (English)
      b. [por [el río$_i$ abajo t$_i$]]   (Spanish)
      c. [zu- [-m ersten Stock$_i$ hinauf$_i$]]   (German)

[24] It should be noted that the case has to be structural because the subject is a DP instead of an NP (for further information see Belletti (1988)). The ungrammaticality of (i) is due to this fact.

(i)   *por río abajo (cf. río abajo)   (Spanish)
      through river down (cf. river down)
      'downstream'

(32)   c.   Wir liefen snell zum ersten Stock hinauf.   (German)

              we walked quickly to-the first floor up

2.2.2. Frozen Postpositional Constructions and FC. We will now suggest some empirical arguments in order to clarify the difference between the two kinds of raising processes. Remember that, on one hand, there are languages like German, Dutch, Old Spanish and Old Catalan that allow derived postpositional structures as a consequence of a syntactic movement of a lexical category from a complement position to a Specifier position of a higher FC (as we have illustrated in (30)). Other languages, like Modern Spanish and Modern Catalan, have lost the higher FC during their historical evolution and incorporation is the only possibility left to the internal argument in order to raise to a preposed position. In (29) we have shown the incorporation process that the internal argument of a Post undergoes. The following observations illustrate the empirical consequences of the syntactic activity or inactivity of the affixes attached to the lexical head.

A) First, the NP contained in incorpored structures like (33) lacks the article in sharp contrast with the preposed nominal appearing in sequences like (34). This contrast is far from irrelevant. The lack of the article in (33) exempts the nominal element from being Case marked in the usual way, whereas the DPs in (34) have to obey Case requirements.

(33)   a.   (*la) cuesta arriba   (Spanish)

              the   hill   up

     b.   (*les) escales avall   (Catalan)

              the   stairs   down

(34)   a.   E dio a fuyr *la escalera abajo*, e cerró tras sy, e el otro quedó desangrándose, [...]

              (Corbacho, p. 154)   (Old Spanish)

              and went-3sg the stairs down, and closed-3sg behind him, and the other was-left

              bleeding-to-death

(34) b.   Commo omne non siente tanto frío si corre, corrí *la cuesta ayuso*. (Buen Amor, vv. 1007a-b)

since one NEG feels so-much cold if runs, ran-1sg the hill down

c.   meiner Meinung nach   (German)

my opinion ₍dat₎ according-to

'according to me'

d.   Die ganze Straße entlang sieht man nette moderne Häuser

'All along the street one can see nice modern houses.'

It should also be mentioned that Case appears morphologically specified in sequences like (34c), but no personal pronoun with an explicit mark of Case may be present in incorporated sequences as shown in (35):

(35) a.   *yo/*mí/*me arriba   (Spanish)

I (nom.)/me (obl.)/me (acc.) up

b.   *jo/*mi/*em avall   (Catalan)

I (nom.)/me (obl.)/me (acc.) down

B) Agreement is defective in the incorporated construction[25] but productive when applied to the nominal element present in structures like (33). With regard to this assertion the examples below show an obvious contrast.

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[25] The frozen status does not imply that the only number agreement left to the preposed nominal is singular. With defective agreement we mean that there is no singular/plural alternation. In fact there are some examples, such as (i), that lack the singular counterpart.

(i)   a.   peñas arriba/*peña arriba   (Spanish)
           cliffs up/cliff up
           'uphill'

b.   puertas adentro/*puerta adentro
     doors inside/door inside
     'behind closed doors'

(36) a. *cuestas arriba/cuesta arriba   (Spanish)

         hills up/hill up

      b. *rius avall/riu avall   (Catalan)

         rivers down/river down

(37) a. den Kindern zuliebe/das Kind zuliebe   (German)

         the children$_{dat}$ for-the-benefit-of/the child$_{dat}$ for-the-benefit-of

         'for the benefit of the children/the child'

      b. den Verhältnissen entsprechend/dem Verhältnis entsprechend

         the circumstances$_{dat}$ according-to/the circumstance$_{dat}$ according-to

         'according to the circumstances/the circumstance'

Notice that a priori there should not be any semantic or logical reason prohibiting sequences like *ríos arriba* (lit.'rivers up'). We may attribute this defectivity to incorporation because this process puts together two lexical heads, the noun without any FC (either DP or NumP) and the compositional preposition.

C) Third, in incorporated constructions no modifier may appear between the preposed nominal head and the compositional preposition because this process implies strict adjacency between two heads. The APs *caudaloso* 'large' and *estreta* 'narrow' appearing in (38) are understood to be attached to the nominal element at a N' level and for this reason they block the strict adjacency between the two incorporated heads.[26]

The English constructions *uphill, downhill, inland, outside, upstairs, downstairs* etc. that now behave as compounds have the same restriction concerning number agreement (Cf. *upstair, *uphills). The english compounds are the frozen counterpart of constructions such as *up the street*, both of which keep a head initial ordering.

[26] Sequences like (i) fit perfectly into this system. *Río Ebro* (lit. 'river Ebro') and *muntanya de Rocacorba* (lit. 'mountain of Rocacorba') act as a compound, as an N^0.

(i)   a.   río Ebro abajo   (Spanish)
            river Ebro down
            'down the Ebro river'

(38) a. *río caudaloso abajo   (Spanish)

   river large down

   b. *carretera estreta endavant   (Catalan)

   road   narrow forward/ahead

   'further along the narrow road'

This constraint does not hold in German. The syntactic movement to the Spec position of a
higher FC involves a DP instead of an X^0.

(39) Technischer Schwierigkeiten *wegen* muß die Eröffnung verschoben werden. (German)

   technical   difficulties   because has the opening   postponed to-become

   'Because of technical difficulties the opening has to be postponed.'

The same could be said about the Post head. As (40) shows, no modifier is allowed when a
nominal head has been incorporated into a previous position.

(40) a. *río *muy/más* abajo   (Spanish)

   river very/more down

   b. *mar *molt/més* endins   (Catalan)

   sea very/more inside

It should be noted, however, that the whole incorporated constituent is headed by the
compositional preposition.[27] Thus, it maintains the categorial properties of the head and hence

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   b.   muntanya de Rocacorba amunt   (Catalan)
         mountain of Rocacorba up
         'up to the Rocacorba mountain'

[27] See structure (29) in #2.2.1.

"adverbial" modifiers as *muy* or *más* may have scope over the entire construction, as shown by the examples in (41):[28]

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[28] The entire postpositional construction may be also preceded by a quantifier as the examples below clearly show.

(i) a. diez metros río abajo   (Spanish)
         ten meters river down
         'ten meters downstream'
     b. dos quilòmetres mar endins   (Catalan)
         two kilometers sea inside
         'two kilometers out at sea'

This fact is related to the directional value of postpositional constructions. Directional value implies that the place designated by the adverb is not a point but a continuity, so we may stablish a gradation. "Direction", in this sense, might be equivalent to some aspectual activity. We will come back to this point in section 2.3.

Ps and PLocs (both lacking directional value) do not allow quantifiers, as expected:

(ii) a. *dos metros bajo la cama   (Spanish)
          two meters under the bed
      b. *unos pocos metros debajo de la cama
          a   few   meters under of the bed

Quantifiers may also precede other kinds of constructions, that some authors have treated as postpositions:

(iii) a. años después
           'years later'
       b. varios días antes
           'several years before'

These sequences differ crucially from the ones examined in this paper: the preposed NP is not a former internal argument of the heads *después* and *antes*, but a quantifier. The fact that the NP cannot appear here in singular form is absolutely relevant in this sense:

(iv) a. *año después
      b. *día antes

(41) a. *muy/más* río abajo   (Spanish)

      b. *molt/més* mar endins

D) When the construction has undergone an incorporation process, coordination between two incorporated heads sharing the same lexical nature is disallowed:

(42) a. *río arriba y abajo   (Spanish)

          river up and down

      b. *río y montaña arriba[29]

          river and mountain up

PLocs, in sharp constrast with Posts, admit coordination:

(43) a. libros apilados encima y debajo de la mesa   (Spanish)

          books piled-up   on   and under of the table

          'books piled up on and under the table'

      b. Hay libros encima de las mesas y de las sillas.

          there-are books on of the tables and of the chairs

          'There are books on the tables and the chairs.'

This constraint does not hold in Old Spanish, because the constituents of the postpositional construction have relative independence and may undergo coordination.

Notice, however, that quantification is possible in sequences like (iii) for the same reasons we have suggested in (ii). *Antes* and *después* have a durative aspectual value and hence a gradation may be established.

[29] The only possibility left for coordination is a sequence like (i):

(i)   río abajo y montaña arriba
         river down and mountain up
         'downstream and uphill'

(44)   Et si quisiessen andar a caça con buenas aves *Arlançón arriba et ayuso* et en buenas

mulas gordas, et dexar de defender la tierra, que bien lo podrían fazer, [...] (*Lucanor*, p.

116)

and if wanted-3pl to hunt with good birds Arlançón up and down, and on good fat

mules, and give up defending the land, would-3pl be able to do it

The contrasts mentioned above may be attributed to the lack of any FC intervening in

constructions like *río abajo*. If we assume that Spanish, Catalan and other Romance languages

currently have the frozen counterpart of a syntactic process productive in German, Old Spanish

and s.o., an interesting generalization arises. Frozen constructions are the result of a

progressive loss of the functional architecture dominating lexical categories produced in the

course of historical evolution. With no FCs associated with the lexical elements, no landing

sites are offered to the internal argument in order to move up to obtain Case. The only

possibility left is incorporation to the left of the lexical item. Incorporation will block any

syntactic process that affects only one of the incorporated elements as we have shown above.[30]

2.2.3. Some Problems.   We have assumed in previous sections that *baj-* is the same lexical

item always selecting the same internal argument in all contexts. The differences among Ps,

PLocs and Posts may be derived from the FCs attached to the lexical item in order to assure a

mark of case for the internal argument. If this is true, *baj-* should appear with the same kind of

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[30] It should be pointed out that idiomatic constructions have always been considered opaque domains, non accessible for transformations. However, as Chomsky (1981:146, fn. 94) has argued, "idioms in general have the formal properties of non-idiomatic structures, (...) it is only at D-Structure that idioms are uniformly non 'scattered' and it is only the D-Structure forms that always exist for the idiom with marked exceptions".

FCs may shed some light over the controversial nature of idiomatic constructions. Frozen processes might be considered as a gradual loss of the FCs selecting lexical items, and consequently the disappearance of landing sites available to arguments in order to be Case marked. A frozen construction has, then, bare lexical items, that have to appear consequently "non scattered". For further details about frozen constructions see Ruwet (1989).

internal arguments independent of its final categorial status. However, although Ps and PLocs share the same type of internal arguments, this constraint does not hold in Posts:

(45)   a.   bajo la cama   (Spanish)
            'under the bed'

       b.   debajo de la cama
            'under the bed'

       c.   *cama abajo[31]
            bed down
            'down the bed'

This restriction may be attributed to the semantic and syntatic properties of the preposition *a*. Being a directional preposition, this element keeps its properties and modifies the primitive value of the lexical item [*baj-*] (meaning only location). We will argue that *a-* is able to be syntactically active because it is the last affix to be added to the root. Structure (46) illustrates the ordering in which affixation rules have taken place.

(46)   [a-[[baj-]o]]

According to this view, certain empirical facts may be easily derived.

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[31] *Cama abajo* would be grammatical only if the object *cama* might be conceived as a direction. According to this point of view, notice that (i) is perfectly admissible.

(i)   Dos hormigas iban cama abajo.
         Two   ants   went bed down
         'Two ants were going down the bed.'

(a) Because of the affixation of the former preposition *a-* to the element headed by *baj-*, the compositional result became, in a sense, unaccusative, so it is unable to assign oblique or genitive Case to its internal argument, as we have seen in section 2.2.1.

(b) Postpositional elements may undergo gradation in clear constrast with Ps and PLocs.[32]

(47)   *muy/más/diez metros* río abajo   (Spanish)
         very/more/ten meters river down

(48)   **muy/más/diez metros* bajo la cama
         very/more/ten meters under the bed

(49)   **muy/más/diez metros* debajo de la cama
         very/more/ten   meters under of the bed

We will argue here that gradation may appear only if there is some aspectual value involved. This idea would capture the "sentential" dimension of postpositional constructions. In German, Old Spanish and Old Catalan the internal argument raised to the Spec position of the FC might be considered, in a sense, as the derived subject of a sentential domain. In Modern Spanish, and Modern Catalan, the sentential status is lost because there is no FC anymore, so the final

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[32] It should be pointed out that some postpositional constructions, such as (i) does not bear a directional meaning. As shown in (ii), gradation is not possible in these cases.

(i)   a.   Duerme *boca abajo*.   (Spanish)
            sleeps mouth down
            'He/she is sleeping face down.'

       b.   Descansaba *panza arriba*.
            rested-3sg belly up
            'He/she was resting face up.'

(ii)   a.   *Duerme *muy/más/poco* boca abajo.
            'He/she is sleeping *very/more/a little* face up.'

       b.   *Descansaba *muy/más/poco* panza arriba.
            'He/she was resting *very/more/a little* face up.'

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categorial result is a PP (see section 2.2.1). In spite of this, Spanish and Catalan postposed constructions may undergo gradation, because the aspectual value is present as a lexical feature contained in compositional items as Sp. *abajo* or Cat. *endarrera*.[33]

(c) There is a connection between the way in which the constituent has been constructed and the raising process that affects the internal argument. If the Post has been obtained as a result of a diachronic affixation process (such as Sp. *abajo* or Cat. *endarrera*), the compositional unit behaves as a single lexical item and the complement may raise. On the contrary, if the locative element is a "real" PP the complement has to always appear postposed. The examples below illustrate this point.[34]

(50)   a.   [$_{PostP}$ río a-bajo]/*abajo del río   (Spanish)

        b.   [$_{PP}$ en la dirección del viento]/*(el) viento en la dirección

             in the direction of the wind[35]

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[33] The lexical status of the aspectual value in languages like Sp. and Cat. will explain some paradoxical facts. It should be noted that postpositional constructions like Sp. *río abajo* 'downstream' (lit. 'river down') may have a directional value only if a higher imperfective predicate licenses this value (in a sort of *consecutio temporum* with the postpositional construction). If *río abajo* is not within the scope of an adequate apectual antecedent, the sequence is interpreted as locative, lacking aspectual value. The contrast in (i) illustrates this point:

(i)   a.   El pont és$_{+perf}$ riu avall$_{locat}$.   (Catalan)

          'The bridge is downstream.'

        b.   El bote fue arrastrado$_{-perf}$ río abajo$_{dir}$.   (Spanish)

          'The boat was carried downstream.'

[34] Notice that both sequences have a directional meaning but they differ crucially in their structure. (50a) might be considered as a synthetic form, but (50b) should be conceived as an analytical construction, similar to the PLocs examined in #2.1., in which the directional sense is obtained from the N *dirección* 'direction'.

[35] Sometimes, both the analytical and the synthetic form are offered to the speaker. Pairs of nearly synonymous examples like the following are very rare but they show two possible ways to obtain a locative directional element.

3. Conclusion and Further Extensions

3.1. *Theoretical Conclusions about Ps, Plocs and Advs/Postp*

The following conclusions have been drawn from our analysis. First, lexical elements such as *baj-/bajo* maintain their selectional properties in all circumstances independent of their derived categorial labels. Those labels are in fact epiphenomena with no real grammatical import, their syntactic behaviour being derived from the interaction between selectional properties and the nature of FCs associated with them. Basically, the different mechanisms through which arguments of lexical elements are Case licensed are the cause of the main differences among the related structures of a paradigm and those of the parametrical variation observed.

Secondly, at least for clear compositional units, it is possible to argue that from a syntactic point of view, all categorial labels are derived. This *Strong Lexicalist Hypothesis* appears to be much more plausible in acquisitional terms. It greatly simplifies the lexicon, without increasing the number of principles and rules of grammar. In effect, the elements accounting for the superficially different categorial behaviour of elements are independently needed as categories of the grammar. Thus, in spite of the fact that we posit the existence of a Functional Preposition, the number of categories does not increase. This follows from the fact that the difference between a lexical preposition and a functional one lies only in the inability of the latter to assign a theta role, hence, the support for the principle that items that do not assign a theta role are functional.

We also establish that lexical items have to be selected by a FC in order for their arguments to be Case licensed. It is only when no FC is available that a mechanism of incorporation comes

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(i)   a.   campo a través   (Spanish)
                country across
                'cross-country (running)'

       b.   a través del campo
                across of-the country
                cross-country (running)'

into play. In this sense, incorporation implies a loss in syntactic productivity and some degree of freezing of the construction. Following Baker (1988), we assume that morphology is a module of grammar and that incorporation can be considered a syntactic process if there is still some degree of productivity. When incorporation becomes utterly restricted, so that it always involves the same lexical items, we are no longer faced with a grammatical process but with a lexical structure, most likely an idiom.

Last but not least, some reasonable doubts have been cast on the adequacy of maintaining the category "Adverb" as a separate category in the lexicon.[36] We have shown that in a sentence like (51) the element *abajo* is a lexeme in which a diachronical morphological process has reanalyzed the L within the FC and, parallel to this fact, the functional element selecting the category is no longer active:

(51)   Los papeles están *abajo*.   (Spanish)
       the papers   are in-the-bottom-part

In other cases, nevertheless, such as those in (52), the functional element is still active:

(52)   a.   La Maria em va parlar *clar*.   (Catalan)
            Mary to-me PAST speak clear
            'Mary spoke clearly to me.'

       b.   María me habló *claro*.   (Spanish)
            Mary to-me spoke clear
            'Mary spoke clearly to me.'

       c.   Te hablaré *llanamente*.
            to-you speak-FUT-1sg plainly

       d.   *Plane* et *latine* loquuntur.   (Latin)
            clearly and Latin speak-3pl

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[36] This is the case if we do not adopt the strongest lexicalist hypothesis.

In all these cases a FC has to be present to license the lexeme, because it cannot be licensed as an adjective. The adjective has no agreement morphemes (or FCs such as NumP or DP) and it is not coindexed to an external argument. Thus, no grammatical sequence is possible. The affix *-mente*, the epenthetical *-e* from Latin, the neuter or masculine *-o* morpheme from Spanish or an abstract masculine morpheme in Catalan are responsible for the lack of agreement possibilities of adjectives.

Adverbs have been considered intransitive prepositions. In a way we maintain this view, however, we implement it in a new conceptual system. In effect, what we obtain is a framework in which functional elements selecting Ls can appear pre-posed as Ps (Sp. *a+bajo, a medias, de+prisa, de pena* ; Cat. *a+vall, a casa, de+rere, de broma*), postposed as a derivational affix (Sp. *-mente* Advs, Eng. *-ly*, Germ. *-lich*), or as a WM (Sp. *-o* or zero in *clar-o, alt-o, fácil-Ø*). What is important is that in all cases the L element is Case licensed inside the functional projection. Thus, Advs do not behave like intransitive Ps, but rather like PPs and it is because of this fact that they are intransitive. The functional element present in Adverbsor in selecting the Ls that would ultimately be part of the so called Adv could easily be assimilated to Case. This possibility receives a lot of empirical support from languages such as Arabic, Warlpiri or Basque, where Advs are simply Case marked Ns or As.

The empirical facts follow clearly from this analysis. Advs, like PPs, usually appear as adjuncts. They do not need to be L-selected, because they are F-selected. They cannot be Case governed without violating CRP.

It is not impossible for an "Adverb" to select an internal argument (for example, items like *abajo* are able to do so). If this is the case, one of the two following mechanisms is needed: (a) a Syntactic movement to a [Spec, FPP] position, or (b) an Incorporation process.

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