

Prefixes in Latin and Romance and the satellite-/verb-framed distinction*

Víctor Acedo Matellán

Universitat de Barcelona. Departament de Lingüística General
Gran Via de les Corts Catalanes, 585. Barcelona. 08007
viacma@yahoo.com

Abstract

The differences and similarities between Romance change-of-state prefixed verbs and Latin verbs with cognate prefixes are laid out. An account is offered in terms of a syntactic theory of argument structure and word formation, and the phenomenon is put in relation to the typological distinction between satellite-framed languages and verb-framed languages.

Key words: prefixes, argument structure, satellite-framed languages, verb-framed languages.

Summarium

Quibus partibus differant quibusque paria sint Romanica praefixata status mutationem exprimentia verba et Latina cognatis praefixis composita verba exponitur. Explanatio offeritur per syntacticam theoriam actorum structurae verborumque conformationis, atque phaenomenon referitur ad typologicam distinctionem inter satellite informantes linguas verboque informantes linguas.

Claves: praefixa, actorum structura, satellite informantes linguae, verbo informantes linguae.

Περίληψη

Εκτίθενται οι διαφορές και οι ομοιότητες μεταξύ των Λατινογενών ρημάτων αλλαγής κατάστασης και των Λατινικών ρημάτων με συγγενή προθέματα. Προσφέρεται μια εξήγηση μέσα στα πλαίσια μιας συντακτικής θεωρίας της δομής των όρων και του σχηματισμού λέξεων, και το φαινόμενο τοποθετείται σε σχέση με την τυπολογική διάκριση μεταξύ των δορυφορικά πλαισιωμένων γλωσσών και των ρηματικά πλαισιωμένων γλωσσών.

Λέξεις-κλειδιά: προθέματα, δομή των όρων, δορυφορικά πλαισιωμένες γλώσσες και ρηματικά πλαισιωμένες γλώσσες.

Contents

1. Introduction
2. Change-of-state *a-/en-* vs. locative *ad-/in-*
3. The richness of Latin prefixes vs. the poorness of Romance prefixes
4. Diachronic issues: from Latin to Romance prefixed verbs
5. Conclusions and possible applications to further data
6. References

* I'm grateful to my thesis supervisors, Joana Rosselló Ximenes and Jaume Mateu i Fontanals, and to the members of the Seminar of Theoretical Grammar and Typology of the University of Barcelona, for their help and comments. Thanks go also to María Ortega Aragón and Dimitra Lazaridou-Chatzigoga for help with the Latin and Greek translations of the abstract, respectively. All errors are my own responsibility. This work has benefited from the FPU grant AP2001-1956 and from the research project BFF2003-08364-C02-02, both of them granted by the Ministerio de Educación y Ciencia of the Spanish Government.

1. Introduction

At first sight, there is a remarkable difference between the Romance verbs with an *a-* or *en-* prefix,¹ and their Latin cognates, *ad-* and *in-* verbs: while the former are change-of-state verbs, the latter may correspond to other verbal types and their prefix has a locative meaning. I show, within a syntactic approach to argument structure and morphology (Halle & Marantz 1993, Hale & Keyser 1993, 2002, Mateu 2002), that the structure of both sets of verbs is actually quite similar, although a difference in the conceptual content of the prefix is at work. In fact, it is the conceptual richness of Latin preverbs versus the conceptual poverty of Romance preverbs, linked to either kind of prefix's syntactic properties, which may account for the differences between both types of verbs. On the other hand, the underlying structural similarity is linked to the fact that the predicates headed by these verbs exemplify, both in Latin and in Romance, satellite-framedness, one of the two main ways in which, following Talmy 1991, 2000, motion events are linguistically expressed, the other one being verb-framedness. The typological change from a satellite-framed system into a verb-framed one curiously favoured the evolvement of the Romance prefixed verb type, itself a satellite-framed structure.

2. Change-of-state *a-/en-* vs. locative *ad-/in-*

The purpose of this section is to show the semantic and syntactic differences between Romance *a-* and *en-* prefixed verbs and Latin *ad-* and *in-* prefixed verbs. While Romance *a-* and *en-* are mostly found in verbs expressing change of state, their Latin cognates, at least in the Classical period (1st c. BC - 14 AD), had strongly preserved their prepositional locative character, and government of a locative argument from the preverb was not infrequent in this language.

2.1 *A-/en-*verbs in Romance

In Romance there are many verbs with an *a-* or *en-* prefix involved in the expression of a change of state. The prefix can be attached to either a nominal, adjectival or verbal base, although nowadays it is only productive with nominal ones. Its change-of-state (COS) meaning must be understood in a wide sense, so as to encompass change of location as well.² The following examples from Catalan illustrate:³

¹ From now on, I will represent Romance cognates of the prefixes through the Catalan instantiations. Thus, *a-* corresponds to Spanish *a-*, French *a-*, Italian *a-* (often triggering gemination of the first consonant of the base), etc. *En-* corresponds to, apart from its allomorph *em-* in many languages, Spanish *en-*, French *en-*, Italian *in-* (or *i-* followed, again, by a gemination of the first consonant of the base), Romanian *în-*, etc. *Es-* is equivalent to *des-* (Spanish and Catalan), French *é-* (and maybe *dé-*, also), Italian *s-*, etc.

² See Mateu 2001a, 2002 for a reduction of locative verbs of the *saddle* and *bottle* type to COS verbs.

³ I provide next examples of *a/en-* prefixation in other Romance languages:

FRENCH: *Acroître*, 'make increase' (*croître*, 'grow (up)'); *adoucir*, 'sweeten' (*doux*, 'sweet'); *embarquer*, 'embark' (*barque*, 'ship'); *endormir*, 'put to sleep' (*dormir*, 'sleep').

ITALIAN: *Addormentare*, 'put to sleep' (*dormente*, present participle of *dormire*, 'sleep'); *affrettare*, 'speed something' (*fretta*, 'hurry'); *imbiancare*, 'whiten' (*bianco*, 'white'); *imburrare*, 'butter' (*burro*, 'butter').

PORTUGUESE: *Ajeitar*, 'make up, arrange' (*jeito*, 'manner, look'); *aloiar*, 'render blond' (*loiro*, 'blond'); *embotelhar*, 'bottle' (*botelha*, 'bottle'); *enfrouxecer*, 'loosen' (*frouxo*, 'loose').

ROMANIAN: *A adormi*, 'put to sleep' (*a dormi*, 'sleep'); *a alina*, 'calm down' (*lin*, 'calm'); *a așeza*, 'sit (someone) down' (*a ședează*, 'to be sitting'); *a îmblăni*, 'provide with a fur' (*blană*, 'fur').

DEADJECTIVAL VERBS

- (1) Aquest xampú *allisa* els cabells (*llis*, ‘smooth’)
‘This shampoo smooths the hair’
- (2) En Jan ha envellit molt (*vell*, ‘old’)
‘Jan has grown a lot older’

DENOMINAL VERBS

- (3) El pas del temps *avinagra* el vi (*vinagre*, ‘vinegar’)
‘Time makes the wine become like vinegar’
- (4) La Núria ha *ensellat* el cavall (*sella*, ‘saddle’)
‘Núria has saddled the horse’
- (5) Els nois *encapsaran* els llibres (*capsa*, ‘box’)
‘The boys will box the books’

DEVERBAL VERBS

- (6) La cançó ha *adormit* l’infant (*dormir*, ‘sleep’)
‘The song has brought the child to sleep’

*A-/en-*verbs show the same syntactic and semantic features as COS verbs in general. First, they select an internal argument referring to an entity which undergoes a change of state, where state can also mean ‘location’. In the case of prefixed verbs, the state is encoded in the embedded base, be this state a property (examples (1), (2), (3), and (6)), a located object (example (4)) or a location (example (5)). As to the argument structure (AS) properties of these verbs, most *a-* and *en-*prefixed verbs are transitive, and the great majority of them may appear in unaccusative predicates when provided with a reflexive clitic. In other words, they participate in the so called *causative alternation* (Mendikoetxea 1999:1589), because they can show up as transitive (see the examples above) or unaccusative, their internal argument respectively surfacing as object or subject. This is exemplified in (7) through (9):

- (7) El vi s’ha avinagrat
‘The wine has become (like) vinegar’
- (8) En Joan s’ha enriquit
‘Joan has got rich’
- (9) El nen s’ha adormit
‘The child has fallen asleep’

There are some *a-/en-*verbs which appear to be always unaccusative, crucially without the cooccurrence of the reflexive clitic, as is the case with Cat. *envellir* in (2) above. Romance (maybe some Romance languages, such as Spanish, more clearly than others, such as Italian) shows the tendency to neatly separate the transitive use from the unaccusative one through the presence and the absence of the reflexive clitic, respectively. This situation is general in the domain of COS verbs.⁴

Other properties of these verbs are related to their status as derived verbs. As is common in derivational processes, the output of *a-/en-*prefixation often shows certain

SPANISH: *Acallar*, ‘silence’ (*callar*, ‘shut up, be quiet’); *atontar*, ‘make become a fool’ (*tonto*, ‘fool’); *enlatar*, ‘can’ (*lata*, ‘can’); *enmohecer*, ‘make mouldy’ (*moho*, ‘mould’).

⁴ For more discussion on the status of the reflexive clitic in Spanish unaccusative counterparts of causative alternating verbs see Masullo 2000, Mendikoetxea 1999, 2000, Zubizarreta & Oh 2004; see Folli 2001, Zubizarreta & Oh 2004 for Italian.

new features when compared to its input. Thus, *a-/en-*prefixed verbs appear to possess ASs different from the ones related to the bases they seem to be derived from. In particular, the derived verbs appear to have a new agentive external argument (EA), in addition to an internal argument (IA, the entity undergoing the change of state), which corresponds to the EA of the base (if it had one):⁵

(10) *petit*: an EA → *empetitir*: an agentive EA, a patient IA

- a [El text]_{EA} és petit
'The text is small'
- b [L'escriptor]_{EA} empetiteix [el text]_{IA}
'The writer makes the text smaller'

(11) *vinagre*: zero arguments → *avinagrar*: an agentive EA, a patient IA

- a La Maria li ha posat massa vinagre a l'amanida
'Maria has put too much vinegar in the salad'
- b [La Maria]_{EA} ha avinagrat [l'amanida]_{IA}
'Maria has put vinegar in the salad'

(12) *jeure*: an external agentive argument → *ajeure*: an agentive EA, a theme IA

- a [En Joan]_{EA} jeu al llit tot el dia
'Joan lies in bed the whole day'
- b [La Maria]_{EA} ja ha ajagut [en Joan]_{IA}
'Maria has put Joan to bed'

Last, let us consider the semantic contribution of the prefix to the derived verb. While the meaning of *a-/en-* is that of change of state, *a-* shows a tendency to mean a change in the properties of some entity, while *en-* seems to be preferred when referring to change of location. Illustration of these tendencies is next made with some examples from Catalan; *a-*: *ablanir*, 'soften' (*bla*, 'soft'), *acovardir*, 'induce cowardice' (*covard*, 'coward'), *agrisar*, 'make grey' (*gris*, 'grey'), *asserenar*, 'make serene' (*serè*, 'serene'), *acréixer*, 'make increase' (*créixer*, 'increase'), *adormir*, 'put to sleep' (*dormir*, 'sleep'), *abacallanar-se*, 'get lean as cod' (*bacallà*, 'cod'), *agermanar*, 'unite, twin, make brethren' (*germà*, 'brother'), etc.; *en-*: *embeinar*, 'sheathe' (*beina*, 'sheath'), *emmagatzemar*, 'store' (*magatzem*, 'store'), *emmurallar*, 'wall' (*muralla*, 'wall'), *empaquetar*, 'pack' (*paquet*, 'pack'), *encapsar*, 'box' (*capsa*, 'box'), *embalsamar*, 'embalm' (*bàlsam*, 'balm'), *emmelar*, 'coat with honey' (*mel*, 'honey'), *enllosar*, 'pave' (*llosa*, 'flagstone'), etc. Further illustration for these semantic preferences is provided by minimal pairs: *avinagrar*, 'make sour as vinegar' / *envinagrar*, 'put vinegar' or 'put in vinegar' (*vinagre*, 'vinegar'); *acanyar-se*, 'turn lean as a reed' / *encanyar*, 'put reeds or canes (to keep a broken limb rigid)' (*canya*, 'reed'); *acaramel·lar*, 'turn into caramel' / *encaramel·lar*, 'coat with caramel' (*caramel*, 'caramel').⁶

The meaning of *a-/en-* can be considered unitary when opposed to that of prefix *es-*: while *a-/en-* indicate that an entity enters a given state (represented by the root), *es-* signals that that entity comes out of the state. The opposition between *a-/en-* and *es-* gets implemented in some minimal pairs, as in Catalan *emboirar*, 'cover in fog' / *esboirar*, 'free from fog' (both formed on *boira*, 'fog'), or in *emplomat*, 'provided with feathers' / *esplomat*, 'deprived of feathers' (*ploma*, 'feather'), etc.

⁵ For an extensive discussion of the changes in AS accompanying verbal prefixation in Catalan, see Acedo Matellán, in press.

⁶ See Acedo Matellán, in press, for more examples.

2.2 *Ad-/in-*verbs in Latin

The first thing to note about *ad-/in-* prefixation is that it is one of the cases of prefixation of prepositional preverbs. In Latin, many if not all prepositions can be found attached as prefixes to verbs, as can be seen in the next examples:⁷

- (13) *indormio*: ‘sleep or to fall asleep on something’ (*in*, ‘in, on’ + *dormio*, ‘sleep’)

Congestis undique saccis *in-dormis* (Hor. S. 1, 1, 71)

heaped_up:M:DAT:PL everywhere bag:M:DAT:PL in-you_sleep

‘You sleep on your bags, heaped up everywhere’

- (14) *adjaceo*: ‘lie next to’ (*ad*, ‘to, beside’ + *jaceo*, ‘lie’)

Quae Vulturno *ad-jacent* flumini (Liv. 10, 31, 2)

REL:N:NOM:PL Vulturn:DAT:S to-they_lie river:DAT:S

‘What lies beside the river Vulturn’

- (15) *interfundo*: ‘cast between’ (*inter*, ‘between’ + *fundo*, ‘throw, to cast’)

Inter-fusa [...] aequora Cycladas (Hor. Carm. 1, 14, 19-20)

between-cast:N:NOM:PL sea:N:NOM:PL Cyclades:ACC

‘The sea spread between the Cyclades’

- (16) *detrudo*: ‘push away’ (*de*, ‘from’ + *trudo*, ‘push’)

De-trudent naves scopulo (Verg. A. 1, 145)

from-they_push ships:ACC reef:ABL

‘They push the ships away from the reef’

The meaning of the prefix is primarily locative: it keeps its prepositional character, as shown in the examples (13) through (16). The locative meaning of the preverb is particularly evident when the same base yields two verbs differing only in their prefix:⁸

- (17) *adequito/inequito*

- a Qui ubi *ad-equitavit* portis [...] (Liv. 22, 42, 5)

REL:N:NOM:S when to-he_ride doors:DAT

‘This one, as soon as he had ridden up to the doors’

- b Sarmatae patentibus campis *in-equitant* (Flor. 4, 12, 20)

Sarmatae:NOM open:M:DAT:PL fields:DAT in-they_ride

‘The Sarmatae ride on open fields’

Latin prefixed verbs are typically not COS verbs. This is particularly striking when we compare the semantics and syntax of some prefixed verb in Latin with its Romance (Catalan) descendant:

- (18) Latin *adsido* vs. Catalan *asseure*

- a Hiempsal dextra Adherbalem *ad-sedit* (Sal. Jug. 11, 3)

Hiempsal:NOM to_the_right Adherbal:ACC to-sat_down

‘Hiempsal sat down beside Adherbal, on his right’

⁷ The Latin data which I present in this section have been extracted from Gaffiot 1934, Lewis & Short 1879, Perseus Digital Library and Crocco Galèas & Iacobini 1993.

⁸ Other values for the prefix are found, however. In the case of *ad-*, García Hernández 1980 registers a complementary value (similar to the one of English *back* in *He shouted and I shouted back*; this value could be more fittingly dubbed “responsive”, maybe), an aspectual, ingressive value, an intensive value and an additive value, also. As for *in-*, the same author records, in addition to its locative value, a causative value (which he calls, again, “complementary”), an aspectual, ingressive value and an intensive value.

- b *Hiempsal assegué Adherbal*
Hiempsal sat_down Adherbal
 ‘Hiempsal sat Adherbal down’

In (18)a the subject *Hiempsal* is the theme argument of the COS simple *sedet*, while the accusative *Adherbalem* represents the entity beside whom the sitting event takes place. This locative relation is expressed through the preverb *ad-*, ‘to, beside’. In (18)b the subject *Hiempsal* is an EA exerting a change of state (change of position) on an IA represented through the object *Adherbal*. The prefix *a-* seems to mediate the COS meaning, provided that simple *seure* means merely ‘sit’. No locative argument is introduced in the predicate via the prefix, as happens in the Latin example. Notice that, as we will see later on, this argument is introduced by the Latin preverb regardless of its overt manifestation, in contrast with what occurs in Romance: while *Hiempsal adsedit* would mean ‘Hiempsal sat down *alongside*’, *Hiempsal es va asseure*, ‘Hiempsal sat down’, does not host any implicit locative argument.

A major property of prefixation in Latin is *p(reverbal)-government* (Lehmann 1983). The term *p-government* aims at describing a long-distance dependence established between a prefix and an argument semantically governed by it.⁹ Moreover, it is a suggestive way of contemplating the fact that the preverb has the power to introduce a new argument in the AS of the resulting verb. In the following examples, both the preverb and the p-governed argument are italicised:

- (19) *Tota vi novissimos in-currere* (Tac. Ann. 1, 51)
 whole:F:ABL:S force:ABL recent:M:ACC:PL in-they_ran
 ‘They charged the rear with the whole force’
 (20) *Aliquot me ad-ierunt* (Ter. An. 534)
 some_people me:ACC to-they_went
 ‘Some addressed me’

A *local* syntactic relation between the preverb and the p-governee may be overt. This is known as *duplication* (Lehmann 1983), that is, the repetition of the same element as a preverb and as a preposition:

- (21) *Ad exta angues ad-lapsi* (Liv., 25, 16, 2)
 to entrails:ACC snakes:NOM to-having_slid:M:NOM:PL
 ‘Snakes which had slid towards the entrails’
 (22) *Hunc in collum im-pone* (Pl. Per. 4, 6, 10)
 this:M:ACC in neck:ACC in-he_put:IMP:2S
 ‘Put this one on his neck’

As noted above, sometimes the preverb is understood as governing a null constituent, which may be interpreted as a discourse anaphor or, in the default case, as the speaker:¹⁰

⁹ Preverb government is also found in Ancient Greek, with a wider range of case assignment possibilities from the preverb. See Garret 1990, Coleman 1991 or Miller 1993. For the relation between the preverb and its allegedly governed argument in Latin, see Lehmann 1983, Coleman 1991, Miller 1993, or Vincent 1999.

¹⁰ Lehmann (1983:150) notes that sometimes the default interpretation of the null p-governee is the subject of the sentence. Indeed, there are cases where the speaker does not coincide with the subject, but the preverb seems to make reference to the latter:

(23) Null p-governee referring to an element outside its predicate

Parent[i] et dis prae[i]-euntibus [...] (Ov. Met. 8, 693)

they_obey and god:ABL:PL ahead-going:ABL:PL

‘They_i obey and, the gods leading the way (ahead of them_i) [...]’

(24) Null p-governee referring to the speaker

Ecquis ad-est? (Ov. Met. 3, 380)

anybody:NOM to-is

‘Is there anybody (here)?’

P-government can be understood as the power of the prefix to introduce a new argument to the AS of the verb. Note, however, that this change in the AS is different from the one performed by prefixes in Romance, which, as said, introduce an EA. In Latin the introduced argument is never an external one and can surface invested with different case markings, or in the form of a PP (involving duplication or not).

2.3 Summary

The next table lays out a comparison between Romance and Latin prefixed verbs, in relation to the syntactic and semantic features revised in this section:

(25)

	ROMANCE	LATIN
MEANING OF THE PREFIX	change of state	locative (primarily)
AS DIFFERENT FROM THAT OF UNPREFIXED A, N OR V	yes	yes
P-GOVERNMENT	no	yes
LICENSING OF A NULL ARGUMENT	no	yes
DUPLICATION	no	yes

In the next section I will provide a theoretical analysis and explanation of the data presented in (25), within a syntactic approach to lexical semantics.

3. The richness of Latin prefixes vs. the poorness of Romance prefixes

In this section I will try to provide an analysis for prefixed verbs both in Romance and Latin, showing that, while both types of verbs share the same basic structure, there is a semantic difference between their prefixes which may account for their semantic and syntactic differences, as are shown in table (25) of the previous section 2. Before doing

-
- (i) Si te [...] meae [...] uret sarcina chartae, ab-icito (Hor. Ep. 1, 13, 6f)
 if you:ACC my:F:GEN:S burn:FUT:3S charge:NOM paper:F:GEN:S away-throw:IPV:FUT:2S
 ‘If my paper’s charge burns you, throw it away (from you)’

In (i), which corresponds to Lehman’s (11), *ab-* is said to refer to the subject, the recipient of the letter. This case should be subsumed into the general one where the preverb makes reference to a previously cited element, which is *te* in the example.

this, I first sketch the theoretical framework through which the phenomena examined will be approached. It is the l(exical)-syntactic approach developed in work by Hale & Keyser (1993, 1998, 2002) and further revised and elaborated on by Mateu (2002). Reference will also be made to Talmy's (1985, 1991, 2000) theory of motion events, and Mateu's (2001b) syntactic interpretation of his proposals.

3.1 Theoretical framework

3.1.1 A theory of AS

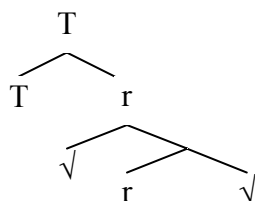
The approach I will follow to understand the structure of predicates headed by prefixed verbs both in Romance and in Latin is that proposed in different works by Hale and Keyser (1993, 1998, 2002) and Mateu (2002). This approach can be characterised as a syntactic one to lexical decomposition phenomena: lexical items are envisaged as units semantically decomposable in smaller entities which are related to each other by independently established syntactic principles. Importantly, in Mateu's theory the relation between lexical semantics and syntax is seen as a homomorphic one (Mateu 2002:28), that is, the (grammatically relevant) semantic properties of a lexical item are directly read off both its l(exical)-syntactic structure and the properties encoded into the subunits it is made up of.

I will assume, following Mateu's (2002) refinement of Hale and Keyser's theory, that the building blocks of AS can be divided into *relational* and *non-relational* ones. Relational elements are but a few ones, and constitute the articulators of AS, in that, besides being endowed with certain highly abstract semantic (and syntactic) content, they structurally relate other building blocks among each other. Non-relational elements crucially do not have any syntactic properties (not even syntactic category), only conceptual ones: they cannot project a specifier or a complement. The relational heads proposed in Mateu 2002 are basically two, although the second one comes in two varieties: one head, [r], is semantically interpreted as a non-eventive relation, and projects both a complement and a specifier; the second one is an eventive head projecting a complement but only optionally projecting an EA as the specifier of some higher functional head. The EA-projecting eventive head is [R], the *source* relation, while the one which does not project it is [T], the *transitional* relation. These three heads are specified for a \pm value, which is semantically read off as either dynamic (+) or static (-).

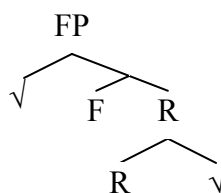
The projections of these three heads, abstracting away from their \pm value, may combine with each other to give rise to the three basic ASs for verbs: unaccusative, unergative and transitive (the $\sqrt{}$ symbol, originally used by Pesetsky (1995) to represent roots, represents here both roots (non-relational elements) or whole projections; the distinction will be crucial later on):

(26)

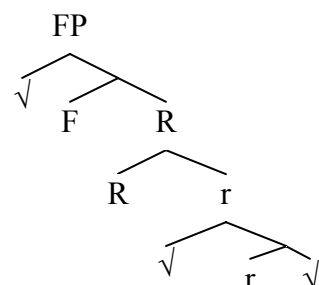
Unaccusative structure



Unergative structure



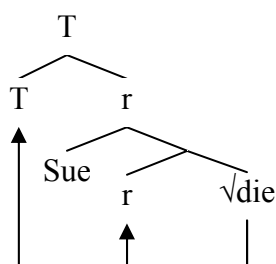
Transitive structure



The above representations are highly abstract: their final phonological shape being obtained through a process called *conflation*, the operation whereby some phonologically empty head of an AS configuration obtains phonological content from another element of that same structure. Conflation was primarily thought of as head movement, and constrained in such a way as to operate only from head to head. Crucially, conflation is banned from applying from within specifier position. This is Mateu's (2001b) take on it, and it will be my own in the following discussion. Next I illustrate both the above AS configurations and the way conflation takes place with some examples; conflation is represented with angled arrows:¹¹

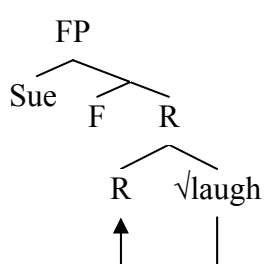
(27)

Unaccusative structure



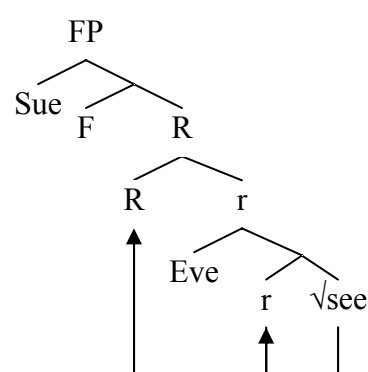
Sue died

Unergative structure



Sue laughs

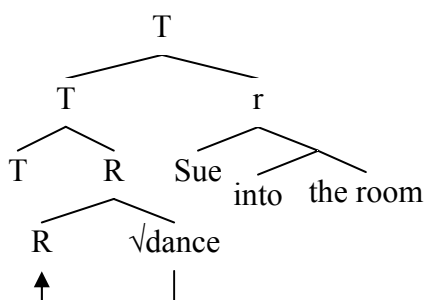
Transitive structure



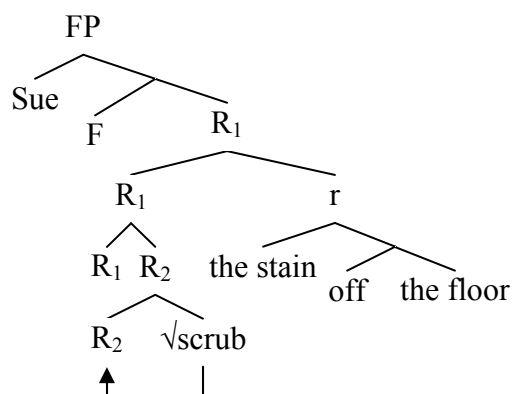
Sue sees Eve

Although the basic types of AS configurations are the three ones presented above, the freely usable operation Merge may attach independently derived structures together.¹² This affects unergative structures which come to be adjuncts of the heads of unaccusative or transitive structures. In these combined configurations, the unergative structure expresses an activity event which accompanies the unaccusative or transitive event. Consider the following examples:

(28) Sue danced into the room



Sue scrubbed the stain off the floor



¹¹ In the representations of (27) and in general throughout this work I have abstracted away from syntactic movements affecting arguments, such as movement of the subject to Spec-T or that of the object to Spec-v, and also from v-to-T movement.

¹² Appeal is made here to the mechanism of *generalised transformations* (reintroduced in Generative Grammar by Chomsky (1995)), whereby different structures can be computed in parallel in the derivational space and then combined with each other.

In both of the above sentences the basic syntax and meaning corresponds to an unaccusative and a transitive sentence, respectively, although the main verb –*dance*, *push*– an activity one, describes the manner in which the main event is carried out (that is, the way in which Sue enters the room and the way she causes the stain to disappear from the floor). This accompanying event interpretation of the activity verb emerges from its status as an adjunct to the main structures (in the case of the second structure the two R heads are distinguished through sub-indexes). This is, in essence, Mateu’s treatment of what Levin and Rapoport (1988) call *lexical subordination*, and permits him to deal with such phenomena as resultative constructions, as those in (28), particle verbs, *way*-constructions, etc.

3.1.2 The semantic structure of motion and COS events

In addition to the framework put forth above, I will also make use of Talmy’s proposals on the linguistic construal of motion events, in particular to concepts such as Path, Figure and Ground, through which the predicates headed by prefixed verbs can be understood.

Talmy (2000, vol. II, chap.3), in a revision and expansion of earlier work (Talmy 1985, 1991) on the relation between meaning and surface form in the expression of motion events, proposes that any motion event has an internal structure displaying different components. Consider the following sentences:

- (29) The cat walks into the hat
 (30) There stood a cat in the hat

In either one of these sentences there is something that moves or is stationary: the cat. This is the *Figure* component. The object which is taken as a reference for the movement or stationariness of the Figure is the *Ground*, which is the hat, in both sentences. Both Figure and Ground are related to each other by the *Path* component, which in (29) is expressed by *into* and in (30) is expressed by *in*. Last, the *Motion* component (which can in turn be movement proper, MOVE, or stationariness, BEAT) is encoded, in the above sentences, in *walks* and *stood*, respectively. Importantly, Talmy considers that the core part of the motion event (the one which distinguishes different events) lies in either the Path alone or the Path together with the Ground. This is what he calls the *Core Schema* (Talmy 1991, 2000-II).

It is crucial for our later discussion on the nature of prefixes to introduce Talmy’s (1991, 2000-II) decomposition of the Path component. The Path is constituted by a *Vector* subcomponent, a *Conformation* subcomponent and a *Deictic* subcomponent.

The Vector expresses the sense in which the relation between Figure and Ground is established. The types of Vector are given the names of certain prepositions: such as AT, which specifies a contact relation between the Figure and the Ground, TO, which specifies directionality towards the Ground, FROM, which specifies that the Ground is the starting point, VIA, which signifies that the Ground is something located in the Path, but which is neither the starting point nor the end point, etc. In (29) the Vector is TO, and is encoded in the *-to* subcomponent of *into*, while in (30) the Vector is AT, and lies in the preposition *in*.

The Conformation is a geometrical shaping of the Ground, which comes then to be conceptualised as a volume, an enclosure, a plane, etc. The conformation in both (29) and (30) is the one corresponding to an enclosure, and could be paraphrased as INSIDE. Note that, in both cases, it is expressed in the preposition *in*, which in (30) encodes, in addition, the Vector AT, and in (29) is morphologically attached to the TO Vector encoder *-to*. A volume conformation, which we could dub SURFACE, applied to the same motion event could yield *The cat walks onto the hat* and *There stood a cat on the hat*, respectively.

Last, the Deictic component conveys whether the sense of the Path is towards the speaker or elsewhere. The verbs *to come* and *to go* exemplify, respectively, a +SPEAKER (towards the speaker) and a -SPEAKER Deictic.¹³

It must be mentioned that Talmy's theorising aims at encompassing other kinds of events, in particular, events of change or maintenance of state. In that case, the Ground might represent a state, rather than an object, which implies that the Figure is the entity being in that state or undergoing a change so as to enter or exit the state. The Path would then be the change into or out of the state, or its maintenance.

Talmy's ideas on the construal of motion events have been drawn on by Mateu (1999f.) who proposes that concepts such as Figure, Ground and Path are semantic interpretations of different positions in his AS configurations. In particular, within an [r] projection, the Figure is the semantic interpretation of the specifier, the Ground is that of the complement and the Path is how the [r] itself is interpreted.

3.2 Conceptual richness of the prefix as the motivation for the differences between Latin and Romance prefixed verbs

I offer now an analysis of prefixed verbs in Latin and Romance within the framework presented in 3.1. On those grounds, I will try to account for the differences between the syntactic and semantic features of Latin and Romance prefixed verbs as summarised in table (25).

3.2.1 The structure of Romance and Latin prefixed verbs

My analysis of prefixed verbs in Romance and Latin hinges on three basic assumptions.

I assume, first, that predicates involving a prefixed verb both in Romance and Latin contain a projection of [r] type, headed by the prefix (that is, the prefix encodes the [r] head). As pointed out in 3.1.2, the prefix is interpreted as the Path, the specifier as the Figure and the Complement as the Ground.

Secondly, Latin prefixes are assumed to codify a conceptually rich Path; Romance prefixes codify a conceptually poor Path, provided only with the Vector subcomponent, which, in turn, can be only of either TO or FROM value, and, in the case of *en-*, also a Conformation subcomponent of value INSIDE. To see this fact more clearly, consider the constitution of the prefix (and preposition) *ad(-)*, in Latin, which has a TO Vector, a SURFACE conformation (which permits it to contrast with *in-*, involving an INSIDE

¹³ The technical names INSIDE, SURFACE, +SPEAKER and -SPEAKER are creations of my own (Talmy 2000-II:291 refers to my +SPEAKER as *hither* and to my -SPEAKER as *hence*).

conformation: *ad urbem/in urbem*, ‘to the city’/‘into the city’¹⁴), and very often a +SPEAKER Deictic (notably apparent in (24) of subsection 2.2). In contrast, its cognate *a-* has only a TO Vector, being opposed to the FROM Vector of *es-*, and unspecified Conformation, in contrast with the INSIDE Conformation of *en-*.

In the third place, I claim that the richness/poorness of the Path codifier determines its syntactic-selectional properties: a rich Path codifier may select a whole non-root complement (a nominal projection, either NP or DP); on the contrary, a poor Path codifier selects roots as complements.¹⁵ The projection of a rich Path codifier and its phrasal complement is read off as a Core Schema with a referential Ground, that is, a Ground which refers to some actual entity in the discourse. By contrast, the projection of a poor Path codifier and its root complement is interpreted as a Core Schema with an abstract Ground, the root, which represents a state or a non-referential entity. The rationale for this assumption is the fact that roots are abstract elements, not endowed with the functional material (a D projection, for instance) which could make them express the existence of referential entities, and are thus not eligible as concrete spatial Grounds, introduced by prepositional elements with a spatial meaning (a meaning which hinges on an internal structure of Vector, Conformation, and Deictic subcomponents).¹⁶ Another important fact is derived from the semantic difference between Latin and Romance prefixes, which has to do with the conflation mechanisms leading to the final shape of the verb: while in Latin prefixed verbs, the Ground component, being a whole nominal projection, is unable to conflate with the upper null verb, in Romance, this Ground component, due to its root character, must conflate into that verbal head (that is, [T] or [R]), providing it with phonological substance. This type of lexicalisation pattern, where only the Ground, and not the Path, is conflated into the verb, is alluded to by Talmy as a sporadic one, which may not form even minor lexicalisation systems in any language (Talmy 2000, II:60-61). Of course he is referring to lexicalisation of the Ground in pure, non abstract motion events (he gives the English verb *emplane*, ‘embark in an airplane’ and *deplane*, ‘get out of an airplane’, as an example). However, if one goes beyond that territory, it is not so difficult to find certainly not “minor” systems involving such patterns, as is the case with Romance prefixed verbs, or even verbs with inseparable prefixes in German and Dutch.

The previous assumptions work together to ensure that the structures in Latin and Romance are not different in their basic aspects, although the content of their [r] heads (the prefix) is.

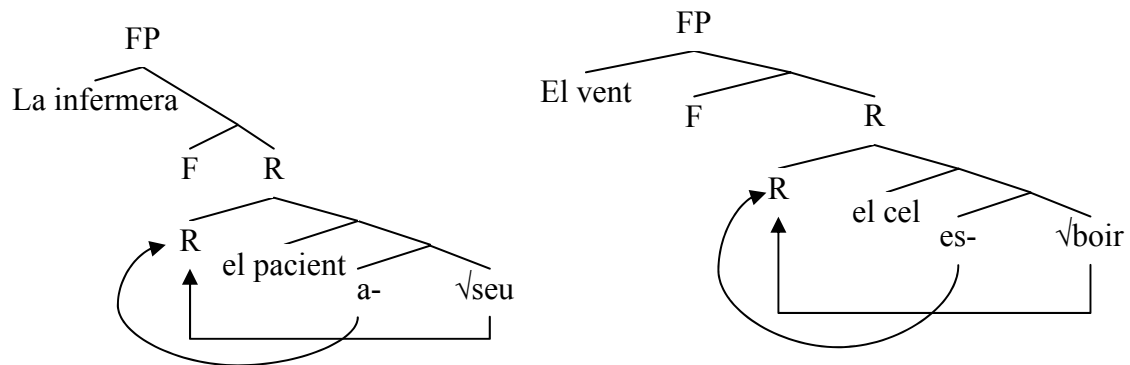
¹⁴ To be more precise, the Conformation of *ad(-)* is left unspecified (which does not mean it lacks one). Thus, *ad urbem* does not tell whether the movement ends up inside the city or in its outskirts (see Rubio & González 1985).

¹⁵ Parameterisation of syntactic heads as root- or phrase-selectors is not a new idea. It is, for instance the key in Pytkäinen’s (2002) theoretical approach to the typology of causatives. The novelty here is to put this selectional property in relation to a semantic property of the head.

¹⁶ Note that we are working on the assumption that, in principle, there can be syntactic relations between components of a word (the prefix, in this case) and whole phrases (the ground DP). This is expected in a framework like Distributed Morphology (Halle & Marantz 1993, Harley & Noyer 1999), which we strongly sympathise with, and which proposes that words, rather than being stored as sound-meaning units in a separate lexicon, are phonological phenomena; syntax would involve, in this view, only relations between morphemes, that is, the meaningful subparts of words. See, for discussion, Marantz 1995, 2000.

Let us now see what the subjacent structure of a predicate headed by a prefixed verb looks like in terms of the theoretical tools introduced in the previous subsection. Two predicates such as Catalan *La infermera asseu el pacient*, ‘The nurse sits the patient down’ and *El vent ha esboirat el cel*, ‘The wind has freed the sky from fog’, involve an [r] projection headed by the prefix *a-/es-*, which, by virtue of its poor conceptual content as Path encoder –it possesses only a Vector component of value TO/FROM, respectively– takes a root as its complement, $\sqrt{\text{seu}}$, ‘sit’ and $\sqrt{\text{boir}}$, ‘fog’, which is interpreted as an abstract Ground, a state. The specifier position is occupied by *el pacient/el cel*, the entity which is understood as abstract Figure, that is, the one which *enters* or *exits* –depending on the TO/FROM Vector in the prefix– into the state represented by the root. This structure is in turn taken as complement of an [R] head, whose semantics involves the introduction of an event (the change of state represented by the abovementioned elements) and the projection of another argument, understood as the originator of the COS event, which takes place thanks to the intervention of a higher functional head. The whole structures could be paraphrased as follows: “the nurse causes the event of the patient entering into the state of sitting” and “the wind causes the event of the sky exiting the state of fog”, respectively:

(31)

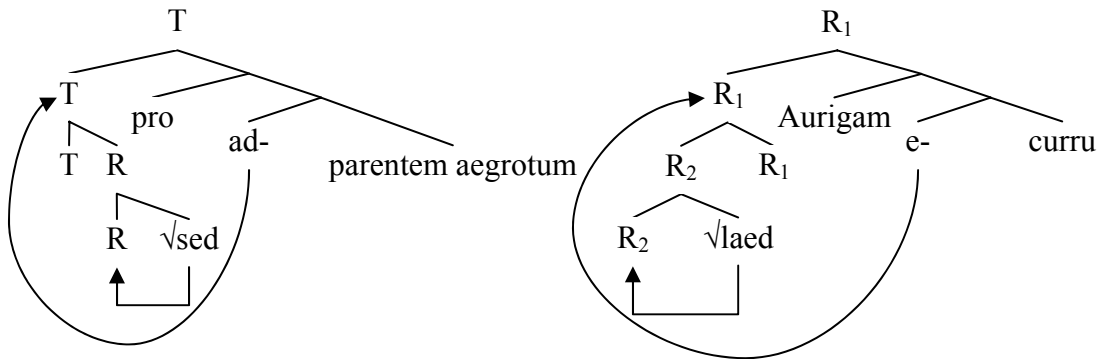


Some operations must take place in order to derive the overt shape of the predicate: a conflation process, represented through angled arrows, taking the phonological content of the root up to the [R] head, and a prefixation operation, represented through curved arrows, responsible for the prefix, a phonologically dependent sequence, not to be left astray in its original site.¹⁷

Latin predicates headed by prefixed verbs have the same basic structure. Two differences stand out, however: first, the complement position of the prefixal projection hosts a DP projection; second, the verbal root appears embedded in an unergative structure which is an adjunct to the head of the whole basic structure. Consider the structure of the predicates in *Quasi parentem adsideret aegrotum* (Apul. Met. 8, 11), ‘As though he were sitting beside his ill father’ and *Aurigam e curru elidere* (the active counterpart of *Auriga e curru eliditur*, Cic. Rep. 2, 41), ‘To beat a charioteer out of his chariot’:

¹⁷ Cf. Lieber’s (1980) Stray Affix Filter.

(32)



The prefixes *ad-* and *e-* codify a semantically rich Path, conveying a meaning equivalent to ‘beside’ and ‘out of’, respectively. The fact that the prefix encodes a conceptually rich Path, with a spatial interpretation, permits it to take a nominal projection as complement, *parentem aegrotum/curru*, which is interpreted as a concrete, referential Ground. The specifier, *pro/Aurigam*, is the Figure of the Motion schema. A difference between both structures comes from the nature of the relational head taking the [r] projection as complement and introducing the event semantics into the predicate: [T] in the former and [R] in the latter. This difference determines the unaccusative/transitive status of the predicate. An independently derived structure of unergative type, headed by an [R] relation, is attached to this [T]/[R] head as an adjunct. The unergative structure, containing a root $-\sqrt{\text{sed}}/\sqrt{\text{laed}}-$ in complement position, is interpreted as a manner Co-event modifying the main event expressed by the [T] head. Further operations include successive conflation of the phonological matrix of the root $\sqrt{\text{sed}}/\sqrt{\text{laed}}$ to the phonologically empty upper [T] and [R] heads and, last, prefixation of *ad-/e-* to the left of the verb (onto the upper [T]/[R] head)). In the second sentence we observe that the prefix is also spelt out in its original site, as a preposition (duplication).

3.2.2 An account of the differences between Romance and Latin prefixed verbs

The syntactic and semantic differences between the predicates headed by prefixed verbs in Romance and Latin, summed up in table (25), are now treated and accounted for separately.

3.2.2.1 Meaning of the prefix

The difference in meaning in Romance and Latin prefixes emerges from their internal makeup. Latin prefixes have kept, in most cases, their spatial meaning because they encode a complex Path, provided with Vector, Conformation and Deictic subcomponents. In turn, the Vector component may range over AT, TO, FROM, VIA, etc. Romance prefixes, on the contrary, involve a Vector component, which is exclusively of TO (*a-/en-*) or FROM (*es-*) value, expressing change of state (either entrance in (TO) or exit from (FROM) a state). In the case of *en-* I assume a Conformation component of value INSIDE, whence the conceptualisation of the root of the verb (the abstract Ground of the event) as an enclosure (see the examples in 2.1).

3.2.2.2 Changes in AS

In a theory as the one defended here, the AS changes observed between a simple base and its prefixed counterpart are epiphenomenal, provided that there are no special

derivational mechanisms having that base as input and yielding the prefixed word as output. Therefore, no reference can be made to AS inheritance mechanisms, and the expression “changes in AS” is merely descriptive. We can discuss, however, what is common and different in the ASs of prefixed verbs in Romance and Latin. The first thing to notice is that both types of structure show an internal argument, which in Romance corresponds to the entity changing state, and in Latin corresponds to the entity which is located with respect to some Ground entity. In fact, this internal argument is the specifier in the projection headed by the prefix, the difference in its interpretation arising from the already discussed internal composition of the prefixal element in either language. This internal composition is responsible for licensing or not an additional argument as the complement of the prefix. As we have pointed out, Latin prefixes allow a whole nominal projection as their complement, unlike Romance prefixes. This is the fundamental difference in the AS properties of Latin and Romance prefixed verbs. As for EAs, their *semantic* licensing is, within this framework, a consequence of the appearance of an [R] head of causative semantics taking the prefixal ([r]) projection as complement. The EA is *structurally* licensed provided the existence of the relevant higher functional head (Chomsky’s (2001a) v^*) which projects it as its specifier. This is the case in Cat. *asseure*, *esboirar*, in (31), and Latin *elido*, in (32); but the prefixal projection can be complement to a [T] head, which introduces a non causative, unaccusative event, as in Latin *adsideo*, in (32) also (possible unaccusative prefixed verbs in Romance are Italian *arrossire*, ‘blush’, Cat. *embogir*, ‘go crazy’, Sp. *envejecer*, ‘grow old’, etc.).

3.2.2.3 P-government

P-government, as the long distance dependence between a prefix and an argument of the predicate, is simply the result of the prefix *locally* governing that argument in the subjacent structure, in Latin. The prefixation of the prepositional element onto the verb and the possibility of not spelling it out in its original site produce the “long distance” effect. P-government does not arise in Romance simply because the prefix does not have a nominal projection as its complement. This is in turn due to its nature as an encoder of semantically poor Path.

3.2.2.4 Licensing of a null argument

This feature is part of the p-government phenomenon, to wit, it is the prefix’s government of a phonologically empty complement. It has been observed that the null argument might be interpreted as correferent with another element in the discourse. In this case, I take the prefix to take a *pro* as its complement, which is coindexed with some other constituent. In this light, the analysis of the example in (23) would be as follows:

- (33) pro_i Parent et dis prae₁-euntibus [~~prae₁~~ pro_i] [...] (Ov. Met. 8, 693)
 they_i obey and god:ABL.PL in_i front-going:ABL.PL [in_i front pro_i]
 ‘They obey and, the gods leading their way [...]’

The numerical subindex after the prefix and the preposition signals a movement relation between them (the second, crossed out instance of *prae* is, however, not pronounced), while the *i* subindex means coreference between the *pro* complement of the prefix-preposition and the subject of the main sentence (coincidentally a *pro*, also).

Another possible interpretation of the null argument of the preverb corresponds to the utterer. We believe that, again, a *pro* element is at stake, although we will not go into where this utterer's reference comes from.¹⁸

- (34) *Ecquis ad₁-est [ad₁ pro_{utterer}]? (Ov. Met. 3, 380)*
 anybody:NOM to-is
 'Is there anybody (here)?'

3.2.2.5 Duplication

The phenomenon of duplication involved in Latin prefixed verbs comes as no surprise once three assumptions are made: 1) in a predicate showing duplication, the prefix's original site is that marked by its prepositional counterpart, 2) movement involves copying an element (*Copy theory of movement*, Chomsky 1993) and 3) the possibility exists to spell out the two copies of the same element. As for assumption one, it is hardly in need of justification, provided the phenomenon of p-government. Assumption 2 has proved useful to explain other phenomena in grammar, such as reconstruction (Chomsky 2001b). Last, the empirical predictions of assumption 3 have been independently attested for other kinds of movement in Nunes 2004, among others. An analysis of a duplicated prefix would be as shown in (35) where the numerical subindex indicates that there is a movement relation between both elements:

- (35) *De₁ via de₁-cedite (Pl. Am. 984)*
 from way:ABL:S from-march:IMP:2PL
 'Step off the way'

Romance prefixed verbs do not show duplication: *El vent ha esboirat el cel* (**a boir(a)*). I assume that the prefix cannot be phonologically licensed in its base position, provided that its complement, a root, is also a phonologically weak element (which ends up conflated into the upper eventive head).

4. Diachronic issues: from Latin to Romance prefixed verbs

I would like to make some considerations on the diachronic process affecting prefixed verbs in Latin and yielding the Romance prefixed type. I will take two factors into account: the semantic impoverishment of the prefix as a Path-encoder and the global typological change from a satellite-framed system, Latin, into a verb-framed system, Romance.

4.1 Semantic impoverishment of the prefix

The semantic impoverishment of Latin verbal prefixes involved a drastic reduction of the values their Vector subcomponent can take: they end up being either TO (*a-*, *en-*) or FROM (*es-*). Other spatial values of the prefixes are lost, such as *ad-*'s 'beside' meaning, while the Conformation component remains active only in the opposition INSIDE (*en-*)/unspecified (*a-*, *es-*). The semantic bleaching is, in our view, the origin of two facts intimately related to the expansion of the Romance prefixed type. First, the appearance, already in pre-Classical Latin, of prefixed verbs with nominal or adjectival bases, such as *irretio*, 'ensnare' (*rete*, 'net, snare') or *ingurdo*, 'fatten' (*gurdus*, 'fat')

¹⁸ A possibility is that the prefix acquires a default +SPEAKER value for its Deictic subcomponent.

(see Crocco Galèas & Iacobini 1993). These verbs displayed the same features as the Romance prefixed verbs we have examined: abstract COS meaning, absence of p-government/duplication/licensing of a null argument, and the same changes in AS from the base to the derived verb. A second fact caused by the impoverishment of the prefix is a process of reanalysis of prefixed verbs with verbal bases, such as *adsideo*: the impoverished prefix can no longer take a DP projection as complement, as in the first example of (32), so it is reanalysed as a root-selector, its root becoming then the abstract Ground (a state) of the predicate. The presence of the deadjectival and denominal type (the *irretio/ingurdo* type), which also involve root-selecting prefixes, might have reinforced this reanalysis process.

4.2 A typological shift: from satellite-framedness to verb-framedness

The second factor implicated in the evolvement of the Romance prefixed type is a change in the expression of the semantic components of motion and other events in Latin. First I put forth how Latin and Romance differ in this sense and then I connect the difference to the appearance of Romance prefixed verbs.

4.2.1 Satellite- vs. verb-framed languages

Talmy (1991, 2000) proposes that languages systematically encode, in a single phonologically unanalysable unit, the same components of a motion event. Specifically, he focuses on the Path, and describes two possibilities as to its surface (syntactic) expression: the Path can be expressed within the verb, *conflated* –that is, fused into the same indivisible overt piece– with the motion component, or it can be expressed through an independent adjunct-like element of the predicate which he calls *satellite*. Languages which primarily feature the first way of encoding the Path are called *v(erb)-framed languages*, while languages where the second way is found are called *s(atellite)-framed languages*. What is of relevance within the present discussion is that there is a kind of complementary distribution between the expression of the Path and the expression of a Co-event, such that in v-framed languages the Co-event cannot be conflated in the verb, and it usually appears in an adjunct phrase, while in s-framed languages the Co-event can be readily expressed within the verb.

Latin and Romance are examples of s- and v-framed languages, respectively: the Path component of a motion event is expressed in Latin usually as a satellite, the linguistic correspondence of such being often a verbal prefix, while in Romance the Path is conflated into the verb. The next example from Latin and its Catalan translation illustrate:

(36)

- a Ex-curristi a Neapoli (Caes. ap. Prisc. p. 901 P)
out-you_ran from Naples:ABL
'You ran out from Naples'
- b Sortires corrents de Nàpols
you_went_out running from Naples
'You ran out from Naples'

In (36)a there is a verb, *curro*, which conflates the directed Motion with a Co-event expressing manner (that of quick motion or "running"). The path component is expressed by the prefix *ex-* ('out of'). This situation contrasts with that found in

Catalan, in (36)b, where the same elements are expressed in a “v-framed” style: the Path (‘out of’) is expressed in the verb, *sortir*, ‘go out’, while the manner Co-event is conveyed by an adjunct phrase, *corrents*, ‘running, in a hurry’.

After these considerations it must be clear that both Latin and Romance prefixed verbs are examples of s-framedness, provided that the Path, whether spatial or abstract, is encoded within the prefix, a satellite. The difference lies in the fact that in Latin the base verb conflates a manner Co-event (cf. *elido*, ‘beat out’, on $\sqrt{\text{laed}}$ ‘beat’), while in Romance the verb encodes the Ground component of the COS event (cf. *esboirar*, on $\sqrt{\text{boir}}$, ‘fog’).

4.2.2 The s-/v-framed distinction in prefixed verbs

The typological shift from an s- to a v-framed system implied the emergence of a host of verbs lexicalising the Path (cf. Cat. *eixir*, ‘go out’, It. *intrare*, ‘go in’, Sp. *meter*, ‘put in’, etc.). The presence of these verbs blocked the derivation of s-framed prefixed verbs such as *adsideo*, where the Path is expressed in the prefix and, crucially, the base verb encodes a manner Co-event. In that way, the reanalysis of those verbs as root-selecting verbs of the Romance type was further prompted.¹⁹

5. Conclusions and possible applications to further data

I have presented an analysis of prefixed verbs in Romance and Latin which depends on a syntactic vision of lexical decomposition and AS. The core idea of my analysis is that Latin and Romance prefixes exemplify two types of Path encoders: rich Path encoders and poor Path encoders, respectively. This richness/poorness, which is to be understood as the expression of concrete/spatial vs. abstract/COS meaning, is linked, in my view, to the syntactic-selectional properties of the prefix. Thus, while rich Path encoders select whole nominal projections as their complements, poor Path encoders select roots as their complements. In this way, we believe, the syntax/semantics homomorphism is strengthened.

The s-framed > v-framed typological change plays a special role in the diachronic interpretation of the difference between Latin and Romance prefixed verbs. In fact, this change has been suggested to have favoured the reanalysis of typical s-framed predicates with conflation of a manner Co-event as new COS predicates of the Romance type which conflate the Ground component into the verb. Paradoxically, therefore, the s-framed > v-framed change accompanied the evolvement of structures which are themselves s-framed.

I believe that the core idea of the analysis of Romance and Latin prefixed verbs could be applied to the analysis of the distinction between prefix verbs and particle verbs in German (Siebels & Wunderlich 1994), the former being analogous to Romance prefixed verbs and the latter to Latin prefixed verbs. This belief is based on the properties shown by either kind of preverbal elements, (inseparable) prefixes being closer to COS markers and (separable) particles showing locative meaning.

¹⁹ It is crucial to understand the difference between conflation, which is phonological substantiation, and affixation, which implies a mere attachment of one sequence to another. Thus, when Path-conveying prefixes appear attached to the verb, the Path cannot be said to be conflated into the verb.

6. References

- Acedo Matellán, V. (In press). "Una aproximació sintàctica als verbs prefixats en català", *Estudis Catalans*.
- Chomsky, N. (1993). A Minimalist Program for Linguistic Theory. In K. Hale & S. J. Keyser, eds., *The view from building 20: essays in linguistics in honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press, 1-52.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Chomsky, N. (2001a). Derivation by Phase. In M. Kenstowicz, ed., *Ken Hale: A Life in Language*. Cambridge, Mass.: MIT Press, pp. 1-52.
- Chomsky, N. (2001b). Beyond Explanatory Adequacy. In *MIT Occasional Papers in Linguistics 20*. Cambridge, Mass.: MITWPL, pp. 1-28.
- Coleman, R. (1991). Latin prepositional syntax in Indo-European perspective. In R. Coleman, ed., *New Studies in Latin Linguistics*. Amsterdam: John Benjamins, pp. 323-338.
- Crocco Galêas, G. & C. Iacobini. (1993). "Lo sviluppo del tipo verbale parasintetico in Latino: i prefissi AD-, IN-, EX-", *Quaderni Patavini di Linguistica*, 12, pp. 31-68.
- Folli, R. (2001). Constructing Telicity in English and Italian. PhD dissertation. Oxford University.
- Gaffiot, F. (1934). *Dictionnaire Latin-Français*. Paris: Hachette.
- García Hernández, B. (1980). *Semántica estructural y lexemática del verbo*. Tarragona: Aresta.
- Garret, A. (1990). Applicatives and Preposition Incorporation. In K. Dziwirek, P. Farrell & E. Mejías-Bikandi, eds., *Grammatical Relations: A Cross-theoretical perspective*. Stanford: The Center for the Study of Language and Information, pp. 183-198.
- Hale, K. & S. J. Keyser. (1993). On argument structure and the lexical expression of syntactic relations". In K. Hale & S. J. Keyser, eds., *The view from building 20: essays in linguistics in honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press, pp. 53-109.
- Hale, K. & S. J. Keyser. (1998). The Basic Elements of Argument Structure. In *MIT Working Papers in Linguistics 32*. Cambridge, Mass.: MITWPL, pp. 73-118.
- Hale, K. & S. J. Keyser. (2002). *Prolegomenon to a theory of argument structure*. Cambridge, Mass.: MIT Press.
- Halle, M. & A. Marantz. (1993). Distributed morphology and the pieces of inflection. In K. Hale & S. J. Keyser, eds., *The view from building 20: essays in linguistics in honor of Sylvain Bromberger*. Cambridge, Mass.: MIT Press, pp. 111-176.
- Harley, H. & R. Noyer. (1999). "Distributed Morphology", *Glott International*, 4, 4, pp. 3-9.
- Lehmann, C. (1983). Latin preverbs and cases. In H. Pinkster, ed., *Latin Linguistics and Linguistic Theory*. Amsterdam: John Benjamins, pp. 145-161.
- Levin, B. & T. Rapoport. (1988). Lexical subordination. In L. MacLeod, G. Larson & D. Brentari, eds., *Papers from the 24th Annual Regional Meeting of the Chicago Linguistic Society. Part One: The General Session*. Chicago: Chicago Linguistic Society, pp. 273-289.
- Lewis, C. T. & C. Short. (1879). *A Latin Dictionary: Founded on Andrews' Edition of Freund's Latin Dictionary: Revised, Enlarged, and in Great Part Rewritten by Charlton T. Lewis, Ph.D.* URL: <http://www.perseus.tufts.edu>.
- Lieber, R. (1980). *On the organization of the lexicon*. Doctoral dissertation. MIT.
- Marantz, A. (1995) Cat as a phrasal idiom: Consequences of late insertion in Distributed Morphology. Ms. MIT.
- Marantz, A. (2000). Words. Ms. MIT.
- Masullo, P. J. (2000). La Interfaz Léxico-Sintaxis: Presencia y ausencia del clítico se en construcciones inacusativas. Ms. Universidad Nacional del Comahue/ University of Washington.
- Mateu, J. (1999). Universals of semantic construal for lexical syntactic relations. Paper presented at the 1999 GLOW Workshop: Sources of Universals. University of Potsdam, Potsdam. GLOW Newsletter 42: 77. Distributed as GGT-99-4 Research Report, Universitat Autònoma de Barcelona, Bellaterra.

- Mateu, J. (2001a). Locative and Locatum Verbs Revisited: Evidence from Romance. In Y. D'Hulst, J. Rooryck & J. Schroten, eds., *Romance Languages and Linguistic Theory 1999*. Amsterdam: John Benjamins, pp. 223-244.
- Mateu, J. (2001b). Unselected Objects. In N. Dehé & A. Wanner, eds., *Structural Aspects of Semantically Complex Verbs*. Frankfurt am Main: Peter Lang, pp. 83-104.
- Mateu, J. (2002). *Argument Structure: Relational Construal at the Syntax-Semantics Interface*. Doctoral dissertation. Universitat Autònoma de Barcelona.
- Mendikoetxea, A. (1999). Construcciones inacusativas y pasivas. In I. Bosque & V. Demonte, eds., *Gramática descriptiva de la lengua española*. Madrid: Espasa, pp. 1575-1629.
- Mendikoetxea, A. (2000). "Relaciones de interficie: los verbos de cambio de estado", *Cuadernos de lingüística del I. U. Ortega y Gasset* 7, pp. 125-144.
- Miller, D. G. (1993). *Complex Verb Formation*. Amsterdam/Philadelphia: John Benjamins.
- Nunes, J. (2004). *Linearization of Chains and Sideward Movement*. Cambridge, Mass.: MIT Press.
- Perseus Digital Library. University of Tufts. URL: <http://www.perseus.tufts.edu>.
- Pesetsky, D. (1995). *Zero Syntax*. Cambridge, Mass.: MIT Press.
- Pylkkänen, Liina. (2002). *Introducing Arguments*. Doctoral dissertation. MIT.
- Rubio, L. & T. González. (1985). *Nueva Gramática Latina*. Madrid: Coloquio editorial.
- Stiebels, B. & D. Wunderlich. (1994). "Morphology feeds syntax: the case of particle verbs", *Linguistics*, 32, pp. 913-968.
- Talmy, L. (1985). Lexicalization patterns: semantic structure in lexical forms. In T. Shopen, ed., *Language typology and syntactic description III: Grammatical categories and the lexicon*. Cambridge: Cambridge University Press, pp. 57-149.
- Talmy, L. (1991). Path to realization: A typology of event conflation. In *Proceedings of the 17th Annual Meeting of the Berkeley Linguistics Society*. Berkeley Linguistics Society, pp. 480-519.
- Talmy, L. (2000). *Toward a cognitive semantics II: Typology and Process in Concept Structuring*. Cambridge, Mass.: MIT Press.
- Vincent, N. (1999). "The evolution of c-structure: prepositions and PPs from Indo-European to Romance", *Linguistics*, 37, 6, pp. 1111-1153.
- Zubizarreta, M. L. & E. Oh. (2004). *The Lexicon-Syntax Interface: the Case of Motion Verbs*. URL: <http://www-rcf.usc.edu/~zubizarra/SelectedPublications.htm>.