Locative prepositional predicates in English: pragmatic, semantic and cognitive motivations[1]

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ABSTRACT

In the last decades of the twentieth century, lexicist approaches to word formation acknowledge some degree of autonomy between morphology and grammar (among others, Aronoff 1985 [1976]), Szymanek 1980, 1985, Di Sciullo and Williams 1987). Much in the same vein, the Model of Functional Grammar (Dik 1997² [1989¹]) first integrates the Lexicon as a specific component for the analysis of lexical structures. Functional Grammar (FG), however, centers mainly on the development of the Component of Rules (Predicate Formation Rules) that specifically accounts for word-formation processes associated with syntactic constructions (De Groot 1987).

The main concern of this paper is to present an analysis of locative prefixation in English within the framework of the Functional Lexematic Model, first propounded by Martín Mingorance (1984, 1985a,b, 1990), and to demonstrate that this model alternatively provides an adequate framework for an autonomous description and interpretation of those processes of derivation in which syntax only constitutes one of the many factors involved in word formation.

Key words: synchronic linguistics, lexicology.

Los predicados locativos preposicionales en inglés: motivaciones pragmáticas, semánticas y cognitivas

RESUMEN

En las últimas décadas del siglo XX, los modelos lexicistas asignan a los procesos morfológicos cierto grado de autonomía con respecto a los procesos sintácticos. Entre otros, cabe mencionar los trabajos de Aronoff (1985 [1976]), Szymanek (1980, 1985) Di Sciullo and Williams (1987). En esta misma línea, el Modelo de la Gramática Funcional (Dik 1997² [1989¹]) incorpora un componente léxico, el Lexicón, ideado como un componente autónomo. Sin embargo, la Gramática Funcional se centra fundamentalmente en el desarrollo de un Componente de Reglas, Reglas de Formación de Predicados que dan cuenta de aquellos procesos de formación de palabras asociados a estructuras sintácticas (v. De Groot 1987).

Este artículo presenta un análisis de los procesos de prefijación locativa en la lengua inglesa en el marco del Modelo Lexemático Funcional, propuesto originariamente por Martín Mingorance (1984, 1985a,b, 1990). El objetivo fundamental de este análisis es demostrar que esta propuesta representa un modelo funcional alternativo idóneo para la descripción e interpretación de procesos de derivación desde una perspectiva autónoma con respecto a la sintaxis.

Palabras clave: lingüística sincrónica, lexicología.

1. INTRODUCTION

The central concern of this paper is to give a general account of the locative derived lexicon in English under the scope of the Functional Lexematic Model (henceforth FLM). Martín Mingorance (1984, 1985a,b, 1990)[2] claims that functional lexematics basically contributes to improve the lexicon component propounded within Functional Grammar. Indeed, one of the most relevant contributions is the design of an autonomous Word-Formation Component (henceforth WFC) and the view that both the primary and the derived lexica are onomasiologically rather than semasiologically organized (see Mairal 1999: 69 ff.). Furthermore, the model constitutes an attempt to bridge the gap between the linguistic and the extralinguistic worlds. Not surprisingly, therefore, the hierarchical distribution of the lexicon is judged to be ultimately motivated by semantic-cognitive factors and the model incorporates a Cognitive Axis or level that accounts for the role of cognitive mechanisms in language. The design of an adequate means of lexical representation is also one the most interesting challenges for the FLM. Within the WFC, "derivational schemata" are regarded as being suitable representations of the linguistic information relevant to the derived units. They constitute, however, much more than mere semantic representations since semantics interacts in various ways with other levels of linguistic analysis in the lexicon, namely, the pragmatic, the cognitive, the syntactic and the phonological levels.

2. A METHODOLOGICAL FRAMEWORK FOR THE STUDY OF THE DERIVED LEXICON: THE WORD FORMATION COMPONENT

The FLM was first designed by Martín Mingorance (1985, 1987a,b,c and 1990) as a development of the lexicon component propounded within the framework of

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[2] The methodological framework of the FLM was first designed by Martín Mingorance (1984, 1985a,b, 1987a,b,c, 1990). Subsequent contributions to the development of the model are Faber (1991), Faber and Mairal (1994, 1997a,b, 1998, 1999) and Mairal (1999). The following publications present relevant work on the treatment of derivation within this model: Cortés (1996, 1997a,b, c) and Sosa (2002a,b, 2004).

FG (see Dik 1997 [1978] *Part I*). The model of FG constitutes a production model, hence a synthetic grammatical model conceived from the encoder's viewpoint. In addition, Dik (1978:3) assumes that "the onomasiological approach seems to be the most appropriate criterion for the organization of the lexicon in this type of grammar", and devises Stepwise Lexical Decomposition as a means to capture hierarchical relations of meaning. Alternatively, the FLM incorporates Coseriu᾿s Lexematics and Classematics as analytic methods for the semantic description of the lexicon: lexemes are classified into lexical classes or **domains** (Lexematics), and these, in their turn, are distributed into lexical fields or **dimensions** (Classematics) (see Martín Mingorance 1987a:85). Interestingly enough, the Coserian analytic procedure reinforces Dik᾿s hypothesis about lexical structure at the same time that, as it will become clear through the analysis presented in this paper, it contributes to the development of a much more powerful method for lexical description: by factorising lexical items, lexematics allows for the elaboration of dictionaries that capture the core vocabulary of languages (see Martín Mingorance 1990; Mairal 1999:45 ff.). On the whole, functional lexematics is presented as a lexicographical model based on an integrated view of grammar in which not only synthetic (production) but also analytic (interpretation) processes coexist.

   Also central to functional lexematics is the view that, on the one hand, the lexicon comprises both primary and derived items, and, on the other hand, the derived lexicon requires a component of its own: "Lexical units, either simple or complex (i.e. non-derived by synchronic word formation rules), constitute the proper domain of the primary lexicon. The derived lexicon constitutes a separate component, being a parallel component to the grammatical one" (Martín Mingorance 1995: 181).

   Within the model, an autonomous, self-contained Word Formation Component (WFC) is thus designed as a "mini-grammar" whose basic task is to derive complex units by processing the relevant grammatical information, namely pragmatic, syntactic, semantic and phonological information (see Martín Mingorance 1985b).

   Besides an analytic process, the WFC performs a complex synthetic process that involves the reduction of INPUT **derivational schemata** to OUTPUT morphosyntagmatic structures, and finally, to the derived units (see *Figure 1*). Derivational schemata basically constitute patterns of derivation and they are formulated by adapting the **predicate structures** propounded within the framework of FG (see Dik 1997 [1978] *Part I*: 78 ff.) The general format and more specific implications about locative schemata will be discussed in *Section 5*.

   So far, the model of FG and the FLM have been presented as being complementary in many ways. However, the FLM holds a more encompassing view of the lexicon and assumes that extralinguistic factors such as semantic-cognitive phenomena play an essential role in the organization of the lexicon (see Martín Mingorance 1990:102; Mairal 1999: 70-71). In order to account for the relationship between conceptualization and the structure of the lexicon, the model incorporates a Cognitive Axis or level of interpretation (see Mairal 1999: 85)

   Given these premises, one of the specific aims of this paper is precisely, first, to present the internal layout of the domains and dimensions that constitute the
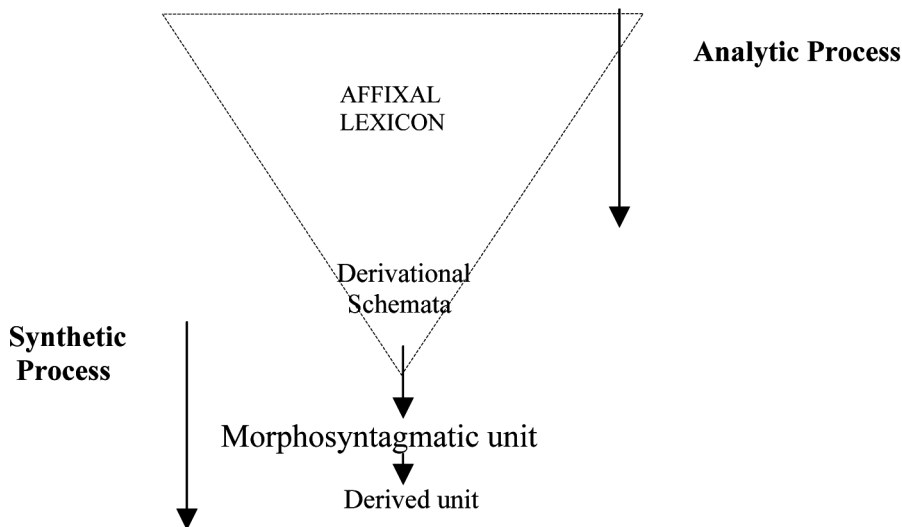
Figure 1: Analytic and Synthetic Phases in the Word-Formation Component

lexical structure of the locative derived vocabulary and, second, to gain insight into the semantic-cognitive motivations that lie behind the structure of the locative formations.

Furthermore, the analytic phase of the model calls for an adequate methodology. As specified by Martín Mingorance (1990:102), the methodological framework for the study of the lexicon should involve at least four steps. In the sections that follow, an attempt will be made to characterize the locative prefixed lexicon on the basis of such steps which primarily involve:

(i)   The selection of the corpus: the elaboration of selection criteria for the vocabulary
(ii) The identification of meaning: graphemic, morphophonological and semantic-cognitive analysis of both the bases and the prefixes.
(iii) The representation of meaning definitions associated to the lexemes: elaboration of derivational schemata as the formal representation of the meaning.
(iv) the organization of hierarchies of meaning

3. CRITERIA FOR THE SELECTION OF THE CORPUS

As opposed to other lexicist and syntacticist views (see Cortés 1997c), in a functional-lexematic approach, affixed units are regarded as semantically-motivated grammatical structures or **composites** consisting of a Determinant (DT), the restricting constituent, and a Determinatum (DTUM), the restricted constituent (see Marchand 1969 [1960]: 11-12). This means that forms like, for instance, *precede*, *antecedent* or *forfeit* are not considered to be part of the derived lexicon of the

English language, since the particles *-cede*, *-cedent* and *-feit* do not constitute morphemes, that is to say, units provided of form and meaning (see Marchand 1969 [1960]: 6; Aronoff 1985 [1976]; Aronoff and Anshen 1998: 245). Accordingly, the essential condition that has determined the selection of prefixes presented in this paper is that the derived formations must be combinations of two morphemic items in the Saussurean sense (E.g. pre-'beforehand'+ arrange, ante-'beforehand'+ date, fore-'beforehand'+arm, etc.). The number of instances registered for each of the locative prefixes is presented in *Table 1* below. They have been collected through corpus and dictionary surveys:[3] the *Tagged LOB Corpus* (1986), and the *Collins COBUILD Dictionary of the English Language* (1995 [1987]).

Domain	Prefixes	Prototypical Formations	Number of formations registered
Anteriority	*Ante#*	*anteroom*	4
	Fore#	*forecourt*	40
	Pre#	*predeterminer*	73 Lob* (31)
Posteriority	*Post#*	*postdeterminer*	34 Lob (15)
Centrality	*Inter#*	*inter-parliamentary*	75 Lob (32)
	Spatial/Notional: Intra#	*intracontinental*	3 Lob (1)
	Spatial/Notional: Mid#	*mid-section, mid-way*	36 Lob (29)
Superiority	*Meta#*	*metaphysical*	4 Lob (1)
	Para#	*parapsychology*	4 Lob (2)
	Super#	*superman*	25 Lob (23)
	Hyper#	*hyper-sophisticated*	5 Lob (2)
	Ultra#	*ultra-sophisticated*	6 Lob (4)
	Sur#	*surmount*	3 Lob (2)
Inferiority	*Hypo#*	*hypoallergenic*	3 Lob (1)
	Sub#	*subculture*	48 Lob (35)
Exteriority	*Ex#*	*exorbitant*	22 Lob (20)
	Extra#	*extraordinary*	8 Lob (4)
Opposition	*Anti#*	*antibody*	47 Lob (39)
	Counter#	*counter-espionage*	29 Lob (24)
	Retro#	*Retro-virus*	9 Lob (1)
Motion	*Trans#*	*transexuality*	20 Lob (14)

* Formations registered in the *LOB Corpus* appear in brackets

Table 1: Formations with locative prefixes in the Lob Corpus and COBUILD

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[3] When the meaning of some formations did not appear transparent in the contexts provided by these sources, other means, mainly The Oxford English Dictionary (1989 [1933]) and The Longman Dictionary of Contemporary English (1995 [1978]), have been used as additional evidence. Such sources will be specified where necessary in the paper.

4. THE IDENTIFICATION OF MEANING AND THE
MORPHOPHONOLOGICAL FEATURES: THE ROLE OF METONYMY

Marchand (1969 [1960]: 11) observes that compounds like *steamboat* and semantically motivated affixed units like *fore-room, metalanguage*, or *rewrite* constitute **expansions,** extensions of the meaning designated by the base. Hence, *steamboat* is interpreted as '*type or class of boat*' and, much in the same way, *metalanguage* and *foreroom* designate '*a kind of language*' and 'a kind of room' respectively.

As has been suggested by Lakoff and Johnson (1980), Lakoff (1987) as well as by other experiential accounts of space, particularly the one developed by Langacker (1987,1990), Talmy (1983, 2001) and Svorou (1993), spatial, temporal and/or notional conceptualisations are based on direct physical experience (experiential basis). On this assumption, lexical structures are judged to be ultimately motivated by conceptual structures and so are, therefore, affixed formations. Specifically, locative expansions may be characterized as part-whole conceptualisations, partition relations that appear to be systematic across the locative derived vocabulary in English. Consider the following examples:

foreroom:	'front room (PART) of a house (WHOLE)'
intra-continental:	'territory (PART) inside, at the middle of a continent (WHOLE)'
ultraviolet:	'violet (PART) beyond the spectrum (WHOLE)'
metalanguage:	'system of symbols (PART) as part of language (WHOLE)'
anti-bomb:	'kind of bomb against (PART) other bombs (WHOLE) '

*Example 1: Part-whole configurations in locative prefixed formations*

Though the part-whole relation may not be always apparent in the respective paraphrases, what seems to be clear is that, regardless of the meaning of the prefixes and the bases, locative prefixes invariably "single out" one specific feature, or a set of features (PART), from the properties associated to the base (WHOLE). Thus, *foreroom*, *intra-continental* and *ultraviolet* designate a specific part of a house, a continent and the light spectrum respectively. Perhaps less obviously, the prefix *meta#* focuses *language* as 'device to code information, system of symbols' (PART) against other possible interpretations (WHOLE) like 'language as manner of expression' (E.g. *I don't like his language*), 'language as style' (E.g. *Shakespeare's language*), etc. More controversial may be the interpretation of *anti-bomb* as a part-whole relation. However, *anti-bomb*, like *metalanguage*, designates 'a kind of bomb' as opposed to others (*atomic bomb*, *smoke bomb*, etc.). In addition, the meaning can be paraphrased as 'bomb AGAINST bomb'. The choice of the prefix *anti#* thus contributes meaning at two different levels: first, it foregrounds a particular member from the whole class of bombs; second, it provides a relation of opposition between the selected member (PART) and the whole class of items (WHOLE).

What this analysis indicates is that the part-whole relation is more obvious with spatio-temporal formations (E.g. *foreroom*, *intracontinental*, etc.) whereas partition operates at a higher level in more notional formations (E.g. *metalanguage*, *anti-bomb*, etc.). However subtle they may be, however, distinctions of this sort will be considered as instances of **metonymy** that, in the context of this work, will be regarded as an underlying device to conceptualise location as Part-whole relations.

Another interesting issue about locative prefixation is that the fact that they designate expansions has a direct impact on the morphophonological patterns of the derived units. As Marchand (1969 [1960]: 13) claims, prefixes that designate expansions do not trigger any change in the grammatical category of the base (E.g. [meta[language]$_N$]$_N$) and, prototypically, prefixed units show obvious regularities with respect to the assignment of stress as well as the syllabicity of the respective phonological strings (see *Section 7*). Interestingly enough, suffixes prototypically exhibit the opposite behaviour. Thus, for instance, forms like *writer* or *curiosity* instantiate "true derivation" rather than expansion (see Marchand 1969 [1960]: 13). In *writer*, the suffix "affects" the state of affairs (*write*$_{ACTION}$- *writer*$_{PerformerOfAction}$) and causes categorical changes ([[write$_{Verb}$]-er$_{Noun}$]), while *curiosity* shows changes in the category ([[curious$_{Adj}$]-ity$_{Noun}$]), graphemic variation (*curious-curiosity*) and phonological changes (['kjuərɪəs]-[ˌkjuərɪ'osɪtɪ] (see Cortés 1997: 225).

5. THE REPRESENTATION OF MEANING: DERIVATIONAL SCHEMATA FOR LOCATIVE PREFIXES

One of the most significant proposals for the formal configuration of locative predicates is provided by Mackenzie's prepositional predicate structures (1992)**.** In principle, locative prefixes seem to behave just like spatial prepositions in that, as Mackenzie (1992:5) states, "spatial prepositions in English co-realize two elements of the representation of a term, namely a semantic function and a predicate":

(p : ***ACROSS*$_p$** (x$_i$: Atlantic.Ocean $_{Path}$)
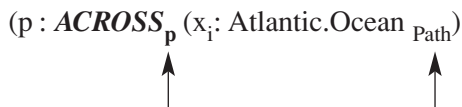
Example 2: Mackenzie's prepositional predicate for the Path model

However, Mackenzie's proposal disregards two important facts. First, while the prepositional predicate ACROSS (x)$_{Path}$ only specifies 'the entity across which movement takes place' (i.e. the path itself, *Atlantic*), both the experience of location and of movement seem to involve some kind of discontinuous interaction between, at least, two more entities, namely 'the entity that moves' and the 'entity that specifies the reference point from/to which it moves' (see Svorou 1993: 24 ff.). Taking this into account, locative schemata will be conceived as structures that

instantiate the interaction of three entities, each of them performing a specific relational function (*Locandum*, *Referent* and *Locus*):

(i) The entity-*Locandum*, defined as the one subject to location (x_2 or $room_2$ in the schema in *Example 3* below).

(ii) The entity-*Referent*, the one with respect to which the *Lcdum* holds a specific position (i.e. entity x_1 or $room_1$).

(iii) The entity-*Locus* that specifies the "region" (in Svorou's terminology) or the point of interaction between the *Lcdum* and the *Referent*. In a formation like *foreroom*, the external part or *exterior region* of both entity x_1 and x_2 interact.

$$[BEFORE_{\text{prep}} (x_1:room)_{\textbf{\textit{Ref}}})_{\textbf{\textit{Locus}}} (x_{2:} room)_{\textbf{\textit{Lcdum}}}]$$

Example 3: Participant entities in locative schemata

Second, from an experiential perspective, any locative setting seems to involve more than the participant entities as such. As will become clear from the examples analysed in *Section 7*, the entities may interact in a variety of ways and hence co-realize various functions. The way they interact depends on several factors of conceptualization such as the nature of the relation established between them (e.g. anteriority, posteriority, exteriority, movement, etc.), the size, orientation and perspective of the entities, the choice of specific parts of the reference point (E.g. FRONT/BACK; UPPER/LOWER part of an entity, etc.), etc (see Svorou 1993: 25). These features may have an impact on the semantics of the derived units and, if so, they have to be incorporated as part of their formal representations. Thus, locative constructions will be formulated as complex "relational predicates" that entail various chained co-realizations of semantic-cognitive functions (see De Groot 1987, 1989):

$$[p : (ACROSS_{\textbf{p}} (x_1: \text{Atlantic.Ocean})_{\textbf{Ref}})_{\textbf{Loc}} (x_2)_{\textbf{ Lcdum}}$$
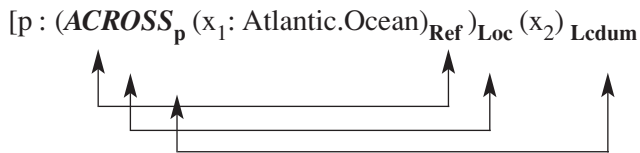
Example 4: Chained co-.realizations in prepositional predicates

What this structure expresses is that, in locative formations (E.g. *transatlantic*), multiple co-realizations affect the predicate (E.g. ACROSS) and each of the participant entities. The interpretation of the *PATH model*, '(entity) moving across (from-to) x', thus emerges as the result of complex semantic-cognitive interactions rather than as the unilateral predicate-function realization (cf. Mackenzie 1992: 5 ff.).

One of the most relevant properties of derivational schemata is that they represent a generalization, a "minimal projection" of a whole class of lexemes (see Mairal 1999). Thus, the schema outlined in *Example 3* is associated with *transatlantic* as well as with other related formations like *transoceanic*, *transpacific*, *trans-Siberian*, *transnational*, etc. Schemata, therefore, constitute the basic blueprints for lexical classes (lexicological viewpoint) and the specific patterns of formation, that is to say, the lexical entries for individual lexemes (lexicographical viewpoint). The fully-specified structure of each lexeme is expressed by introducing the individual relevant features in the derivational schema. Consider, for instance, the following schema of Anteriority:

$$\Theta_{Nominal} \; ((BEFORE_{p} \; (x_1 \;)_{\textbf{\textit{Ref}}} \;)_{\textbf{\textit{Locus}}} \; (x_2)_{\textbf{\textit{Lcdum}}} \;]_{STATE}$$

<p align="center">*Example 5: Prototypical derivational schema of spatial anteriority*</p>

Some of the units conforming to this schema are *foreroom*, *forecourt*, *forefinger, forearm*, etc., which designate 'entity BEFORE entity': 'room before room'; 'court before building'; 'finger before finger: first finger'; 'arm-part before arm-part', etc.

The semantic weight that the participant entities contribute to the interpretation of the derived unit is specified by means of selection restrictions like [± human], [± artifact], [± shape], [± evaluative], [± dimensional ϵ place or time], etc., which have been adapted from the High-Primary Features classified by Aarts and Calbert (1979:18). In addition, the participant entities are classified according to the typology of entities expounded by Dik (1997 [1989], *Part I*: 136 ff.). Prototypically, the participant elements of locative schemata are first-order entities, that is to say, entities that can be located in space and time that are represented by the variable x_1, x_2, ...x_n.[4] Derivational schemata, once the selection restrictions are specified, take the form illustrated in *Example 5* that can be paraphrased as 'first order entity categorised as a ready-made artifact [+artifact] and as an entity with shape [+shape] BEFORE an entity of the same typology'. Fine-grained sub-specifications are also included where required to distinguish lower-level features within a given domain, such as, for instance, the various formal conceptualizations associated with the field of architecture: architectural unit as a whole (*building*), piece of architectural unit (*room*) and architectural area (*courtyard*):

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[4] Deverbal locative formations may involve second-order entities that designate states of affairs (e1, e2...en.) and third-order entities that designate possible facts (X1,X2...Xn) (see Dik (1997 [1978] Part I: 55). However, a comprehensive description of these formations will exceed the length and the goals of this paper. For a specific treatment of deverbal units see Sosa (2004).

Θ_N [*BEFORE*$_P$ (x$_1$: NP <+Sh, +Art> (x$_1$)) (x$_2$: Θ_N < +Sh, +Art >(x$_2$)]$_{STATE}$
foreroom and *forecourt*

Θ_N [*BEFORE*$_P$ (x$_1$: NP <+Sh, +Art:: piece of architectural unit> (x$_1$)) (x$_2$: Θ_N < +Sh, +Art:: piece of architectural unit >(x$_2$)]$_{STATE}$
foreroom

Θ_N [*BEFORE*$_P$ (x$_1$: NP <+Sh, +Art:: architectural unit> (x$_1$)) (x$_2$: Θ_N < +Sh, +Art:: architectural area >(x$_2$)]$_{STATE}$
forecourt

Example 6: Semantic specifications within derivational schemata.

For some formations like *forefinger*, the use of operators, more specifically number (N) and (in)definiteness (i,d), is introduced to indicate non-inherent semantic restrictions with respect to the entities such as the number of items (see Dik 1997 [1989], *Part I*: 140). *Forefinger* designates 'first or most prominent entity from a SET comprising a DEFINITE NUMBER of entities of the same typology (fingers)'. Note the occurrence of the operator **dN** in the corresponding derivational schema:

Θ_N [(*BEFORE*$_P$(**dN**x$_1$:<+Sh,-Art:bodypart>(x$_1$))$_{Ref}$)$_{Locus}$ (x$_2$:<+Sh,-Art ::bodypart> (x$_2$))$_{Lcdum}$]$_{STATE}$

Example 7: The specification of the operators Definiteness and Number

Finally, it should be noted that schemata embody predications and that they thus designate some type of State of Affairs (see Dik 1997 [1989], *Part I*: 115). Though all the examples cited so far are characterized as prototypical STATES, locative formations may also designate ACTIONS associated with deverbal formations like *intermarry*, *counter-attack*, *transplant*, etc.

6. TOWARDS A HIERARCHY OF LOCATIVE PREFIXES: THE ROLE OF METAPHOR

It was established in previous sections that the lexicon is organized in an onomasiological fashion. Basically, this means that the lexemes, lexical entries and their associated derivational schemata arrange hierarchically in lexical classes or domains at the same time as these domains belong in the Spatial, the Temporal and/or the Notional dimensions depending on the nature of the locative relation they designate (see Faber and Mairal 1999).

Example 7 below illustrates the architecture of the domains (1.a, 1.b, etc.) and dimensions (Spatial Anteriority, Temporal Anteriority and Notional Anteriority) for the formations with the prefix *fore#*. Note that, within domains, subdomains, or even sub-subdomains may be distinguished (E.g. 1.b.1 and 1.b.2):

Group 1. *SPATIAL ANTERIORITY*

1.a. *CONTACT*

Θ_N [(BEFORE$_P$(x_1:NP<+Sh, +Art > (x_1))$_{Ref})_{Locus}$ (x_2 : < +Sh, +Art >(x_2)))$_{Lcdum}$]$_{STATE}$
(denominal: *foreword ,forecourt*)

1.b *PARTITION*

1.b.1. *FRONTING*

Θ_N [BEFORE(IN FRONT OF$_P$ (dNx_1: NP < +Sh, -Art :: bodypart>(x_1))$_{Ref})_{Locus}$ (x_2 <+Sh, -Art ::bodypart > (x_2)) $_{Lcdum}$]$_{STATE}$
(denominal: *forefinger, forefoot*   …)

1.b.2. *ROUNDING*

Θ_N[BEFORE(ON(AROUND$_P$ (x_1 : NP <+Sh, -Art ::bodypart>(x_1))$_{Ref})_{Locus}$ (x_2:<-Sh,-Art:: body area, surface> (x_2))$_{Lcdum}$]$_{STATE}$
(denominal: *foreskin*)

Group 2. *LOCATIVE TEMPORAL ANTERIORITY*

2.a. *ANTERIORITY*
Θ_N [BEFORE$_P$ (x_1: <+Dim (Time:: point in daytime >) (x_1))$_{Ref})_{Locus}$ (x_2: NP< +Dim(Time :: timespan>(x_2))$_{Lcdum}$[($_1$]]$_{STATE}$
(denominal: *forenoon*)

Group 3. *LOCATIVE NOTIONAL ANTERIORITY*

3.a. *ANTERIORITY(SUPERIORITY*

Θ_N [OVER$_P$ (x_1:NP <+Hum([+Attr::social position]> (x_1))$_{Ref})_{Locus}$ (x_2:<+Hum([+Attr:: social position]>(x_2))$_{Lcdum}$]$_{STATE}$
(denominal: *foreman*)

Example 8: Domains, subdomains and sub-subdomains within Anteriority

The most basic level of the domain hierarchy is represented by formations that designate spatial or temporal interactions between physical objects and entail presuppositions associated with the manipulation of these objects in the world (e.g. orientation, position, size, etc.). One of the reasons why spatio-temporal relations are considered to be the most basic configurations is that the patterns they represent may be projected as more notional conceptualisations in which physical objects are categorized in terms of notional properties. Consider, for instance, the formation *foreroom* as opposed to *foreman*. *Foreroom*, expressed as 'room BEFORE room', designates a spatial relation of anteriority between two first-order entities categorised as [+shape,+artifact]. Similarly, *foreman* prototypically designates a first-order entity like *room*. *Man*, however, is primarily categorized as [+human] which entails certain presuppositions associated with the **anthropomorphic model** that characterizes human social interaction (see Svorou 1993: 74). Such presuppositions seem to prevail over the spatial interpretation ('man BEFORE man') and block the realization of a *man* as a spatial entity within a spatial scenario while the notional relation 'man OVER man' is favoured. *Foreman*, therefore, builds around the interpretation of 'man BEFORE man' (model of spatial anteriority) as the notional 'man OVER man' (model of superiority).

Lakoff and Johnson (1980) articulate this kind of notional interpretations as mappings of both ontological and epistemic information from a Source Domain (E.g. Anteriority: 'man BEFORE man') towards a Target Domain (E.g. Superiority: 'man OVER man'). As illustrated in *Figure 2* below, the target domain *Anteriority* provides orientational information together with epistemic knowledge related to the experiential facts that "Before is First" (i.e. a man before other men is first, and he thus may be more important or powerful) and "After is Last" (see Sosa 2002b,

SOURCE DOMAIN	TARGET DOMAIN
Anteriority	*Superiority*

Ontological Information: BEFORE –AFTER → ➢ Orientation: UP-DOWN

Epistemic Information: BEFORE = First AFTER= Last → Anthropomorphic model: ➢ First = MORE CONTROL - POWER IS UP Last = LESS CONTROL - POWER IS DOWN
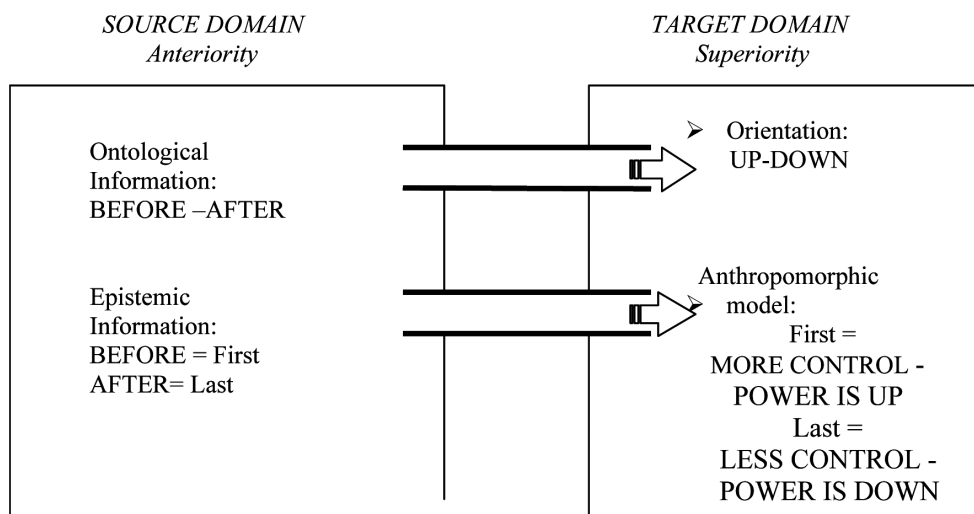
Figure 2: Projection of spatio-temporal information on notional superiority

2004). Information transferred in this way brings about the orientational metaphor MORE CONTROL/POWER IS UP as opposed to LESS CONTROL/POWER IS DOWN. These metaphors motivate numerous formations of superiority (e.g. *superman, superstar*, *hypermarket*, etc.) and inferiority (e.g. *sub-lieutenant, sub-inspector*, *sub-group*, *hypotension*, etc.) respectively.

As shown in *Figure 3* below, metaphorical extensions activate the emergence of different prepositional predicates in the respective derivational schemata: BEFORE (FRONT), AFTER (BACK), OVER, BELOW, BEYOND, etc. (see Sosa 2002a):
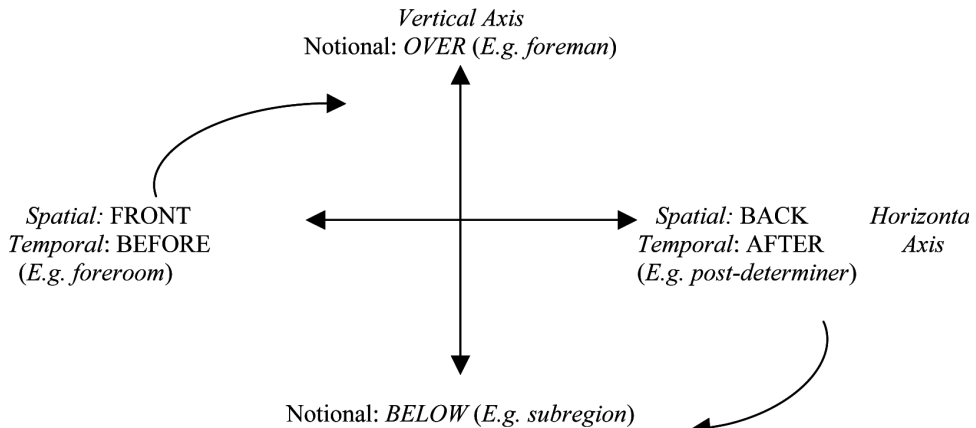

Figure 3: Metaphorical projections and prepositional predicates

Furthermore, domains constitute, by definition, hierarchies of lexemes, lexemes associate with derivational schemata and these, in turn, embody prepositional predicates. It follows from this that prepositional predicates arrange in hierarchies as well. The full body of the prototypical prepositional predicates for locative schemata is represented in *Figure 4*.

Finally, it should be noted at this stage that, though some locative prefixes co-occur in more than one domain and dimension (e.g. *fore#* in *foreroom*: Domain Anteriority, Spatial Dimension*; fore#* in *foreman*, Domain Superiority, Notional Dimension), they associate prototypically with one of them, that is to say, there is always some specific domain and dimension in which locative prefixes are more productive. Such prototypical domains and dimensions are given in *Table 2* below:

On the whole, in this section, metaphor has been characterized as a means to create notional meaning on the basis of spatio-temporal meaning. Going back to the role of metonymy in the lexicon, it seems that, as indicated by Barcelona (1997: 31 ff.), metaphor and metonymy operate at different levels within the complex network of the lexicon: while metonymy motivates the locative configurations expressed by individual prefixed formations and thus characterizes each domain, metaphorical extensions allow for the expansion of basic spatio-temporal domains into the notional dimension.

Hierarchies of Prepositional Predicates

Superiority

AT THE EXTREME OF
AWAY FROM
OUTSIDE BEYOND
FROM BEYOND
AFTER ABOVE→BEYOND/AGAIN
OVER/ABOVE→ON→INSTEAD OF
OVER→ON
OVER→ALONGSIDE
OVER
Anteriority ↔Posteriority
BEFORE→(IN FAVOUR OF/FOR) AFTER

Anteriority   ***AGAIN***   **Posteriority**
BEFORE   ***ON OVER AMIDST***   AFTER
IN / AT/ON/ AROUND...   *Centrality*
... the FRONT OF   AMIDST
                                INSIDE
                              (IN) BETWEEN/
                                 AMONG

Exteriority
OUTSIDE→AFTER→NO LONGER→WITHOUT
BEYOND OUTSIDE→ AFTER→AGAIN→BACK TO
Inferiority
UNDER→UNDERNEATH
BELOW→UNDERNEATH
BEYOND BELOW→AFTER
AFTER→AGAIN
AFTER→SECOND
Opposition
IN FRONT OF→OPPOSITE→BACK→ BACK TO
BACK→AFTER
AFTER→OVER
Motion
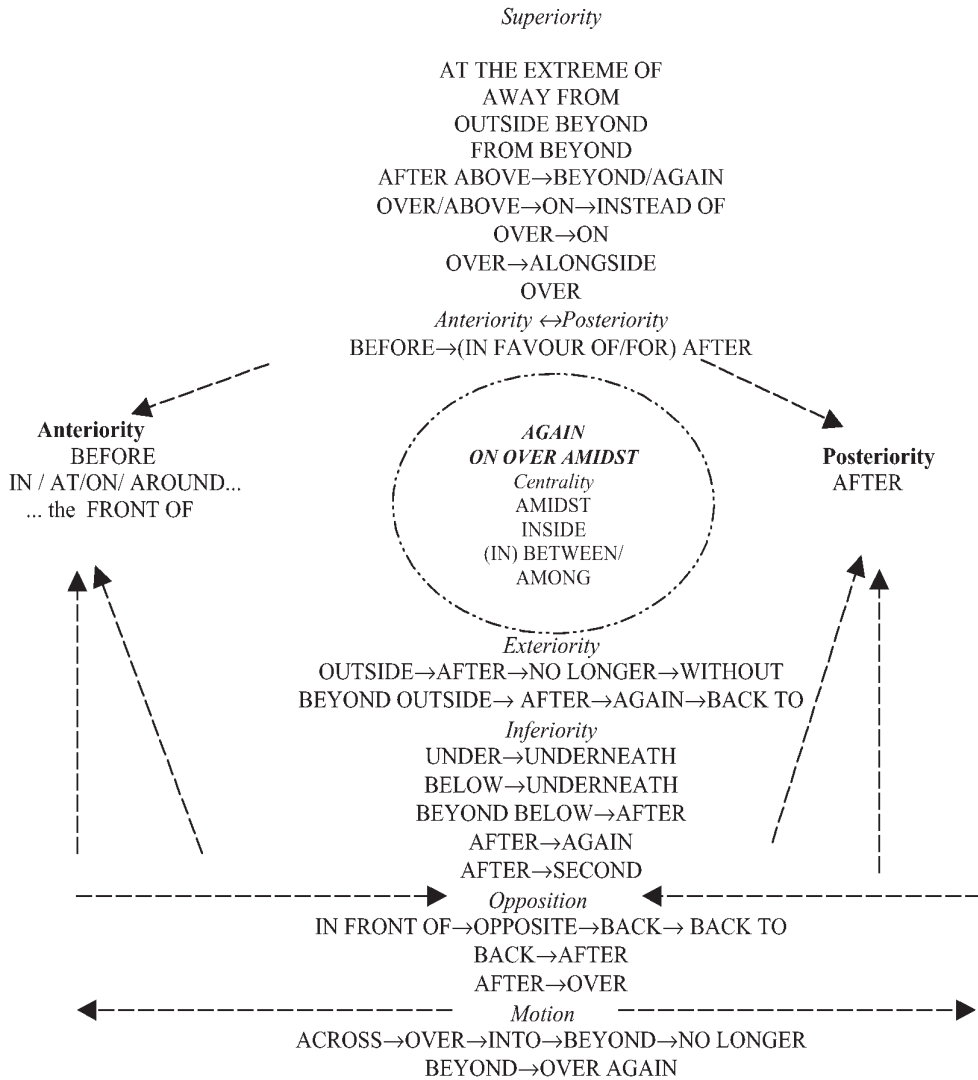ACROSS→OVER→INTO→BEYOND→NO LONGER
BEYOND→OVER AGAIN

Figure 4: Prototypical prepositional predicates for locative prefixes in English

Domain	Prototypical Dimension	Prefixes	Prototypical Formations	Category	Number of formations registered	Productivity
Anteriority	*Spatial*	*Ante#*	*anteroom*	*N, V*	4	*Low*
	Spatial	*Fore#*	*forecourt*	*N,V, Adj*	40	*Low*
	Spatial	*Pre#*	*predeterminer*	*N,Adj*	42 Lob (31)	*High*
	Temporal					
Posteriority	*Temporal*	*Post#*	*postdeterminer*	*Adj*	19 Lob (15)	*High*
Centrality	*Spatial*	*Inter#*	*inter-parliamentary*	*N, Adj, V**	43 Lob (32)	*Low*
	Spatial/Notional	*Intra#*	*intracontinental*	*Adj*	3 Lob (1)	*High*
	Spatial/Notional	*Mid#*	*mid-section, mid-way*	*N, Adj*	36 Lob (29)	*High*
Superiority	*Notional*	*Meta#*	*metaphysical*	*N, Adj*	4 Lob (1)	*High*
	Notional	*Para#*	*parapsychology*	*N, Adj*	4 Lob (2)	*High*
	Notional	*Super#*	*superman*	*N, Adj*	25 Lob (23)	*High*
	Notional	*Hyper#*	*hyper-sophisticated*	*N, Adj*	5 Lob (2)	*High*
	Notional	*Ultra#*	*ultra-sophisticated*	*N, Adj*	6 Lob (4)	*High*
	Notional	*Sur#*	*surmount*	*N, Adj, V*	3 Lob (2)	*Low*
Inferiority	*Notional*	*Hypo#*	*hypoallergenic*	*N, Adj*	3 Lob (1)	*Low*
	Spatial/Notional	*Sub#*	*subculture*	*N, Adj*, V**	48 Lob (35)	*Low*
Exteriority	*Temporal*					
	Notional	*Ex#*	*exorbitant*	*Adj, N* V (temporal) (E.g. exchange)*	22 Lob (20)	*Low*
	Notional	*Extra#*	*extraordinary*	*Adj*	8 Lob (4)	*Low*
Opposition	*Notional*	*Anti#*	*antibody*	*N,Adj,V*	47 Lob (39)	*Low*
	Notional	*Counter#*	*counter-espionage*	*N, Adj, V*	29 Lob (24)	*Low*
	Spatial	*Retro#*	*Retro-virus*	*N, Adj, V*	9 Lob (1)	*Low*
Motion	*Spatial*	*Trans#*	*transexuality*	*N, Adj, V*	20 Lob (14)	*Low*
	Notional					

Table 2: The prototypical domains and dimensions for locative prefixes in English

7. RESTRICTIONS ON THE ONOMASIOLOGICAL ORGANIZATION OF LOCATIVE PREFIXED UNITS

Looking at *Table 2* and at *Figure 4*, a question arises as to what specific criteria determine the organization of prefixes subsumed under the same domain and/or the same dimension.

It should be emphasized that the autonomy of the WFC within the FLM is justified on the grounds that lexical derivation involves a complex processing of information related to all levels of linguistic organization (i.e. pragmatic, semantic-cognitive, morphological and phonological information)[5]. The following sections concern the analysis of specific formations that, being prototypical cases, illustrate some of the restrictions that operate at each of these levels. Such restrictions condition both domain and dimension membership within the lexicon. With regard to this, phenomena such as synonymy and polysemy will be reconsidered from a different viewpoint since they play a part in the distribution of closely related formations.

7.1. SOME RESTRICTIONS ON THE OCCURRENCE OF PREFIXES WITHIN THE SAME DOMAIN

(i)   Pragmatic restrictions.

The formations *foreroom*, *anteroom* and *antechamber*, registered as instances in Present-day English, share the derivational schema proposed in *Example 2* above. There are, however, restrictions on the occurrence of *foreroom* as part of a more erudite, literate register of the English language (E.g. *A small foreroom with which begin the Rooms of the Emperor Alexander II*).[6] In contrast, *antechamber* is reserved for poetic or metaphorical usage (E.g. *the antechamber of death*)[7] whereas *anteroom* usually appears in the context of pure architectonic description. Thus, while these formations could be considered as synonymous in the first instance, they differ at the pragmatic level. Though these restrictions are not coded in the derivational schemata, the FLM predicts the specification of a *substratum* in the corresponding lexical entries that spells out input restrictions on usage (see Sosa 2004).

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[5] Syntax is not included here as a linguistic level. There is, however, interesting work to be published in this area. It seems worth mentioning here Mairal and Cortés (in press) who explore the syntax-semantics interface in word formation processes in English. In so doing, these authors design a linking algorhythm adapted from the theory of Role and Reference Grammar (see Van Valin and LaPolla 1997).

[6] Quoted from www.alexanderpalace.org/tsarskoe/fifth2.html

[7] Quoted from The Oxford English Dictionary (19892 [19331]) ¬ante.

AFFIX: *ante#*
INPUT CONDITIONS

> *Anteroom*
> > *Substratum:* Romance

> *Antechamber*
> > *Substratum:* Romance, poetic and metaphorical

AFFIX: *fore#*
INPUT CONDITIONS

> *Foreroom*
> > *Substratum:* Romance, erudite

Example 9: Substratum specifications in lexical entries

(ii)   Semantic-cognitive restrictions.

From an experiential viewpoint, the conceptualisation of spatial settings draws basically on two notions: **perspective** defined as *the way in which a scene is viewed* (Langacker 1987: 491), and **dimensionality,** which applies both to the dimensions of the scene itself (e.g. two-dimensional, three-dimensional physical space), and to the dimensions of the entities involved in each setting (see Sosa 2002a). Consider, as an instance, the domain Spatial Anteriority in which the different scenarios result from the interaction between the perspective anteriority (BEFORE, (AT, ON…the) FRONT (OF)…) and the dimensional configuration of the participant entities:

LOCATIVE SPATIAL DIMENSION OF ANTERIORITY

Anteriority (Immediateness
> *1.-individual entity immediately before (in contact with) individual entity of exactly the same typology.*
> E.g.: *foreroom* (*anteroom*, *antechamber*).

Anteriority (Partition
> 2.- individual entity on the front of individual entity of different typology.
> E.g.: *fore-gallows, fore-loader, forelock...*
> 3.- part of individual entity on the front of the same individual entity.
> E.g.: *forehead, forehand, forearm, forepart, fore-deck...*

Anteriority (Circling/Rounding
> 4.- mass entity on/around individual entity.
> E.g.: *foreskin…*

Example 10: subdomains of spatial Anteriority.

The most basic scenarios (see patterns 1 and 2) relate to a part-whole interaction between two entities that designate physical objects. However, in pattern 2, the front surface of a large physical object interpreted as a two-dimensional entity is foregrounded as *Ref* (the front part of the surface *deck*, etc.). Formations that conform to this configuration are accordingly interpreted as 'physical entity ON the front part of the surface of a two-dimensional physical entity' (see Navarro 1999). Similarly, in schema 3, both entities designate physical objects (a part of the body) but the *Ref* emerges more specifically as the front surface of the head, an entity conceptualised as a three-dimensional object. By contrast, schema 4 seems to rest halfway between the two-dimensional and the three-dimensional conceptualisations of patterns 2 and 3 respectively: the entity-*Ref* is conceptualised as the surface AROUND (rather than ON) the front part of a three-dimensional entity (body part).

One-dimension patterns
FRONT ▪ ▫ ▫ ▫   BACK   (E.g. *forefinger*)

Two-dimension patterns
FRONT ▪▪▪▪▪▪▪▪ BACK   (E.g. *fore-loader*)

Three-dimension patterns

BACK
FRONT   (E.g. *forehead, fore-shore*)
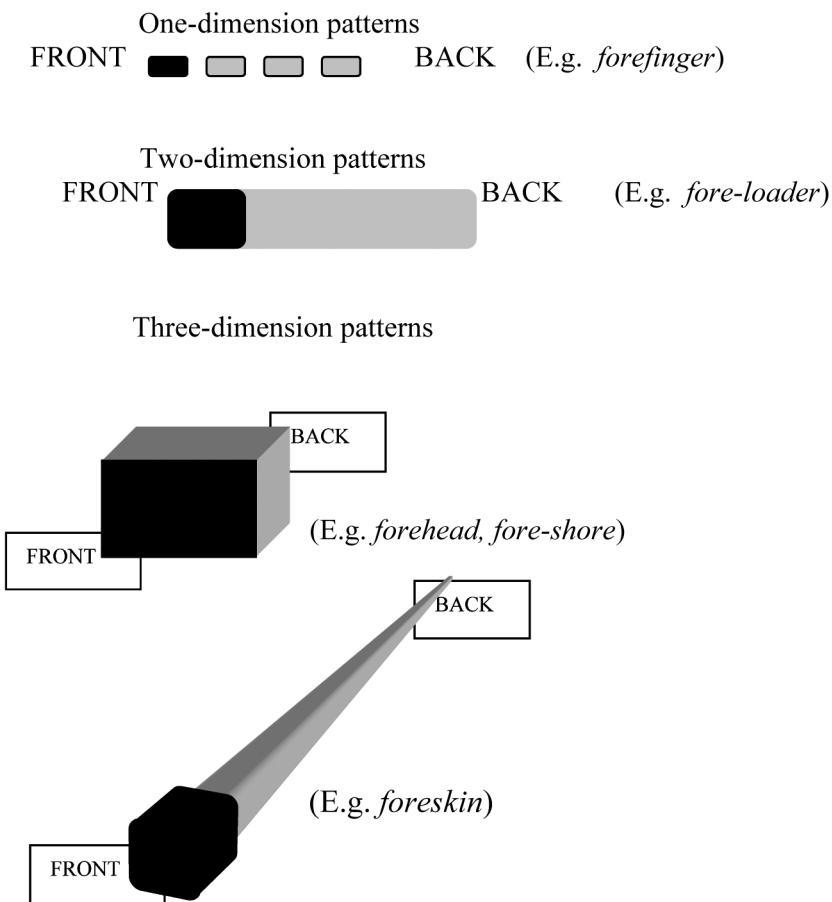
BACK
FRONT   (E.g. *foreskin*)

Figure 5: Gradual complexity of locative conceptualisations

The structure of the domain Spatial Anteriority seems to be, therefore, primarily motivated by the dimensionality associated with the entity-Referent which provides the basic source for the configuration of gradually more complex partition relations (see Sosa 2000):

(iii) Phonological restrictions and lexicalization.

Pragmatic and semantic-cognitive restrictions correlate with restrictions on the phonological patterns of affixed units (see Cortés 1997: 221 ff.; Cortés and Pérez 2002). As was pointed out previously, prefixed locative units prototypically show no syllabic fusion between the base and the affix and, in consequence, as opposed to suffixes, they do not motivate any change in the syllabic pattern. Different degrees of lexicalization, however, may interfere and cause deviation of some structures from the prototypical phonological pattern. As an instance, consider the prefix *pre#*. This prefix exhibits a prototypical phonological pattern for denominal, deadjectival and deverbal formations like *predeterminer*, *preverbal* and *predate* in which the prefix bears secondary stress. In contrast, lexicalized forms like *predestination* ('destiny'), *premeditation* ('intent'), etc. show evidence of lexicalization at the phonological level and thus deviate from the prototypical pattern in that the stress on the prefix weakens and triggers the realization of the allomorph [prɪ] (cf. [pr**i**] in *predeterminer*, etc.):

S= syllable

S_{0-n} = variable number of syllables

^{1-3}S = primary, secondary and tertiary stress

Prototypical patterns:
    $[prI]/ [^1S_1 (S_{o-n})]_{BASE (} [\{^2pri:\}_1 {}^1S_1 (S_{o-n})]$
        Denominal formations. E.g: *predeterminer*.
            $\{^2pri:\} \{^3dI\} \{^1t(:\} \{mIn\}\{(^r\}$
        Deverbal formations. E.g: *pre-cooked, predate*.
            $\{^2pri:\} \{^1k(kt\}, \{^2pri:\} \{^1deIt\},$
    $[prI] / [S_1 {}^1S_1]_{BASE (} [\{^2pri:\}_1 {}^3 S_1 {}^1S_1]$
        Deadjectival formations. E.g: *pre-arranged*
            $\{^2pri:\} \{^3(\} \{^1reInd^0d(d\}$
Lexicalized pattern:
    $[prI] / [^2 S_1 S_1 {}^1S_1 S_1]_{BASE (} [\{^3 prI\}^2 S_1 S_1 {}^1 S_1 S_1]$
        E.g: *predestination*
            $\{ ^3prI\} \{^2des\} \{tI\} \{^1neI\} \{((n\}.$

Example 11: Effects of lexicalization on stress assignment and phonological realization

7.2. SOME RESTRICTIONS ON THE OCCURRENCE OF PREFIXES WITHIN THE SAME DIMENSION

The semantic, pragmatic and phonological restrictions introduced in the previous section also interact in various ways at the level of the Spatial, Temporal and Notional dimensions.

(i)   Pragmatic restrictions.

Some units show halfway membership into two different dimensions, usually Spatial and Notional. Thus, among others, *supermarket* and *extra-parliamentary* may be ambiguous between two interpretations, either as 'physical entities' or as 'notional entities': *He entered the supermarket* (building) as opposed to *the European supermarket of art* (exchange); *extra-parliamentary office room* against *extra-parliamentary government*. In terms of lexical structure, dual membership into dimensions will be interpreted here as polysemy, a phenomenon conditioned by semantic and pragmatic factors that motivate more than one interpretation of the same unit (see Pustejovsky 1998: 27 ff.) .

(ii) Semantic-cognitive restrictions.

Anteriority and *Posteriority* constitute basic domains since, as was stated above, features associated two both are projected onto more notional interpretations in the notional dimension. These metaphorical projections, however, are not equally productive across the locative lexicon. More specifically, the notional dimension comprises at least six prototypical domains that certainly show varying degrees of productivity (see *Table 2*).

An important aspect to be considered is that productivity is here understood in terms of the probability that any given pattern *affix + [base], [base] + affix*, etc. occurs in a given state of the language rather than in terms of quantitative occurrence. It should be observed that, for instance, though dictionary surveys hardly yield about ten different entries with the prefix *super#*, it is widely accepted by present-day English speakers that the incidence of *super#* (as well as of many other prefixes like *hyper#*, *ultra#*, etc.) is almost unrestricted. Indeed, it seems unreasonable to think that numerous unregistered formations like *?superbaby*, *?superteacher* or *?ultraclever*, or even more complex expressions like *?superhighway* or *?ultramysterious* do not represent instances of the productivity of the respective prefixes.

This facts seem to indicate that productivity is fundamentally restricted by the ability of the speakers to reconstruct, to re-interpret the meaning of units on the basis of the general morphological patterns (underlying schemata) that govern the combination of prefix and base and that, ultimately, articulate the speaker's **mental**

lexicon (see Faber and Mairal 1999: 15). [8] Furthermore, speakers seem to retrieve the underlying patterns of registered forms which trigger off an adequate interpretation of *ad hoc* formations and novel expressions. From this perspective, the fact that no lexicographical source can possibly account for large numbers of entries should not determine any judgement about lexical productivity.

The data provided in *Table 2* certainly suggest that the nature of some restrictions operating on productivity is not necessarily associated with purely quantitative criteria. Indeed, both cognitive-experiential and morphological conditions seem to qualify as essential factors. In the context of cognitive-experiential accounts, the way in which perceivers conceptualise reality is viewed as a determining factor in the perception of location (see Svorou 1993: 1 ff.). In general, "what is above" the level of physical perception (E.g. from any surface upwards) seems to be more readily subject to stratifications (E.g. *meta-space*, *super-space*, *hyper-space*…)[9] while "what is below" the level of perception (E.g. *subway*) is usually conceived as not easily accessible, associated with the unknown and captured as a whole. Such restrictions may explain why *Superiority*, as compared with *Inferiority*, appears as the most complex domain in both quantitative and qualitative terms; it comprises a larger number of different prefixes as compared with the other domains and some of these prefixes exhibit higher productivity than attested by lexicographical records. Observe, for instance, in *Table 2* how the number of entries collected contrasts with the degrees of productivity of the prefixes *meta#*, *para#*, *hyper#* and *ultra#*.

As for morphological restrictions, the analysis of locative prefixed formations has revealed some complex correlations which determine the distribution of prefixes within domains and dimensions. These correlations may be formulated, in a very "programmatic" way, as follows:

> The higher the productivity of the prefix [where i, ii and iii are mutually exclusive],
>
> (i) the lower the number of categories associated to it,
>
> (ii) the higher the probability for the prefix to exhibit polysemic interpretations, that is to say, for the prefix to show simultaneous association or borderline features with respect to two different dimensions (spatial and notional),
>
> (iii) the lower the degree of lexicalization.

As illustrated in *Table 2*, the prototypical category within the notional dimension is Adjectival (including denominal adjectives), followed by Nominal and Verbal instances. The relation between productivity and category for each prefix may be easily inferred from the data specified in the last column of the table. As for those prefixes that do not conform to the correlation productivity/category (e.g. *intra#*, *mid#*, *sur#*), they show a clear tendency to occur halfway between prototypical domains of the spatial and the notional dimensions. Thus, as indicated above with

some examples, *intracontinental* may be interpreted either as a purely spatial configuration (e.g. *intracontinental river*: 'river INSIDE/AT THE MIDDLE OF a continent') or as a more notional conceptualisation (e.g. *intracontinental politics*: 'politics INSIDE/CONCERNING a continent'). Finally, those formations that do not stick to either of the two criteria pointed out above show a great degree of lexicalization as evidenced by formations from the notional domain *Exteriority* (e.g. *extraordinary, exorbitant, etc*.). It should also be noted that some prefixes compensate low productivity within the notional dimension by associating with other dimensions. Thus, *ex#*, rare with notional meaning, seems to be extremely productive within the temporal dimension, which comprises a large number of forms like *ex-minister, ex-prisoner, ex-boxer*, *ex-wife*, etc.

    (iv) Phonological restrictions:

    As with domains, phonological restrictions at the level of dimensions interact closely with the degrees of lexicalization: the more notional the interpretation of a prefixed unit is (i.e. the more lexicalized, e.g. *Supermarket* as 'exchange'), the higher the degree of fusion between the prefix and the base which, in addition, produces changes in the morphological pattern. This observation provides additional evidence for the universal continuum proposed by Bybee (1985:12). This continuum predicts that degrees of prototypicity and degrees of morphophonological fusion go hand in hand in language expressions:

Greater degree of fusion

◄⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯⋯
lexical —**derivational** —Inflectional— free grammatical —syntactic expression

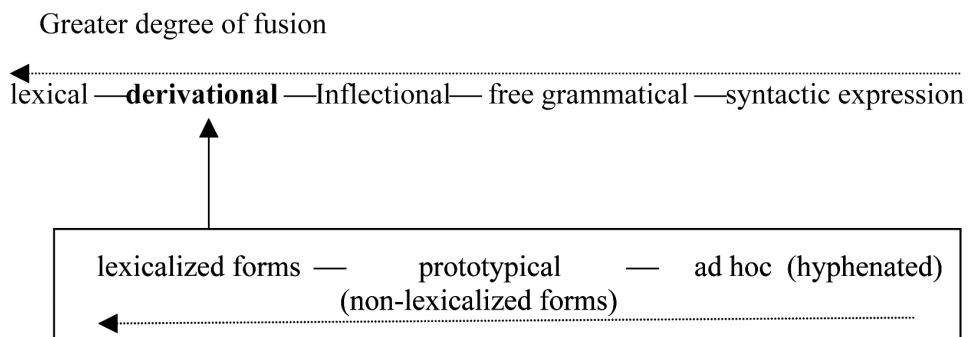| lexicalized forms — prototypical — ad hoc (hyphenated) |
| (non-lexicalized forms) |

Figure 6: Universal continuum and degrees of fusion in language expressions

    In general, *ad hoc* formations are at one end of the continuum and, since they are created on the basis of prototypical derivational schemata (at middle positions within the continuum), they show a low degree of both graphemic and phonological fusion. In contrast, lexicalized units appear at the other end and show graphemic and/or phonological changes as a result of a higher degree of morphophonological fusion.

By virtue of this continuum, therefore, morphophonological variation is characterized on the basis of the semantic interpretation of linguistic structures. This means that the phonological alternations described in *Example 9* (e.g. *predestination*) may be thus evaluated in terms of semantic motivations: *destination* prototypically designates 'place', [+Concrete, +Dimensional (Place)], whereas *predestination* undergoes a subcategorization, [-Concrete,-Attribute], that triggers the interpretation 'destiny'. This is also true of *premeditation* and *preconception,* whose bases designate actions [+Perception: +Action] but eventually acquire [-Perception:+Evaluative] features in the respective derived units. The lexicalised forms *exorbitant* and *extraordinary* likewise deviate from the basic stress pattern. While prototypical patterns (E.g. [{ˈek}{str∂}] in *extraterritorial* and [{ˈek}s}] in *ex-husband*) show primary stress on the first syllable, in *extraordinary* and *exorbitant*, the primary stress falls on the second syllable, and the phonological sequences change to [{ɪk}{ˈstrɔː}] and [{ɪg}{ˈzɔː}] respectively. In addition, some graphemic effects are observed in that prototypical denominal formations with the prefixes *extra#* and *ex#* usually appear hyphenated (*extra-terrestrial*, *ex-husband*, etc.), whereas lexicalised formations occur *indivisim*.

8. CONCLUSION

One of the most important advantages of the FLM as compared with other functionalist approaches, mainly FG, is that it permits the description and interpretation of affixes as contentive units. One of the main objectives in this paper has been precisely to show that, far from being mere formal items in the derived formations, locative prefixes contribute fundamental semantic, pragmatic and morphophonological properties to the derived units.

Given the large number of formations collected as part of the basic corpus and the complexity of the analytic method propounded in the model, the data provided in this work has been presented, of necessity, in schematic style. Indeed, most examples commented on represent prototypical instances of Anteriority and Superiority. They have been selected, however, as they constitute valid samples of the general layout of the locative derived lexicon. Furthermore, an attempt has been made to explain non-prototypical features and describe the restrictions that govern these at the most relevant linguistic levels. Particular attention has been drawn on the Cognitive Axis, as it contributes to evidence the role of extralinguistic factors which ultimately determine the semantics of lexical units, and hence, the structure of the lexicon. More specifically, metonymy and metaphor have emerged as devices that determine the conceptualization of location, both spatio-temporal and notional, and the distribution of the lexemes in domains and dimensions, while lexicalization has been characterized as a semantic restriction that motivates non-prototypical morphophonological patterns.

On the whole, though the FLM feeds much upon FG, it undoubtedly improves the lexical component by providing a fully-developed analytic methodology that reveals the basic properties of the derived lexicon as an autonomous, all-inclusive domain.

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