Argument Structure and Morphology: the Case of *en*- Prefixation in English and Catalan

Susanna Padrosa Trias

Supervisors:	Dr. Montserrat Capdevila Batet
	Dr. Jaume Mateu Fontanals

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1 INTRODUCTION¹

The present study deals with the derivation of words and the consequences that word formation processes have on the argument structure of the base. A current topic in generative grammar is whether word-structure is built by the laws of the syntax (cf. Baker (1988), Marantz (1997, 2001), Hale & Keyser (henceforth HK) (1993, 1998, 2002), Mateu (2001a, 2001b, 2002, 2005), among others) or by the laws of the morphological component (cf. Williams (1981a, 1981b), Selkirk (1982), Di Sciullo & Williams (1987), Di Sciullo (1997), Kiparsky (1997), Varela & Haouet (2001), Williams (2004), Lieber (2004), among others), partly reflecting the earlier debate between lexicalist and transformationalist derivations (cf. Chomsky (1970), Halle (1973), Aronoff (1976) vs. Lees (1970) (cited in Scalise (1984)), Lakoff (1970)). Here I will adopt a modular theory of grammar that brings together the two different views. I will assume that morphology constitutes a component on its own that interacts with the other components of grammar, i.e. syntax, semantics and phonology (cf. Jackendoff (1997), Ackema & Neeleman (2004)) and that there is some regularity behind the lexical items in any language, a belief that goes back to Gruber (1965), Chomsky (1970), Halle (1973), Jackendoff (1975), among the earliest references.

Headedness in morphology is regular. For instance, affixation processes in English (e.g. Williams (1981a)) and Catalan (e.g. Mascaró (1986)) are typically rightheaded. Since these will be the languages under analysis, Williams' (1981a) Righthand Head Rule (RHR) becomes relevant. The RHR² states that the head of a morphologically complex word is rightmost. The head will assign its category to the entire word by means of a mechanism referred to as percolation (see section 2.3 for discussion of such a mechanism). A direct result of the RHR is that suffixes are expected to determine the category of the word they are part of, since the head determines the properties of the whole. In contrast, prefixes are not expected to change the category of the words they attach to. The following examples show that suffixes (1a-

¹ This thesis is a development of a publication (Padrosa (2005)) and an elaboration on a talk given at the 2005 BIDE Student Conference in Linguistics, in Bilbao (Spain).

 $^{^{2}}$ Selkirk (1982) points out that the RHR is not universal and notes (citing from Lieber (1980)) that leftheaded types predominate in Vietnamese, for example. The RHR must therefore be stated as part of the grammar of Catalan and English, a parameter set for those languages with right-headed morphology.

2a) are typically category-changing and prefixes (1b-2b) category-neutral. (1) and (2) illustrate the point for English and Catalan respectively.

(1)	a.	$mad_A+ness_N = madness_N$ $character_N+ize_V = characterize_V$ $beauty_N + ful_A = beautiful_A$
	b.	$\label{eq:rewrite_v} \begin{split} & \text{rewrite}_V = \text{rewrite}_V \\ & \text{im+polite}_A = \text{impolite}_A \\ & \text{un+belief}_N = \text{unbelief}_N \end{split}$
(2)	a.	$groc_A$ 'yellow' + $or_N = grogor_N$ 'yellowness/having the quality of yellow' industrial _A 'industrial' + itzar _V = industrialitzar _V 'industrialize' brasil _N 'Brazil' + er_A = brasiler _A 'Brazilian'
	b.	$a + dormir_V$ 'to sleep' = $adormir_V$ 'to make somebody fall asleep' anti + higiènic _A 'hygienic' = $antihigiènic_A$ 'antihygienic'

 $post + guerra_N$ 'war' = $postguerra_N$ 'postwar'

Although the RHR seems to apply quite consistently, there are some exceptions to the claim that the head in morphological constructions is on the right and these need to be accounted for. For example, Williams (1981a) observes that the English prefix *en*-systematically converts N(ouns) and A(djectives) into V(erbs), thus displaying the behaviour of a head:

(3) $rage_{N} > [en+rage]_{V}$ $case_{N} > [en+case]_{V}$ $dear_{A} > [en+dear]_{V}$ $noble_{A} > [en+noble]_{V}$

A similar scenario exists in Catalan. The prefix *en*- also seems to convert Ns and As into Vs in a productive way (see section 3 for other putative category-changing prefixes in English and Catalan):

(4) $\begin{array}{l} \operatorname{amor}_{N} \operatorname{`love'} > [[\operatorname{en}+\operatorname{amor}]_{V}+\operatorname{ar}]_{V} \quad \text{`to make someone fall in love'} \\ \operatorname{caixa}_{N} \operatorname{`box'} > [[\operatorname{en}+\operatorname{caixa}]_{V}+\operatorname{ar}]_{V} \quad \text{`to put (something) in boxes'} \\ \operatorname{car}_{A} \operatorname{`expensive'} > [[\operatorname{en}+\operatorname{car}]_{V}+\operatorname{ir}]_{V} \quad \text{`to raise the price (of something)'} \\ \operatorname{cendrós}_{A} \operatorname{`ashy'} > [[\operatorname{en}+\operatorname{cendrós}]_{V}+\operatorname{ar}]_{V} \quad \text{`to cover something with ashes'} \end{array}$

In front of these counterexamples to the RHR, one is faced with different alternatives to explain them.³ The first one is to say that these words have no head. However, this is not a very attractive option since all complex words seem to have a head. The notion of head, which plays an important role in syntax, can also be applied to the internal structure of words. Work on heads in morphology has been well-established for a long time (cf. Williams (1981a), Selkirk (1982), Scalise (1984, 1988), Di Sciullo & Williams (1987), to mention just some of the earliest works).

A second option is to ascribe the prefix *en*- the attribute of a head and assign it to the category V. For instance, Williams (1981a) provides two arguments to support this view for English, the first of which is that it accounts for the systematic assignment of *en-X* words to the category V. The second argument is that *en*- potentiates the affix *-ment*, as seen in *ennoblement*, *enragement*, and *endearment*. As is usually observed in morphology studies, the potentiation of affix_X by affix_Y indicates that the latter must be in the head position. In this sense, it seems plausible to say that *en*-X words have leftmost heads. (See section 2.4.2 where this second option is developed further for both English and Catalan).

A third alternative to deal with the counterexamples to the RHR is not to treat them as exceptions, which is the view defended by Neeleman & Schipper (1992) when dealing with apparent category-changing verbal prefixation in Dutch. The authors argue that prior to prefixation there is a conversion process of As and Ns to Vs, by means of a zero-affix. Some evidence for this conversion-analysis comes from the argument structure of Vs, assuming that the Θ -grid of a complex word is derived from the thematic information of its morphemes via Θ -role percolation. The Dutch prefix verprovides a Theme when it attaches to a V. That becomes clear if the V dobbelen (5a), which takes an Agent, is contrasted with the prefixed version of the same V (5b), which takes an Agent and a Theme. However, when ver- is attached to a N/A, there is a Theme (which in this case originates in the A due to the Rel(ativized) RHR), and an optional Agent which cannot have originated in the prefix (see (6)), assuming that the prefix verprovides a stable Θ -role. In (5) it was established that the prefix provides a Theme, although its features are sometimes not visible, i.e. when the base on its right has the same features, as seen in (6). Another source for the Agent has to be found. Hence, the postulation of the conversion suffix.

³ I discard the possibility that in Catalan the final suffix is responsible for the category change, since this suffix is part of the inflectional paradigm and inflectional elements do not change category.

- a. dobbelen_V 'to gamble' Agent
 b. verdobbelen_V 'to gamble away' Agent Theme
- (6) a. nieuw_A 'new' Themeb. vernieuwen_V 'to renew' Agent Theme

Reinhart's (2000, 2001) assumptions go well with the modular approach to grammar adopted here, and by adopting her theta system and a Θ -role percolation approach to the inheritance of thematic information (Gràcia (1992, 1995), Neeleman & Schipper (1992)), I will try to find out which of the two last alternatives (i.e. *en*-prefixations having leftmost heads and having a zero-suffix) is the most adequate one, thus addressing the question of whether the complex words derived by *en*-prefixation in both English and Catalan (like those in (3) and (4)) are really exceptions to the RHR or not.

To carry out this task, I will focus on the argument structure of derived Vs and investigate the possible source of Θ -roles, which in turn will allow me to address the issue of whether the prefix contributes to the Θ -grid of the derived word. If the prefix does indeed contribute to the Θ -grid of the resulting word, I will corroborate a Θ -role percolation approach to the inheritance of thematic information (cf. Booij (1988), Levin & Rappaport (1988), Gràcia (1992, 1995) and Neeleman & Schipper (1992)) and Mateu's (2001a, 2002) view of complex denominal Vs. Mateu argues that the preverb of complex denominal Vs in Germanic languages (such as the German word *ver+gärtnern* 'to away-garden') is part of the main thematic structure, thus also contributing to the resulting Θ -grid of the predicate.

Reinhart's theta system (2000, 2001) represents one of the different reinterpretations of the 'Theta' theory in Chomsky's Principles and Parameters approach which have been proposed recently. Another reinterpretation is embodied in HK (1993, 1998, 2002). While Reinhart's proposal relies on Θ -roles, HK's is based on direct interpretation of the structure. According to the latter, the position of an argument in their lexical-syntactic structures equals its thematic role. For instance, the object is not assigned the role Theme, because it is already a Theme as a result of its being in a specific structural position which has this particular semantics. Therefore, the source of Θ -roles will be crucial to determine which approach is superior. If thematic roles always originate in the same position, then HK's approach should be favoured for economy reasons, i.e. the semantics can be read off from the structure and there is no need for a linking system between Θ -roles and syntactic positions. If Θ -roles do not always come

from the same structural position, then Reinhart's framework should be adopted. The two different views of Theta theory will be compared and analysed, although my thesis will be, as already noted, framed within Reinhart's theta system, making it clear that I consider her system superior to that of HK.

Given that the Catalan data will involve many reflexive Vs, a position as to how to consider them will be taken. That is, my study will try to provide an answer to the question of whether reflexive Vs should be treated as either unaccusative (Grimshaw (1990), Sportiche (1998)) or unergative (Reinhart & Siloni (1999)) entries.

Speakers's judgements will be considered to corroborate the data obtained from the dictionaries (see Appendix C), and another proposal, namely HK's (1993, 1998, 2002) will be discussed to see how their analysis can explain the data presented in section 4. If their account can deal with the data satisfactorily, that will mean that my analysis should be revised and modified accordingly.

This thesis is organized as follows. Section 2 contains some theoretical background to understand Reinhart's theta system (2.1), a brief explanation of the different approaches to reflexives (2.2), some discussion about Θ -percolation and inheritance (2.3) and the main approaches proposed in the literature to deal with the so-called parasynthetic structures (2.4). Section 3 provides the research methods as well as the sources of the data on which my study is based. In section 4 the results of the data are presented and discussed. Finally section 5 provides the present thesis with some conclusions and questions for further research.

2 THEORETICAL BACKGROUND

This section provides the basics of Reinhart's (2000, 2001) theta system (including her linking system), some discussion about the different analyses of reflexives, a brief explanation of how Θ -percolation and inheritance work, and the main approaches to parasynthesis which have been proposed in the literature.

2.1 Reinhart's theta system

Reinhart's theta system (2000, 2001) represents a formal definition of thematic roles, similar to what has been done in phonology, i.e. phonemes have been decomposed into features. By proposing two binary features: [+/-c] and [+/-m] (which result in eight feature clusters; see below), Reinhart derives the Θ -roles of the 'Theta theory' found in the Principles and Parameters framework (Chomsky (1995)). Seeing that causality is crucial in thematic structures and observing that there is an overlap between the Cause and Agent roles: 'if an argument is an agent of some change of state, it is also a cause for this change' (Reinhart (2000): 25), Reinhart labels the property they share [c], 'cause change'. Then, she notes that agency, unlike causality, involves volition and intention, and she labels this feature [m], 'mental state of the participant'. By assuming two features and two possible values for each, the system generates eight featurecombinations or, in Reinhart's terms, eight feature bundles. Although some of them, namely the mixed-value clusters ([+c-m]) and the unary clusters ([-c]), are more varied in their role interpretation than fully specified clusters⁴ with a [+] value for each feature (e.g. [+c+m]), there is still a (strong) correspondence between the clusters and the Θ roles. Here I reproduce the correlations (Reinhart 2001: 3):

^{(7) [+}c+m] agent
[-c-m] theme/patient
[+c-m] instrument
[-c+m] experiencer
[+c] cause (unspecified for /m; consistent with agent and instrument)
[+m] (unspecified for /c) with verbs such as *love, know, believe* (externally generated); *laugh, cry, sleep* (requiring an animate argument)

⁴ A fully specified cluster has a value for both features, as in [+c+m], [-c-m], [+c-m], and [-c+m].

[-m] (unspecified for /c) usually expressing subject matter/locative source [-c] (unspecified for /m) usually expressing internal roles like goal, benefactor (typically dative or PP)

Any linking theory about Θ -roles has to map the thematic specification (irrespective of its representation by means of Θ -role labels, feature clusters, etc.) of a lexical entry onto syntactic positions. That is, there must be rules or some mapping connecting the notion agent or the cluster [+c+m] to notions like external and to a specific position in the sentence. (See Williams (1981b), Carrier-Duncan (1985), Baker (1988), Grimshaw (1990), Neeleman & Schipper (1992), Samek-Lodovici (2003), for some linking suggestions).⁵ Reinhart (2001) proposes that there is a lexical operation which assigns indices to the roles on the V's Θ -grid: 1 marks the external role and 2 marks the internal role. These marking procedures only apply to verbal entries with at least two arguments, by assigning index 2 to a [-] cluster ([-c-m], [-c], [-m]) and index 1 to a [+] cluster ([+c+m], [+c], [+m]). The result is that a cluster marked 2 must merge internally and a cluster marked 1 must merge externally.⁶ Only mixed clusters ([+c-m], [-c+m]), which are not marked, can merge in either position, subject to other requirements (e.g. Merge externally whenever possible for economy reasons, since the external position must always be filled eventually).

Given Reinhart's assumption that each V is associated with only one thematic structure and that all Vs are underlyingly transitive,⁷ she derives reflexives, unaccusatives and unergatives by means of a lexical operation called reduction, which reduces the V's arity by one. If the internal argument is reduced (i.e. if the operation Reinhart calls reflexivization applies), a reflexive entry is derived. If the external argument (necessarily specified as [+c]) is reduced (i.e. expletivization has applied, in Reinhart's terms), the result can either be an unaccusative or an unergative alternate, a result which will depend on the feature specification of the remaining argument. To see

⁵ For example, Williams (1981a) distinguishes the external Θ -role by underlining it or in Grimshaw's (1990) thematic hierarchy, the external Θ -role corresponds to the least embedded one. These are just some of the conventions to relate roles to syntactic positions. That is, the underlined Θ -role in Williams or the least embedded Θ -role in Grimshaw's system is merged externally.

⁶ *External merging* refers to that role merged outside the maximal projection of its predicate, and *internal merging* refers to those roles merged within the maximal projection of their predicate.

⁷ The relationship between the causative and inchoative forms of a V is still an open issue in generative grammar. It is generally assumed that one form derives from the other in the lexicon, but it is not clear which form is the basic one. For example, Reinhart (2000, 2001) believes that the inchoative form derives from the causative, whereas HK (1998) claims the opposite. See Gràcia (1995) for a different view, according to which the two forms share the same base, but neither of them is derived from the other.

how the marking procedures work and how the mapping is established, we will consider the basic verb entry of *break* ({*John/The storm/The stone*} *broke the window*) and its unaccusative variant (*The window broke*). (Unnecessary details are left out, e.g. how the accusative feature is assigned).

(8) a. Base entry: <u>break</u> ([+c], [-c-m])
 b. Marking: <u>break ([+c]1, [-c-m]2)</u>
 c. Reduction _{Expletiv.} (break) ([-c-m]2)

(8a) indicates that the V *break* is transitive and thus takes two feature clusters (two arguments). The marking system establishes that the [+c] (cause) cluster is marked 1 and that the [-c-m] (theme/patient) is marked 2. The mapping instructions will then determine that the [+c] and [-c-m] arguments will merge externally and internally on the transitive variant respectively. Although the [+c] argument will not be present if expletivization takes place (8c), such process does not directly affect the remaining argument because it is still marked 2. It cannot merge externally, although it can move to the external position later to satisfy the Extended Projection Principle (EPP).⁸ Given that the remaining argument is [-c-m], an unaccusative verb is derived. If the remaining feature cluster had been [-c+m] ({*The man/The storm/The box*} *worried Mary – Mary worried*), the argument bearing such specification would have been able to merge externally, since the cluster, being mixed, would not have been given an index. The requirement of external merger whenever possible would have had its effects and an unergative would have been derived.

Finally, to exemplify reflexivization, consider (9).

(9) a. John dressed the baby. ([+c+m]1, [-c-m]2)b. John dressed. ([+c+m]1)

The internal argument marked 2 in (9a) has been reduced in (9b). This has no effect on the merging of the remaining argument, since it is still marked 1. It will merge externally, as in (9a).

⁸ The EPP (an extension of the Projection Principle) requires that clauses have subjects. For example, the EPP requires that sentence (i) has an expletive subject:

⁽i) It is raining.

Because Reinhart's marking procedures apply only for the arguments on a V's Θ -grid, it will only be at the verbal node, and not before, that arguments will get index 1 ([+] cluster), 2 ([-] cluster) or no marking at all (mixed cluster). That means that the Θ -roles of As and Ns cannot follow Reinhart's marking system, since this is not applicable to them. With respect to the relationship between the Θ -roles of As and Ns and their syntactic position (whether they are external or internal arguments), I follow the regularities (see (10)) already established in other work (for example, Williams 1981b). That is, a [-c-m] role on an A will be external. The same role on a N will be internal and the R-role,⁹ which is associated with Ns, will be external. The resulting pattern is as follows:

(10) a. For As: i. $[-c-m] \rightarrow external$

> b. For Ns: i. [R] \rightarrow external ii. [-c-m] \rightarrow internal

As will be seen, such approach seems problematic at first sight, because the external argument of an A (*This apple is edible*) is internalized when it is on the V's node (*I ate the apple*). However, this apparent internalization is explained if we adopt the view according to which only Θ -roles percolate, and the notions external or internal are determined by the category the Θ -roles are associated with (see Neeleman & Schipper (1992) for a similar view). In other words, the A will force an argument specified as [-c-m] to be external, whereas the same role on a V will be given index 2, which will determine internal merging.

2.2 Two analyses of reflexives: unergative vs. unaccusative

 $^{^9}$ The source of the R-role is to be found in Williams (1981b), who notes that Ns also have external Θ -roles. In sentence (i),

⁽i) I consider that [destruction of a city by evil forces]

the predicative NP *destruction* has two internal arguments: the Theme *a city* and the Agent *evil forces*, but it also has an external argument which has no counterpart in the verbal system, i.e. *that*, which he gives the label R. That is, *destruction of a city by evil forces* is predicated of *that*. "The label R is meant to suggest 'referential', since it is this argument position (R) that is involved in referential uses of NPs as well" (p. 86)

As for the treatment of reflexives (quite abundant in my Catalan survey, cf. Appendix B), we have just seen that, according to Reinhart, they are unergative entries, which have been derived by reducing the internal argument of a transitive V (see Reinhart & Siloni (1999) and Reinhart (2000, 2001) for details). However, Reinhart is somehow forced to stipulate that reflexivization is the result of reducing the internal argument, because she already has an external reduction operation for expletivization (recall that this is how she derives unaccusative and unergative entries; cf. section 2.1, pp. 7-8). Similarly, one could also stipulate that reflexivization is the outcome of reducing the external Θ -role, and that *se* is the obligatory marker (in Romance languages) that results from the reduction operation. In fact, this is roughly the unaccusative approach to reflexives, which has also been defended (see Grimshaw (1990), Sportiche (1998), for instance). According to this approach, the subject of reflexives, like the subject of unaccusative verbs, is the underlying object. Within the unaccusative analysis of reflexives, there are two different variants: the lexical and the syntactic. While the former assumes that the external argument is lexically absorbed, the latter assumes that the clitic se is the external argument present in syntax. On theoretical grounds, there is no reason for choosing one approach (reflexives as unergatives vs. reflexives as unaccusatives) over the other. The data of my Catalan study will, however, suggest that the unaccusative approach to reflexives is the one which seems to be on the right track.

2.3 O-percolation and inheritance

As far as the Θ -percolation approach is concerned, the basic idea is that the thematic information of a complex word is derived from the different elements that form the word, irrespective of whether they are prefixes or suffixes. This view of Θ -percolation is in conflict with the RHR, which states that only the head is able to transfer its features. The data analysed in my study will show that the strict RHR (Williams 1981a) has to be abandoned, in favour of the Rel. RHR (Di Sciullo & Williams (1987): 25-28), according to which the head for a specific feature is the rightmost element that contains the feature in question. To illustrate this, consider the Latin word in (11), which according to the Rel. RHR will have two heads, given that both *bi* and *tur* are the rightmost elements with respect to the features they are marked; i.e. the former is specified as [+future] and the latter is marked with the feature [+passive].

Other early statements of feature percolation (see e.g. Selkirk (1982), Fabb (1984), Scalise (1984), Lieber (1989))¹⁰ all come down to that of Di Sciullo & Williams (1987) with small modifications. For instance, consider Selkirk's (1982) formulation of percolation (p. 76) (u=unmarked):

(12) a. If a head has a feature specification $[_{\alpha} F_i]$, $\alpha \neq u$, its mother node must be specified $[_{\alpha} F_i]$, and vice versa.

b. If a nonhead has a feature specification $[_{\beta} F_j]$, and the head has the feature specification $[_{u} F_j]$, then the mother node must have the feature specification $[_{\beta} F_j]$.

Although Di Sciullo & Williams (1987) would call Selkirk's *nonhead* **head** with respect to the feature it introduces and would specify that the *nonhead* that introduces a feature the head is not specified for should be the rightmost *nonhead* marked with that feature, the basic idea behind percolation remains the same. Concerning the information which has been claimed to percolate from the head to the entire complex word, there have been several proposals. Not only the syntactic category has been assumed to percolate, but also other information associated with the relativized head, such as the [+/-animate] feature (Scalise (1984)), theta-grids, theta-roles and case features (Fabb (1984)).

Regarding inheritance, it refers to the relationship between the argument structure of a derived word and its input elements. A complex word inherits an argument from the base when the argument may be represented as an argument of the derived word either syntactically (sometimes referred to as external or syntactic inheritance) or internally to the complex word (sometimes called internal or morphological inheritance). To see the effects of inheritance, consider (13).

(13) a. Manchester is industrial.b. The government industrialized Manchester.

¹⁰ For a modern version of a mechanism similar to percolation, see Neeleman & van de Koot (2002) who use upward copying of functions introduced by terminal nodes.

The fact that the suffix -ize forms agentive Vs from As can be explained under the assumption that -ize provides an Agent role. The immediate consequence will be that the A's external Theme becomes the V's internal Theme. Whereas it is generally agreed that inheritance accounts for the shared thematic structure between (13a) and (13b) (cf. e.g. Booij (1988), Levin & Rappaport (1988), Picallo (1991), Neeleman & Schipper (1992), Gràcia (1992, 1995), Gràcia et al. (2000), Williams (2004)), there are also some claims that point to another direction. In this respect, Hoekstra & van der Putten (1988), Bordelois [in Varela (1993)], among others, prefer to talk of a shared semantic structure, not of strict inheritance, between the two lexical items. If we consider (13) again, or many other derived forms, it is obvious that the argument structure of the derived word depends on the argument structure of the base. Thus, the two lexical items cannot have disjoint argument structures. The fact that they share the same Θ -roles cannot be considered a coincidence, but an argument to say that the two argument structures are related by inheritance.

2.4 On parasynthetic structures

Given that most Vs of the present study have been traditionally referred to in the Romance linguistic literature as parasynthetic constructions, a section devoted to clarifying what parasynthesis really involves and whether it is generally applicable to Germanic languages is in order. First, a definition of parasynthesis is given. After that, this section analyses the constituents that form the so-called parasynthetic structures and then the main structures that have been proposed for them.

2.4.1 Definition

Parasynthesis has frequently been described as a morphological process which adds to a base a prefix and a suffix simultaneously. Parasynthetic words would have the following structure: [prefix [base]_x sufix], where [prefix [base]] is not a word of the language nor is [[base] sufix]. Consider the Catalan examples in (14). Although some of these complex words contain a suffix between the base and the thematic vowel, *-er* in

(14a), the most common pattern is the one in (14b). That is, the thematic vowel is the only suffix of most of these constructions.

a. [[en [gra(n)]er]ar] prefix-grain-suffix-thematic vowel (+r)
 b. [en [negre] ir] prefix-black-thematic vowel (+r)

Some authors (cf. Mascaró (1986), Cabré & Rigau (1986)), however, believe that constructions of the type (14b) are not parasynthetic, but derivational, under the assumption that the thematic vowel is present in every V. In this respect, I take a different view. I consider that the thematic vowel, despite being present in every V form, should be considered a morpheme, more specifically an inflectional morpheme¹¹ given that its main function is to signal that we are in front of a verbal category. The conclusion is then that forms like (14b) will be taken as parasynthetic.

Parasynthesis has been acknowledged in other languages like Spanish (Alcoba [in Varela (1993)] and Italian (Scalise (1984, 1988a)). Although this phenomenon is not generally applicable to English, it could be argued that words like *embolden* and *enliven* are forms constituted jointly by a prefix and a suffix. For ease of exposition, I will assume that one can talk about parasynthetic constructions in the two languages under consideration, although it is a minor phenomenon in English and many authors do not apply this term to Germanic languages.

2.4.2 Constituents in parasynthetic constructions

2.4.2.1 A discontinuous affix

The fact that some parasynthetic Vs seem to be derived by simultaneous prefixation and derivation has lead some authors (e.g. Rainer [in Varela (1993)] to entertain the idea that there is a discontinuous affix or circumfix involved in such complex words: [affix_x [base] affix_x]. Although this option does not make use of an overgenerating morphology¹² (i.e. the derivations *affix+base and *base+affix are not present), which

¹¹ Cabré & Rigau (1986) also view the thematic vowel as an inflectional element, but for them Vs like *ennegrir* are not parasynthetic.

¹² Whether morphology is overgenerating or not was and is still a topic of interest (cf. e.g. Halle (1973), Booij (1988), Stiebels (1998), Ackema & Neeleman (2004)).

may be considered negative by some, and can explain the observed dependencies between prefixes like *a-, des-, en-* and the suffix *-miento* in Spanish, or the prefixes *en-, be-* and the suffix *-ment* in English (cf. e.g. Alcoba [in Varela (1993)] and Williams (1981a) respectively), it faces some problems. Having a circumfix would imply ternary branching, an option that would be very marked in morphology, if it exists at all. This untenable structure would be an exception to the general principle of binary branching, embodied in Aronoff's (1976) Binary Branching Hypothesis (BBH), according to which one affix is added at a time, resulting in morphological trees branching in a binary fashion (see e.g. Cabré (1994) and Drijkoningen's (1999) defence of the BBH).

2.4.2.2 Two constituents

A second alternative would be the structure [prefix [x]], which has been proposed for languages whose inflectional paradigm does not contain (at least visibly) the thematic vowel. In this structure the prefix would be category-changing. Although it would be an exception to the generalization that prefixes do not change category, at the same time it would explain the fact that en-, being a head, is able to potentiate the suffix -ment (cf. e.g. Siegel (1979), Williams (1981a), Selkirk (1982),¹³ Fabb (1984), Gavarró (1990), Lieber & Baayen (1993)). Concerning the prefix under analysis, it is generally assumed that *en*- subcategorizes for [+N] bases to form Vs (e.g. $[em[bitter]_A]_V$, $[en[danger]_N]_V$), thus conforming to the Modified Unitary Base Hypothesis (MUBH) of Aronoff (1976), according to which an affix may be attached only to bases that form a syntactic class specifiable in terms of a single syntactic category feature.¹⁴ As and Ns share the same feature specification: [+N]. However, this account leaves unexplained words like en-liven_V, en-lighten_V or en-close_V, where the prefix en- has been attached to a V. This clearly goes against the MUBH: there is no way to derive a single syntactic feature that includes As, Ns and Vs. In addition, another alternative should be found for Catalan as well as for English. Apart from the overt prefix en-, Catalan contains a visible inflectional suffix (cf. 14) and, as it will be shown, English words like encase contain a

¹³ Selkirk (1982) regards the small set of English category-changing prefixes (*a-, be-, de-, en-*) as not exceptions to the Rel. RHR, since the prefixes would constitute the rightmost element within the structure which has such a syntactic category and thus would be the head with respect to this feature. However, I still consider this small number of prefixes exceptional, given that these would be the only ones that are able to change the category of the word they attach to.

¹⁴ Following the decomposition of the four major lexical categories into the features [+/-N] [+/-V], the following picture is derived: Noun [+N-V], Adjective [+N+V], Verb [-N+V], and Preposition [-N-V].

zero-suffix. This suggests that the construction under study is constituted by three elements, which is the possibility I consider next.

2.4.2.3 Three (or four) constituents

A third option would identify three different constituents in parasynthetic constructions: a prefix, a nominal or adjectival base, and a thematic vowel (in Catalan) or zero suffix (in English). Although the basic tripartite constituency is shared by several authors dealing with different languages; e.g. Catalan (Mascaró (1986), Cabré & Rigau (1986), Cabré (1988, 1994)), Dutch (Neeleman & Schipper (1992)), English (Scalise (1988a)), Italian (Scalise (1984, 1988a)), Spanish (Alcoba [in Varela (1993)]), they differ as to what function each element performs. The analyses basically diverge in identifying the verbalizing element: the prefix vs. the suffix, and also in considering whether an invisible morpheme should be added to the structure. Rejecting ternary branching ($[prefix [base] sufix]_V$) on the basis of what has been said above, I will first consider the analysis in which the Catalan prefix has been taken as the verbalizing element (cf. Cabré & Rigau (1986), Cabré (1988, 1994)). This approach is similar to the one discussed in the previous section for English. Again, there is a small set of prefixes (a-, en-, (d)es- re-) that verbalize the putative [+N] base they attach, but now with the difference that there is a visible extra suffix, the thematic vowel. An argument Cabré & Rigau (1986) provide to support this approach is the parallelism that would exist between suffixes and prefixes, in the sense that both would be divided into two subgroups: category-changing vs. non-category-changing. Suffixes have been traditionally divided into aspectual affixes that do not change category (noi 'boy' noiet 'boy' with a diminutive suffix, which has an affection connotation) and those that do (*industrial*_A 'industrial' – *industrialitzar*_V 'to industrialize'). Cabré & Rigau claim that the same analysis is applicable to prefixes: aspectual prefixes, being the majority, would not change category, while non-aspectual prefixes (i.e. a-, en-, (d)es-, re-) would, thus establishing the parallelism between suffixes and prefixes. If the division of suffixes was the main reason not to treat prefixes like en- as exceptional (because prefixes would also have the same division), the parallelism is then not well-founded. There are different reasons to refute their position.

First, the classification of suffixes between aspectual and non-aspectual seems at first sight well motivated due to the comparable number of suffixes in each group, whereas the same division in prefixes seems a bit dubious due to its disproportionate number of prefixes in each group: four non-aspectual prefixes vs. thirty-six aspectual prefixes (see details in Cabré (1994)).

Second, there are no suffixes that do not determine the syntactic category of the derived word. In the cases where there is no apparent contribution (recall $noi_N - noiet_N$), the base has the same features as the suffix, and the Rel. RHR will determine that the features of the suffix, not those of the head, will be percolated. In this way, the non-distinct feature of the base and suffix makes the contribution of the suffix have no visible effects. If it is true that all suffixes determine the category of the derived word, then the parallelism between suffixes and prefixes disappears and so does the motivation to divide prefixes into category-changing and non-category-changing.

Third, if prefixes like *en*- are the elements responsible for verbalizing the derived word, an independent verbalizing process is needed for cases like sal_N 'salt', $salar_V$ 'to salt', and $tinta_N$ 'ink', $tintar_V$ 'to ink', $entintar_V$ 'to ink in'. The validity of such verbalizing prefixes is further questioned by the fact that those prefixes also select [+V] bases: *a-dormir*_V 'to make somebody fall asleep', *des-connectar*_V 'to disconnect', *em-marcir*_V 'to wither'. As has already been noted, the MUBH will be difficult to observe: prefixes attach to both [+N] and [+V] bases. The same problem was found when dealing with the English data in the previous section.

Fourth, Haspelmath (1992) observes that most verbalizing affixes derive historically from Vs and he gives some examples, one of which is the English suffix -fy, as in *codify*, which comes from the Latin V *facere* 'to do/make'. From the point of view of grammaticization, it would then be odd to consider *en*- a category-changing prefix given that it does not come from a V, but from the Latin preposition (adverb) *in*- 'in'.

Fifth, it is a fact that suffixes can generate words of different categories. If category-changing prefixes (both in Catalan and English) really exist, why should they all generate only verbal categories? The poor outcome of such prefixed words may indicate that the base they attach to is already verbal, an option which will be pursued next.

If the prefix is not the verbalizing element, the obvious candidate left in Catalan is the thematic vowel. There have been different instantiations of this proposal in the literature. One of them would have the following structure: $[[prefix [x]] sufix]_V$ (cf. e.g.

Alcoba [in Varela (1993)]). The prefix, transparent with respect to the base, is attached to it first, and it is the suffix (i.e. the thematic vowel), added later, that is verbalizing and assigns its category to the whole word. Whereas the BBH and RHR are observed, in the sense that this analysis presupposes binary branching and it is the rightmost element that provides the category, the MUBH cannot be obeyed. As was said before, the prefix can attach to nominal, adjectival and verbal bases, and there is no single syntactic feature [+/-N, +/-V] that can characterize such an heterogeneous group. This is resolved in an analysis where the verbalizing suffix attaches first to a nominal or adjectival base, deriving a V to which the prefix can attach: $[prefix[[x] sufix]_V]$. In this way, the suffix will attach to a [+N] base (i.e. As or Ns) and the prefix a [+V] base, thus conforming to the MUBH. Both the BBH and RHR will be observed. In fact, this is the analysis proposed by Scalise (1984, 1988a), who defends for Italian the idea that the thematic vowel must be a derivational verbalizing element in the following way. Inflectional morphemes do not change the category of the base they attach to, so he concludes that the thematic vowel cannot be an inflectional suffix, but must be a derivational one, given that there is a change of category.¹⁵ He provides examples like (15):

(15) a. attivo_A 'active' - attivare_V 'to activate' b. $olio_N$ 'oil' - $oliare_V$ 'to oil'

Scalise also proposes that a Ø-suffix in English performs the same function of the thematic vowel in Italian. The word *enrich* would have the structure $[en[[rich]Ø]_V]_V$.

Mascaró's (1986) view on parasynthetic constructions in Catalan is quite similar to that of Scalise. He also sees the thematic element as a derivational suffix, but with properties typical of inflectional suffixes. More specifically, its presence is compulsory in every verbal root and its shape changes for every conjugation (e.g. in the first conjugation, the thematic vowel can have forms like \dot{a} , $\dot{\epsilon}$, \dot{e} , and even more varied forms in the second and third conjugations: $\dot{\epsilon}$, \dot{e} , \dot{i} , \dot{u} and \dot{i} , $\dot{\epsilon}$ respectively), facts

¹⁵ Regarding the conception of the thematic vowel, Pena [in Varela (1993)]) clusters together with Scalise. Pena describes the thematic vowel (especially -a-) as a category that changes Ns and As to Vs very productively. Then, he adds that it is a neuter verbalizing element that can be found alone in a base or together with prefixation (i.e. parasynthesis).

unknown to derivation.¹⁶ This is why Mascaró describes parasynthesis as a process of prefixation with inherent suffixation.

The fact that there is only one property that makes the thematic vowel derivational (i.e. the category-changing ability) may indicate that this proposal is in the wrong direction and that the thematic vowel should be considered an inflectional morpheme. In addition, why should a verbalizing element be present when the base is already verbal?

Given the present panorama, a Ø-suffix presents itself as the way out, which is the view I defend (see Neeleman & Schipper (1992), Gràcia (1995), Stiebels (1997) for similar views). This Ø-suffix will only attach to [+N] bases (Ns and As), thus satisfying the MUBH and being more restrictive than the thematic vowel (ThV):

(16) $[\operatorname{prefix}[[[x] \ \mathcal{O}]_V \ ThV]_V]_V$

Apart from not going against the intuition that the thematic vowel is an inflectional morpheme, and as such it should not change category, this analysis satisfies both the BBH and RHR, and treats the Catalan and English construction in a uniform way. That is, the zero-suffix is the element responsible for the category change in the two languages.

Although all the proposals discussed so far make use of an overgenerating morphology, they make different predictions. Whereas Alcoba, Cabré and Rigau have an intermediate stage where only the prefix has been added to the base (resulting in a verbal or non-verbal category, depending on the author), the rest (cf. Scalise, Neeleman & Schipper, Gràcia, Stiebels) have a suffixed form (verbal) with no prefix yet. Of the two options, the second one is more restrictive in the sense that most of these intermediate forms are existing forms in the language, while that is not the case with the former. That is illustrated in (17) for Catalan.

(17) a. registre_N 'record' - registrar_V 'to register' - enregistrar_V 'to register' b. celler_N 'cellar' - !enceller_{N/V} 'to EN-cellar' (!=possible non-existent word) c. brut_A 'dirty' - !brutir_V - embrutir_V 'to dirty'

¹⁶ See Mascaró (1986: p. 39) for a detailed account for these and other inflectional properties of the thematic element. Note that although the inflectional suffix can adopt different shapes (when it is conjugated), there are fixed forms for the infinitive of each conjugation. The suffixes are -ar, -er/-re and -ir for the first, second and third conjugations respectively.

The pattern in (17a) is more frequent than those in (17b) and (17c). Although the picture for English is a bit different, due to the absence of the inflectional morpheme, it also provides some evidence for the more restrictive option. Compare (18a) with (18b), the former being more frequent than the latter.

(18) a. circle_N - circle_V - encircle_V b. drawer_N - !endrawer_{N/V}

In addition, there are many cases of conversion from a N or A to a V without any prefix, which can be explained by using the same process, i.e. a conversion-suffix process:

(19)	a. sal _N 'salt' - salar _V 'to salt'	(20)	a. salt _N - to salt _V
	b. $arrel_N$ 'root'- $arrelar_V$ 'to root'		b. $root_N$ - to $root_V$

Now it remains to be seen whether there are enough reasons to postulate a \emptyset -suffix responsible for the conversion (N/A \rightarrow V) and how we account for the potentiation of *-ment* by the prefix *en*- if the prefix is not a head. Apart from being the element responsible for the category change, I will argue that this suffix is responsible for a [+c] role present in the derived word.

3 RESEARCH METHODS

Dictionaries have allowed me to carry out the study of "all" *en*-prefixation Vs in the two languages under analysis, thus providing me with enough data to show that complex words derived by *en*-prefixation in English and Catalan are not exceptions to the RHR.

Concerning the Catalan data, the *Gran diccionari de la llengua catalana* (GDLC) (1998) and the *Diccionari de la llengua catalana* (DLC) (1995) have been the main tools, whereas the *Diccionari general de la llengua catalana* (DGLC) (1932) has been used for clarification and further reference when necessary. As for the English data, the *Cambridge International Dictionary of English* (CIDE) (1995) has been used in conjunction with the *Collins Cobuild English Dictionary* (CCED) (1995). Whereas the GDLC contains the etymology of the words, none of the previous English dictionaries does. For the purpose of finding out the origin and historical development of the English words, the Concise Oxford Dictionary (COD) (2001) and the Merriam-Webster Online Dictionary (MWOD) have been consulted. Abundant examples from the spoken language, exactitude, clarity and refinement in definitions are the basic characteristics of the aforementioned dictionaries, apart from being considered standard reference books of each language, recently revised including the latest incorporations.

Of the putative verbalizing prefixes in Catalan (cf. Cabré & Rigau (1986), Cabré (1988, 1994)), i.e. *a*- $([a+[genoll]_N+ar]_V$ 'toA-knee'), en-*(em-)* 'toEN-box', $([en+[caixar]_N+ar]_V$ $[em+[butxaca]_N+ar]_V$ 'toEN-pocket'), re- $(re+[fred]_A+ar]_V$ 'toRE-cool'), des- (es-) $([des+[coratge_N]+ar]_V$ 'toDES-courage', $[es+[teranyina]_N+ar]_V$ 'toES-cobweb'), *en*- has been chosen to be the most productive one. The same reasoning applies to English. Among the alleged category-changing prefixes (cf. e.g. Marchand (1969), Siegel (1979), Williams (1981a), Selkirk (1982)), namely a- $([a+[sleep]_V]_A, [a+[kin]_N]_A), be- ([be+[friend]_N]_V, [be+[calm]_A]_V), de ([de+[bug]_N]_V)$, en- (em-) $([en+[cage]_N]_V)$ [em[bitter]_A]_V), the latter has also been selected to be the most productive one.

The prefix EN- has some phonologically conditioned variants in each language. The alveolar nasal [n], the "default" variant, will change to bilabial [əm] in contact with a bilabial consonant (e.g. *embitter*, *empetitir* 'toEN-small'), labiodental [əm] when it is adjacent to a labiodental consonant (*enfeeble*, *enfarinar* 'toEN-flour'), palatal [ən] when adjacent to a palatal consonant (*enjoy*, *engegantir* 'toEN-giant')

and velar [əŋ] in contact with a velar consonant (*encase, encaixar* 'toEN-box'). That is, the alveolar nasal assimilates the place of articulation of the following consonant, only changing the spelling from <n> to <m> when it is adjacent to a bilabial consonant. The present study has focused on the prefix EN spelt <en>, since this has provided a survey large enough from which conclusive results have been achieved in both languages.¹⁷

All EN-prefixed Vs have been listed, together with their definition and examples where the Vs are used in context. The different senses of the V are indicated by numbers in each definition. Subsenses, when shown, are indicated by the use of an arrow (\rightarrow), and phrases that contain the V in question have been omitted. Regarding the long examples provided by the dictionary, they have been shortened where there was no loss of clarity. The etymology for each prefixed V has also been given as long as it was provided by the dictionaries. Finally, the existence of a word formed by the *en*-prefixed V and the suffix *-ment* has also been included. I have kept the distinction between a derivative and a new entry made by the COD. The word *derivative* has been placed in front of the *en-V-ment* word when this is considered a word derived from the *en-V* word. Otherwise, the word *derivative* is absent. Then, the base from which the prefixed V has been derived has also been listed, including its definition, examples where the base is used in context, and its etymology when provided by the dictionaries. Placing the prefixed V next to its base has eased me the task of finding out the systematic differences, if any, between their argument structures.

The prefixed Vs have been divided into three subgroups. The first group contains those bases which are already verbal when the prefix is attached, as illustrated by the Vs *enact*_V (*<act*_V), *entravessar*_V 'to lay (something) across' (*<travessar*_V 'to cross'). The second group is formed by deadjectival Vs, like *enlarge*_V (*<large*_A), *ennegrir*_V 'to make (something) black' (*<negre*_A 'black'), and finally the third group is constituted by denominal Vs like *entitle*_V (*<title*_N), *encaixar*_V 'to box' (*<caixa*_N 'box'). The latter group has been further divided into three groups: location Vs (e.g. *encase*_V*<case*_N, *encaixar*_V*<caixa*_N), locatum Vs (e.g. *encourage*_V*<courage*_N, *encintar*_V 'to put a tape around' *<cinta*_N 'tape, ribbon') and Vs of creation (e.g. *enslave*_V*<slave*_N, *enraiar*_V 'to make a raft'*<rai*_N 'raft'). (Go to Appendix A to view the English survey and to Appendix B for the final classification of the Catalan Vs).

¹⁷ Although the survey focuses on the prefixed EN spelt $\langle en \rangle$, note that some examples including the prefix EN spelt $\langle em \rangle$ are cited in the thesis.

To confirm the results from the dictionaries, speakers' judgements have also been taken into account. Ten Catalan and English native speakers were given some sentences which contained fifteen possible but nonexistent Vs. Each sentence included two variants of the same nominal or adjectival base: a prefixed and an unprefixed version. In addition, some Catalan sentences contained two forms, one of which had the clitic *se* while the other did not. The subjects had to circle the V they would use if they had to make a choice. (21) illustrates the point for English (21a) and Catalan (21b) (see Appendix C).

(21) a. Little John was playing with shells on the beach. After a while, he embucketted / bucketted them. He wanted to take them home to show them to his grandma.
b. El petit Marc estava jugant amb petxines a la platja. Després d'una estona, les va engadellar / galledar. Se les volia emportar a casa per ensenyar-les a l'àvia.

The informants have also been asked questions like: 'Which V would you use if you were able to create a new V with the meaning of putting something (e.g. *books*) in a drawer?' (*drawer* vs. *endrawer*). The results of this experiment are discussed in section 4.3.

4 PREFIXED VERBS

This section provides the results of the Catalan (Padrosa (2005)) and English data. More especifically, this section analyses how Catalan and English *en*-prefixation works with respect to underived Vs (sections 4.1.1 and 4.2.1), deadjectival (sections 4.1.2 and 4.2.2) and denominal (sections 4.1.3 and 4.2.3) Vs.

4.1 Catalan data

The Catalan classification of prefixed Vs presented in this section largely agrees with that of Gràcia et al. (2000). We both have reached the conclusion that there is no regularity in prefixed Vs whose source is a V, and that deadjectival Vs have the meaning 'to make A' when used transitively and 'to become A' when used intransitively. The only difference has to do with denominal Vs, which Gràcia et al. have classified into four categories, while I have classified them into three, namely location Vs, locatum Vs, and Vs of creation. Their fourth group includes Vs like *engelosir* 'to make somebody jealous' and *embasardir* 'to frighten', which in my classification have been included in the locatum group. Although they are not typical locatum Vs with a physical object being placed somewhere, they still show the same behaviour and semantic paraphrase. For instance, if you *frighten* somebody, you 'put fear into that person' somehow. Other Vs which I have included in the locatum group are *encoratjar* 'to encourage' and *enrabiar* 'to enrage'.

4.1.1 V-to-V prefixation

This study has focused on the Catalan prefixed Vs which maintain a semantic relation with their bases and speakers are aware of the connection. For instance, pairs of Vs like *cantar* 'to sing' and *encantar* 'to cast a spell on somebody' have not been included because the relation between them is lost, i.e. the prefix has become lexicalized and is not seen as a prefix any more (see details in the introduction to Appendix B).

Although the remaining Vs (seven on my list) should be relevant to find out how the argument structure of the prefixed V differs with respect to its base, no conclusions can be drawn (maybe due to its reduced number).

(22) a. Una barca va travessar l'Atlàntic.

'A boat crossed the Atlantic'

(23) a. Van entravessar un tronc al mig del carrer. 'They laid a trunk across the street'b. Se m'ha entravessat un osset a la gola. 'A little bone got caught in my throat'

Based on the examples given in (22/23), one could suggest that the prefix *en*- gives a causative meaning to the V. That is, if people laid a tree trunk across the street, they caused the trunk to be somewhere. However, if we look at the base V to which the prefix attaches, we can also have a causative interpretation. Although such reading is not available in (22a), the same V can be used with a clear causative interpretation, as the following sentence shows:

(22) b. Li vaig travessar el pit amb l'espasa. I thrust the sword through his chest. 'I caused the sword to go through his chest'

Although the prefix is not the source for the causative reading, because such meaning is available without the prefix, one could entertain the idea that the prefix contributes to the Θ -grid of the prefixed V. It could seem that the *en*- prefix adds a locative role (*al mig del carrer* in (23a), *a la gola* in (23b)) to the Θ -grid of the prefixed V. However, such a proposal has to be rejected on the basis of the following examples:

- (24) a. El treballador subornà el cap. 'The worker bribed the boss'
 - b. El venedor ensibornà el client. 'The seller fooled the client'
- (25) a. Ella va retirar els diners del banc. 'She withdrew the money from the account'
 - a' Va retirar la mà que jo li havia allargat. 'He pushed away my approaching hand'
 - a'' Ell es va retirar a un monestir. 'He retreated to a monastery'
 - b. Quan ell va allargar la mà, jo vaig enretirar la meva.
 'When his hand approached me, I moved my hand away'
 - b' Ells van enretirar la taula. 'They moved the table out of the way'
 - b'' Si us enretireu, hi haurà prou espai per les taules. 'If you throw yourself back, there will be enough space for the tables'

In both cases (24/25), there is no addition of any Θ -role. Regarding *subornar/ensibornar* (24), both take the same roles: [+c+m] (agent) and [-c-m] (theme). As for *retirar/enretirar* (25), they show the opposite pattern of *travessar/entravessar*. When used transitively (25a/a' and 25b/b'), *retirar* has an extra Θ -role in (25a) (*del banc*) which would get reduced in the prefixed V. That is, the V in (25a) needs a locative source but that is not compulsory for *enretirar* (25b/b') or even for *retirar* in (25a'). The same holds for the reflexive variants: i.e. *retirar-se* in (25a'') needs a locative source (*a un monestir*) but *enretirar-se* in (25b'') does not. The examples just mentioned show that no systematic patterns between the two argument structures can be observed, i.e. the prefix does not seem to bring anything visible to the V.

The Θ -percolations in (26) will then be assumed for the previous Vs. Let us consider *(en)travessar* for concreteness sake.

(26) V {[+c]1, [-c-m]2} / \ en V {[+c]1,[-c-m]2} | travessar

Following Reinhart's marking system, the [+c] role is assigned index 1, determining its external merger, and the [-c-m] role will get index 2, forcing internal merger of such role. I assume that some reduction process takes care of the reflexive variants.

At this point, the postulation of an empty suffix seems irrelevant and so does the question of whether *en*- is a left head. In V-to-V prefixations, the base is already a V and there is no conversion, for which the suffix or prefix can be made responsible. Further, there is no apparent change in the argument structure of prefixed Vs and those Vs without a prefix. With respect to the role of *en*-, one could suggest that the prefix does have some feature specification, but this does not percolate because the base V has the same features and, according to the Rel. RHR, the rightmost element specified for some features is the one which gets its features percolated. To check whether that can be the case, we will have to turn to the next sections which also provide an answer to the question of whether prefixed Vs are real exceptions to the RHR or not and to which approach to reflexives is the right one, given that in V-to-V prefixation there is only form (*endur-se*<*dur*) that admits the clitic *se* and nothing can be concluded on the basis of a single form.

4.1.2 A-to-V prefixation

A very common pattern for en+A Vs is that most of them allow a transitive (to make A) and an unaccusative (to become A) variant, the latter typically expressed with the reflexive clitic *se/es* (included within parentheses below). In the following examples, all of which allow the two verbal variants, the feature clusters of both the A's Θ -role and the derived V's Θ -roles have been placed next to them. The feature specification in parentheses indicates that this role is absent in the unaccusative variant of the V ((b.2) sentences), but present when the V is used transitively ((b.1) sentences).

(27) a. dol c_A 'sweet' [-c-m] b. endolcir(-se)_V 'to make/become sweet' ([+c]) [-c-m]

b.1 (pro [+c+m]) Vaig endolcir la llet [-c-m]. 'I sweetened the milk' b.2 La llet [-c-m] s'ha endolcit. 'The milk became sweeter'

(28)	a. negre _A 'black'	[-c-m]	
	b. ennegrir(-se) _V	'to make/become black'	([+c]) [-c-m]

b.1 Els núvols [+c] ennegriren el cel [-c-m]. 'The clouds blackened the sky' b.2 El cel [-c-m] s'ennegrí. 'The sky turned blacked'

(29) a. ros_A 'blonde' [-c-m] b. $enrossir(-se)_V$ 'to make/become blonde' ([+c]) [-c-m]

b.1 El tint [+c-m] l' [-c-m] ha enrossit. 'The dye made his hair turned blonde' b.2 El seu cabell [-c-m] s'ha enrossit. 'His hair turned blonde'

To find out which role the prefix *en*- and the alleged Ø-suffix play in deadjectival Vs, their argument structures have to be compared with those of their corresponding As. In (27-29) the A from which the V is derived has a [-c-m] role, which is maintained in both transitive and unaccusative variants of the V. However, one needs to explain the presence and source of the extra Θ -role [+c] in the transitive variant. Although the

prefix might look as the most obvious source, this analysis would run into problems when considering Vs like those in (30) and (31):¹⁸

(30) a. canut_A 'white-haired' [-c-m] b. encanudir_V 'to become white-haired' [-c-m] (31) a. cresp_A 'curly' [-c-m] b. crespar_V 'to curl one's hair' ([+c]) [-c-m] c. encrespar(-se)_V 'to curl one's hair' 'to heighten the waves' [+c] [-c-m]

Although we would be able to explain *encanudir* by saying that the [+c] role of the prefix is reduced, and that it is not in the case of encrespar, Vs like crespar still cannot be accounted for, since there is no source for the unexpected [+c] role if we assume that such role originates in the prefix. Another source for the [+c] role needs to be found. One could entertain the idea that the [+c] role originates in the inflectional suffix (e.g. -ar in the case of encrespar), but that option is a dead end, since inflectional suffixes, unlike derivational ones, do not contribute to Θ -grids. In addition, given that an inflectional suffix is present in each and every simplex V, such view implies that all unaccusative Vs are derived by a reduction operation, an option which needs to be investigated further. A Ø-suffix then seems to be the only possible candidate left. On the basis of examples like (30-31), I propose that the Ø-suffix always carries a [+c] role, although this is not active all the time (i.e. it can be reduced). I also propose that the same Ø-suffix is responsible for the conversion of As to Vs. The inflectional suffix and the prefix en- cannot be responsible for the conversion. Inflectional suffixes do not change category and the derived V crespar in (31) clearly illustrates that the prefix is not needed, since this is absent and a deadjectival V can still be derived.

Given that my analysis presupposes a specific direction of derivation: $A \rightarrow V \rightarrow en+V$ (cresp_A \rightarrow crespar_V \rightarrow encrespar_V), one might think that a weakness of this analysis is that not always is it possible to derive existing intermediate Vs (marked as '!' in canut_A \rightarrow !canudir_V \rightarrow encanudir_V), but the possibility of deriving possible but non-existent words has been established in other work (for instance, see Stiebels (1998), Ackema & Neeleman (2004) who argue for an overgenerating morphology).

To see how the analysis just proposed for deadjectival *en*-prefixations works, the Θ -percolations and marking procedures for (27), *endolcir(-se)*, will be presented.

¹⁸ Go to Appendix B, the section of deadjectival Vs, to view other unprefixed Vs which contain a [+c] role, e.g. *agrir(-se)* 'to sour', *corbar* 'to bend'.

(32)
$$V \{[+c]1, [-c-m]2\}$$

/ \
en $V \{[+c]1, [-c-m]2\}$
/ \
 $V \{[+c]1, [-c-m]2\}$ I
/ \
 $I [-c-m] V [+c]$ ir
| |
dolç Ø

The Θ -role of both the A and the conversion-suffix percolate, resulting in a transitive Θ grid, where the marking procedures assign indices 1 and 2 to the [+c] and [-c-m] arguments respectively. The indices will, in turn, determine external merger for the [+c] role and internal merger for the [-c-m] argument. As noted, this V participates in the transitive-unaccusative alternation. I suggest that first a transitive Θ -grid is generated and then a process reducing the [+c] role takes place. In this case, it is clear that reflexives are the result of reducing the external argument, thus explaining why the (b.2) sentences in (27-29) do not have the role [+c], but only the [-c-m] one, which is inherited from the A. It could be said that the [+c] role is lexically absorbed, leaving *se* as the marker of such process, or that the clitic itself is the external argument containing the [+c] feature. Either view is compatible with my analysis. Otherwise, if one tried to derive the unaccusative variants by reducing the internal argument, the meaning of the sentences would not make much sense. Consider (33).

(33) a. El tint s'ha enrossit. The dye CL.has EN-blonded. 'The dye turned blonde'

On the basis of A-to-V prefixations, I conclude that the RHR can be maintained, since the \emptyset -suffix, and not the prefix, is responsible for the conversion of As to Vs and for providing the [+c] role sometimes present in deadjectival Vs, whether prefixed or not. The presence or absence of the [+c] role is in turn determined by the reduction operation. Given that it is the external argument that is reduced in the case of en+A Vs, the unaccusative approach to reflexives seems superior to the one which considers reflexives to be unergative entries (i.e. internal reduction has taken place). Again, the prefix does not have any visible effects on the resulting Θ -grid. One can only hypothesize that if the prefix has some features, these should be the same as those of the base (i.e. [-c-m]) and that the Rel. RHR determines that the features of the A, and not those of the prefix, percolate. Finally, as for the internalization of the A's external role, this process is only apparent. Only feature specifications (i.e. Θ -roles) move up to the next node. The notions external and internal are conditioned by the category the Θ -roles are associated with. For example, the A will determine that a [-c-m] role is external. Once this role is on the V's Θ -grid, Reinhart's marking procedures will apply (the [-c-m] role will bear index 2), determining internal merger for such role.

The next section shows that the basic pattern found in en+A Vs will also hold for en+N Vs.

4.1.3 N-to-V prefixation

Three semantic patterns can be distinguished within *en*+N Vs: the first one means 'to put something/somebody in/onto/towards N' (34) (cf. location Vs); the second one has the opposite relation between the two arguments, i.e. 'to put N around/in something/somebody' (35) (cf. locatum Vs); and finally, the third semantic pattern involves the creation of the N, namely, 'to make N', which is the same pattern found with As (36)¹⁹. The feature specification for each Θ -role has been placed next to the N and derived V. The R-role is associated with every N (Williams (1981b)) (see footnote 9).

(34) a. $caixa_N$ 'box' R b. $encaixa_V$ 'to put something in a N' [+c] [-c-m]

b. En Joan encaixà els llibres. John EN-boxed the books 'John packed the books away'

(35) a. caputxa_N 'hood' R
b. encaputxar(-se)_V 'to put the N on somebody's head' [+c] [-c-m]

¹⁹ For discussion about location and locatum Vs, see Clark & Clark (1979), Kiparsky (1997), HK (1993, 1998, 2002), Mateu (2001b, 2002), among many others. Regarding denominal Vs with a meaning of creation, see Clark & Clark (1979) and Gràcia et al. (2000) for example.

b. Ell encaputxà la Maria.He EN-hooded the Mary'I put the hood on Mary's head' / 'I covered Mary's head with a hood.'

(36) a. rai_N 'raft' R b. enraiar_V 'to make a N' [+c] [-c-m]

a. Els homes enraiaren els troncs.

The men EN-rafted the logs.

'The men created the raft out of logs' / 'The men tied logs together to create a raft'

Although one could think that the semantics of the Vs in (34) and (35) looks quite distinct from each other, the division between the two may get blurred in some cases. This is made evident by Vs like *envinagrar* 'EN-vinegar_V', which can have both readings. That is, *envinagrar* can either mean 'to soak something (e.g. pickles) in N' or 'to pour N over something (e.g. food)'. (See Appendix B, section A/B for other words like *envinagrar*).²⁰ This suggests that the division between the two groups may not be linguistically relevant after all, leaving us with two semantic patterns for denominal *en*-prefixations: one involving a change of location (34, 35) and the other involving the creation of the N (36).

Since Vs of creation have the same semantics as en+A Vs, it is logical to assume that similar Θ -percolations take place. Although the [+c] role of *enraiar* can come from the conversion affix, the [-c-m] role has no apparent source, since the N only has an R-role. However, Williams (1981b) argues on semantic grounds that the R-role could be interpreted as a theme, a view I adopt, given that it is in accordance with the feature specification we would expect ([-c-m]) from the N.²¹ Once the [+c] role and the reinterpreted R-role, [-c-m], are on the verbal node, they will get index 1 and index 2, which will determine external and internal merger respectively (see 37).

 $^{^{20}}$ Mateu (2001b, 2002) also groups location and locatum Vs together, and treats them as 'change of state' Vs.

²¹ Williams rejects the option of considering the R-role an external theme, because then there would be two themes in a single Θ -grid. In this respect, Neeleman & Schipper's (1992) remarks about Θ -role reinterpretation are illustrative. According to them, a Θ -role can only be reinterpreted as a role that is semantically close, and they also consider that that is the case for themes and R-roles.

Although the reinterpretation of the R-role accounts for Vs of creation, it leaves the presence of the [-c-m] role in verbs like *encaixar* or *encaputxar* unexplained, since their meaning is not 'to make/become a box/hood'. For these Vs, I propose that the prefix is responsible for the [-c-m] role found in the V's Θ -grid. In the two previous sections I already hinted at the possibility of the prefix having some feature specification, but due to the Rel. RHR, the prefix's features were always obscured. In en+N Vs, though, the prefix constitutes the rightmost head specified for the features [-c-m], since the Ø-suffix only has a [+c] role and the noun's R-role is not reinterpreted. Hence, the features of the prefix [-c-m] percolate up to the V's node, where they will get index 2 (internal merger) (see 38).

Interestingly, some Vs can have both a creation and 'change of location' reading:

(39) coixí_N 'cushion' R encoixinar_V to make a N' / 'to put Ns in a place' [+c] [-c-m] toia_N 'bouquet' R entoiar_V 'to make a N' / 'to put Ns in a place' [+c] [-c-m]

I suggest that they will have one or the other reading, depending on the source of the [-c-m] role. If the R-role is reinterpreted, the V will have a creation meaning, but if it is not, then the [-c-m] features will come from the prefix and this will result in a locative meaning.

To explain the existence of the intransitive variant (typically marked with the clitic *se*) of en+N Vs, I will adopt the reduction mechanism already used before. Since most intransitive variants clearly show reduction of the external argument (40), and in only a few cases is it difficult to tell which argument gets reduced like in (35) (it could be either the external or internal one), I assume that external reduction takes place in en+N verbs uniformly. Crucially, there are no cases with clear internal reduction.

(40) a. encoratjar_V 'to encourage' [+c] [-c-m]
b. encoratjar-se_V 'to become encouraged' [-c-m]

a. El primer gol els encoratjà. 'The first goal gave them courage'

b. Amb el cinquè gol es (CL) van encoratjar. 'With the fifth goal, they were encouraged.'

Like deadjectival *en*-prefixations, *en*+N Vs also seem to have an intermediate stage in which the N has become a V, but the prefix is not present as yet. As usual, those intermediate Vs which do not seem to be related to their prefixed version have been disregarded. To exemplify, consider (41).

(41) a. cola_N 'glue'> encolar_V 'to paste with glue'
 b. colar_V 'to filter liquid'

From the meaning of the two Vs, it is obvious that $colar_V$ is not an intermediate word derived from the noun *cola*. It just happens to share the same form. The V *encolar* can then be analyzed as an 'ordinary' denominal V with a locative reading (cf. (34, 35)).

Among the relevant existing intermediate Vs, two groups can be differentiated. The first group includes those forms whose meaning is related to the prefixed V and the second one contains those intermediate forms which, according to

the GDLC and DLC, have the same meaning as the prefixed Vs. The two groups include location and locatum Vs, Vs that can have the two readings and Vs of creation (see Appendix B, section of denominal Vs). Whereas the first group does not pose a problem to my analysis, the second one does.

As for the first three types of Vs in the first group (i.e. location and locatum Vs, and Vs that can be interpreted either way), the locative meaning is associated with the prefixed V, in agreement with my analysis, according to which the prefix *en*- with the features [-c-m] contributes to such meaning. Compare *caminar*_V 'to walk' with *encaminar*_V 'to put someboby in the correct path'.²² Regarding Vs of creation, no locative reading is involved, so whether the prefix is present or absent is irrelevant.

Regarding the second group, the GDLC and DLC define some intermediate Vs as having the same meaning as their prefixed version. Here are included the Vs with a locative reading, i.e. location and locatum Vs, and those Vs that can have the two readings. All these intermediate forms with a locative meaning question my analysis, since there is no source for the [-c-m] role, due to the absence of the prefix. However, once speakers have been consulted, matters become easier. Speakers do not use any of the two forms, namely the prefixed and unprefixed forms (probably because they belong to Old Catalan or to a very specific field like farming in the following examples: $cabestre_N$ 'halter' $\rightarrow cabestrar_V \rightarrow encabestrar_V$ 'to put a halter on' in the two Vs) or they uniformly use the prefixed version. For instance, speakers will use $ensulfatar_V$ rather than $sulfatar_V$ (< $sulfat_N$ 'fertilizer') to express 'to spread the fertilizer on the ground'.

As noted earlier, my analysis presupposes a specific direction of derivation: $N \rightarrow V \rightarrow en+V$ and that is the general pattern in my data. However, three of the locatum denominal Vs were first prefixed and then the unprefixed version was created later. The Vs are the following ones.

(42) a. cercle_N 'circle'→ encerclar_V (c. XV) → cerclar_V (c. XVII) 'to circle'
b. cèrcol_N 'hoop'→ encercolar_V (c. XV) → cercolar_V (c. XVI) 'to put a hoop around a barrel'
c. llustre_N 'polish'→ enllustrar(-se)_V (c. XVII) → llustrar_V (c. XIX) 'to polish'

²² At first sight, the intermediate V *sorrar* 'to put sand on something' would be an exception to my generalization. The locative reading has no source because the prefix is absent. However, Catalan speakers, when asked to choose between *sorrar* and *ensorrar*, prefer the prefixed version. According to the etymology of these words, first the V *sorrar* (c(entury) XIV) was formed out of the N, and then it may well be that speakers added *en*- to best express the locative meaning and the result was *ensorrar* (c. XVI).
Although the dictionary lists the unprefixed Vs as having the same meaning as those with the prefix, native speakers' intuitions reveal that the locative meaning is best associated with the prefixed V. Further, if a new locative V were to be created, speakers feel that the prefix is necessary. These observations favour my analysis (the prefix is associated with the features [-c-m]).

Of the locatum Vs, there are two other forms going in the opposite direction of derivation and they also require some explanation. This time the dictionaries do not give the same meaning for both the intermediate V and the prefixed V.

(43) a. fre_N 'brake' \rightarrow enfrenar_V (c. XIV) 'to put the N on' \rightarrow frenar_V (c. XX) 'to slow down'

As for *frenar*, the V has become lexicalized. The fact that it does not necessarily make reference to putting the brake on, but it can also refer to slowing down a process/activity/job explains the omission of the prefix. *Enfrenar* is an archaic form, not used by the speakers consulted. Regarding *greixar*, most of my subjects do not use this word either. They prefer a prefixed version based on the Spanish N *grasa* 'fat' and the result is *engrassar*, the Catalan version of the Spanish V *engrasar*. Again, the prefix is felt compulsory to express the locative meaning implied by the V, which is also true for the V *engreixar*. However, for those speakers who prefer the unprefixed version, some explanation is required. Notice that this is a very minor phenomenon, though.

The conclusion from this section is that the basic generalizations established in the previous sections also hold for Catalan en+N Vs. The Ø-conversion affix is responsible for the [+c] role. Finally, we have seen that the prefix does have some features, and that these play a role in Vs expressing a change of location. That is, a denominal V will express a change of location if the features of the prefix percolate, but it will have a creation reading if the N's R-role is reinterpreted.

4.2 English data

Although several authors have worked on unprefixed locatum and location denominal Vs and have classified them into extensive lists (see footnote 19), no classification has been provided for *en*-prefixed Vs, as far as I am aware of (except for authors like

b. greix_N 'fat' \rightarrow engreixar_V (c. XIII) 'to put N in something/somebody' \rightarrow greixar_V (c. XX) 'to put N on something'

Marchand (1969) who deal with historical data). I hope then that my classification and my findings here will shed light on a not much worked on area.

4.2.1 V-to-V prefixation

Like in Catalan, there is no systematic change in the argument structures of the few examples of V-to-V prefixation in English with respect to their unprefixed version. Of the eight Vs on my list, one could argue that some should be removed because a N (and an A in one case), exists together with the unprefixed V, and could suggest that the N (or A), and not the unprefixed V, is the base on which the prefixed V is built.²³ If that were correct, it would be the case for most of the Vs, e.g. $enact_V < act_V < act_N$, $enchant_V < chant_N, enclose_V < close_A.$ However, I do not think that is the correct approach. According to Corbin's (1976) [cited in Varela (1993)] semantic criterion, a N is derived from a V if it can be paraphrased by 'the act of Ving' and has no affix. A N which cannot have the previous paraphrase and has no affix added to it precedes the V. If we apply this hypothesis to the pairs of Ns and Vs on my list, we will see that the V comes first and that the N and prefixed V are derived later. To exemplify, consider *chant_{N/V}*. Given that a *chant* is the act (result) of chanting, *chant_V* is the source on which the other forms are based. The result is that the prefixed Vs in question are not denominal Vs, as one might think at first sight, but rather are derived from a V. Although such forms do not have to be removed from the list, others need to, namely engrave, enliven, and ensue. The two first forms are based on archaic Vs: grave_V is rarely used and *liven*_V has been replaced by *liven up*. As for the V *ensue*, some speakers do not longer see its compositional structure, which would be related to the V sue. (Ensue should probably be added to section (d) in Appendix A).

Five Vs remain on the list of *en*-prefixed Vs, not enough to find a systematic pattern between the prefixed Vs and their unprefixed version, as will be seen shortly by the following examples. (To see the other Vs, go to Appendix A, section A)

- (44) a. The young boy confessed his desire to act.
 - b. Her husband acted in Roberto's films.
 - c. The little child enacted old stories.

²³Some authors have resolved the issue of what comes first in a derivation by means of category indeterminacy. For instance, Marantz (1997, 2001) argues that roots are underspecified for syntactic categories like N and V and that the morpheme attaching to the root will provide the category.

- (45) a. The people outside chanted mantras.b. Merlin enchanted²⁴ the house.
- (46) a. I joined my sister in California.
 - b. The actress joined a dance company.
 - c. The boss enjoined him strictly not to tell anyone else.
 - d. Islam enjoins tolerance.

By comparing (44a) with (44c), one could initially suggest that *en*- adds a role to the Θ -grid of the unprefixed V: (44c) contains a [+c+m] (agent) role and a [-c-m] (theme) role, the latter not present in (44a). However, this option has to be abandoned. The unprefixed V can also have two Θ -roles, as shown in (44b) and there is no change between the argument structures of the unprefixed and prefixed Vs in (45) and (46). *Chant* and *enchant* both take the same roles (i.e. a [+c+m] (agent) role and a [-c-m] (theme) role) and so do *join* and *enjoin*. They can both show up in structures with three (46a/c) and two (46b/d) roles.

The reduced number of Vs that can be prefixed with *en*- and the lack of any apparent link between the two argument structures both in English and Catalan (section 4.1.1) questions whether V-to-V prefixation really constitutes a proper class in the two languages. In fact, HK (1993, 1998, 2002) and Mateu (2005) do not predict their existence. For instance, according to HK's theory of argument structure, unergative Vs like *laugh* and *dance* are derived from an initial transitive structure involving incorporation of a nominal head N into an abstract V (cf. HK (1993, 1998)). More recently (2002), there is no incorporation mechanism although HK still assume an initial transitive structure, where the V, filled through Vocabulary Insertion this time, governs an empty nominal complement, thus accounting for the relationship between *laugh* as a N and V, the two clearly related. Similarly, Mateu (2002, 2005) also reaches the conclusion that Ns are the real primitive elements taken as complements by apparently underived Vs. The syntactic analysis proposed by HK will be taken up in the Discussion section.

For the moment, the Θ -percolations in (47) will be assumed for the Vs discussed in this section (cf. (26) for Catalan). Let us consider how Reinhart's percolation system of Θ -roles would derive the Θ -grid of *(en)chant*.

 $^{^{24}}$ Whereas English speakers can still perceive the compositional structure of the V *enchant*, Catalan speakers cannot do the same with the corresponding V *encantar*. That can be explained by a gradual process, according to which speakers would lose the sense of compositionality progressively, being faster with some speakers than others.

(47)
$$V \{[+c]1, [-c-m]2\}$$

/ \
en $V \{[+c]1, [-c-m]2\}$
|
chant

The V *chant* has two Θ -roles a [+c+m] (agent) and a [-c-m] (theme), a sufficient number of roles to allow marking. Accordingly, the [+] role will get index 1 and will merge externally, and the [-] role will receive index 2 and will merge internally.

To summarize V-to-V prefixation in English, no systematic patterns between the two argument structures can be observed, i.e. the prefix does not seem to bring anything visible to the V. At this stage, the question of whether *en*- is a left head is redundant, and so is the postulation of a zero-suffix. The base in V-to-V prefixation is already verbal and no conversion process can be attributed either to the prefix or empty suffix. After all, V-to-V prefixation may not constitute a proper class in English nor in Catalan.

4.2.2 A-to-V prefixation

This section addresses the question of whether the same analysis for Catalan en+A Vs can also explain the different types of deadjectival Vs found in English. Examples like those in (48-50) show that the same analysis can be maintained, although in English en+A Vs only allow the transitive variant, illustrated in (a). The sentences in (b) indicate that the unaccusative variant is impossible and (c) provides some alternatives to (b). Note that this type of deadjectival Vs is not really productive: seven en+A Vs are the only existing forms nowadays (Appendix A, section b).

(48) rich_A [-c-m] enrich_V [+c] [-c-m]

- a. She will enrich the country.
- b. *The country will enrich.
- c. The country will {be/become} rich.

```
(49) large_A [-c-m]
enlarge<sub>V</sub> [+c] [-c-m]
```

- a. The reporter enlarged the picture.
- b. *The picture enlarged.
- c. The picture grew larger. / The picture was enlarged.

(50) noble_A [-c-m] ennoble_V [+c] [-c-m]

- a. His willigness to help ennobled Steven enormously.
- b. *Steven ennobled.
- c. Steven was ennobled by his willingness to help.

Following the analysis proposed for Catalan deadjectival Vs, the extra Θ -role [+c] present in the derived V is provided by a zero-suffix and the [-c-m] role comes from the A. The Θ -percolations and marking procedures for any of the forms in (48-50) are the same as those for *endolcir(-se)* in (32), repeated as (51) here for the V *enrich(<rich)*, the only difference being that there is no inflectional morpheme in English.

Some evidence to confirm that the zero-suffix, and not the prefix, is responsible for the [+c] role of the prefixed V comes from a more productive type of English deadjectival Vs, namely those without prefix. Consider the As in (52a), their derived Vs in (52b) and some sentences ((53a) and (54a)) where the latter are used in context. The sentences in (53b) and (54b) show variability in behaviour with respect to the transitivity alternations (the unaccusative alternate is allowed by *thin*, but not by *clean*).

- (52) a. clean_A, clear_A, dirty_A, empty_A, narrow_A, thin_A [-c-m] b. clean_V, clear_V, dirty_V, empty_V, narrow_V, thin_V [+c] [-c-m]
- (53) a. The old lady cleaned her glasses with a napkin.b. *Her glasses cleaned with a napkin.

(54) a. The cook thinned the sauce slightly.b. The sauce thinned slightly.

The A has the usual [-c-m] role and the V has a [+c] role, whose presence cannot be accounted for without a zero-suffix, since the prefix is not available. From these examples it is then clear that the prefix cannot contribute to the [+c] role present in the derived V, and hence cannot be a causativizer, as already noted earlier.²⁵

Still there exists a third type of deadjectival Vs in English, which have no prefix *en*-, but instead they end with the suffix *-en*. (55) provides some examples, and the sentences in (56) and (57) show that this kind of Vs can participate in the transitive-unaccusative alternation.

- (55) a. black_A, bright_A, hard_A, sweet_A, thick_A, wide_A
 b. blacken_V, brighten_V, harden_V, sweeten_V, thicken_V, widen_V
 [+c] [-c-m]
- (56) a. The cook thickened the sauce. [+c] [-c-m]b. The sauce thickened. [-c-m]
- (57) a. The sun reddened the sky. [+c] [-c-m]b. The sky reddened. [-c-m]

From very early on, a number of authors (e.g. Halle (1973), Aronoff (1976), Siegel (1979), Scalise (1984), Fabb (1988), Malkiel [in Varela (1993)]) have noted their existence and have claimed that *-en* is the element triggering the conversion of As to Vs. If that is the correct approach, there are two sources for the [+c] role: a zero-suffix and the verb-forming suffix *-en*. That is an awkward situation for my analysis, and I suggest that there is a single suffix which sometimes has phonological content (the *-en* morpheme) and sometimes does not (the zero-suffix), thus avoiding the unwanted double forms for a unique function. It is generally agreed that (cf. e.g. Halle (1973), Aronoff (1976), Siegel (1979), Scalise (1984), Fabb (1988)) there are some constraints on the suffix's attachment. The suffix *-en* only attaches to monosyllabic As that on the surface end in a single obstruent, preceded by a vowel, which optionally may, in turn, be preceded by a sonorant. If an A violates the condition just stated and there is a related nominal form that satisfies it, then *-en* attaches to the N: e.g. *frighten*_V (*afraid*_A has two

²⁵ For a different view, see e.g. Zwanenburg (1988), and Grimshaw (1990) who have proposed that the prefix *en*-gives the causative reading ([+c] role in my analysis) to Vs like *ennoble* and *enrage*.

syllables), and *strengthen*_V/*lengthen*_V (*strong*_A and *long*_A end in a nasal). The focus here, though, is on A-based Vs derived by the suffix –en (cf. 55).

Although these *en*-suffixed forms have the same Θ -percolations as *enrich* (cf. 51), now the zero-suffix is replaced by *-en*. This third type of deadjectival Vs provides further evidence to say that the *en*-prefix does not have any features, or if it does, they are probably the same as those of the base, and due to the Rel. RHR, the features of the base get percolated, obscuring those of the prefix.

The present panorama predicts the existence of deadjectival Vs constituted by both prefixation and visible suffixation. As seen earlier, the source of the [+c] role is a suffix which can be full or empty of phonological content (*widen_V*, *sweeten_V*, *brighten_V* vs. *rich_V*, *noble_V*, *clear_V*), the former subject to some phonological constraints. If that is correct, and the constraints on the suffix's attachment are satisfied, the prefix *en*- should be able to attach to bases with both types of suffixes, deriving prefixed deadjectival Vs, suffixed and non-suffixed. Considering historical data (Marchand (1969)), one observes that this prediction is borne out. There was one period where forms like *enwiden*, *ensweeten* and *embrighten* existed alongside of forms like *enrich*, *ennoble*, and *enclear*. However, of all these prefixed and suffixed forms, *embolden* is the only existing word nowadays. The productivity of the different types of deadjectival Vs will be discussed in section 4.3.

Regarding the disparate behaviour of English A-based Vs with respect to the transitive-unaccusative alternation, we have seen that the first group (e.g. *enrich*, *enlarge*) does not allow the V to have an unaccusative variant, an observation unnoticed until now as far as I know (cf. 48-50b), while the third group (e.g. *sweeten*, *redden*) does (cf. 56-57b). As for the second group, there is no uniform behaviour (53-54b). Vs like *clean* cannot have the two variants, whereas Vs like *thin* can. HK's (1993, 1998, 2002) syntactic theory of argument structure cannot explain this. According to their theory, all deadjectival Vs, i.e. Vs incorporating As should participate in the transitive-unaccusative alternation. By looking at the numbers of Vs in each group that allow the alternation, one sees that their claim is generally true. Deadjectival Vs admitting both an unaccusative and transitive variants exceed those Vs that do not. However, there is still a group of Vs which need some explanation. As observed by Kiparsky (1997), the real generalization behind the transitivity alternations does not have to do with the category (A) which gets incorporated into the V, but with the notion of agentivity. In Kiparsky's words, 'the availability of the causative alternation depends on the nature of the Agent's

involvement in the event' (p. 495). In other words, only those Vs denoting processes which can be initiated and continued without an agent will allow the causative alternation. This claim is confirmed by the data of this section. Vs like *ennoble* and *clean* require the presence of an agent, and accordingly do not permit an unaccusative variant, where the agent would be suppressed. By contrast, Vs like *thin* and *sweeten* do not need the participation of an agent for the process to initiate and continue, and admit both the transitive and unaccusative variants. The conclusion is that my data favour a semantic account, rather than a syntactic one. It is not the syntactic category of the element which gets incorporated (A) but the semantics of the V that determines whether a V will show the transitivity alternations.

To summarize this section, we have seen that the analysis proposed for Catalan deadjectival Vs can be maintained for the three types (the type *embolden* does not constitute a fourth group due to its single membership) of deadjectival Vs found in English. Like in Catalan, the RHR can be observed: the prefix *en*- is responsible neither for the conversion of As to Vs nor for the [+c] role present in A-based Vs in their transitive variant. I have shown that the element responsible for the conversion and addition of the [+c] role is a suffix, which can be empty (zero-suffix) or full (*-en* suffix), depending on some phonological constraints. Now I would like to conclude this section by noting the productivity of each group briefly. The first one (type *enrich*) is non-productive, and closed (only seven forms). The zero-suffixed group which has no prefix (type *sweeten*) is subject to some phonological constraints. I will take up the issue of productivity in the Discussion section.

4.2.3 N-to-V prefixations

At first sight, the picture for Catalan denominal prefixation is duplicated in the English data. Three different semantic patterns can also be differentiated: location Vs with the paraphrase 'to put something/somebody in/onto/towards N' (58), locatum Vs which can be paraphrased as 'to put N around/in/into something/somebody' (59), and Vs of creation with the semantic paraphrase 'to make N' (60).²⁶

²⁶ Appendix A, section E shows the classification just mentioned. Although it contains another semantic pattern (i.e. 'to give N'), that has been subsumed within the locatum Vs.

(58) a. $case_N R$ b. $encase_V [+c] [-c-m]$

b. They encased the dangerous substance in a container.

 $\begin{array}{ll} \text{(59)} & a. \ rage_N \ R \\ & b. \ enrage_V \ [+c] \ [-c-m] \end{array} \end{array}$

b. He enraged the government by renouncing the agreement.

(60) a. slave_N R b. enslave_V [+c] [-c-m]

b. The captain enslaved the poor boy and he had to do what he was told.

As said before (for Catalan), Vs of creation like *enslave* ('to make N') involve the same semantics as deadjectival Vs ('to make A'), suggesting that they should both have the same Θ -percolations. Recall that in deadjectival Vs the [+c] role came from the \emptyset -suffix and the [-c-m] role from the A. Although the same could be maintained for the [+c] role in Vs of creation, the [-c-m] role resulted from the reinterpretation of the N's R-role (see section 4.1.3 for the explanation and footnote 21). Accordingly, (61) is the resulting structure for the V *enslave* (cf. 37). Note that the inflectional morpheme present in Catalan is now missing.

The same Θ -percolations cannot explain Vs like *encase* and *enrage*, given that they do not mean 'to make a case/rage'. For Vs like these I did, and I still do, propose that the [-c-m] role does not come from the reinterpreted R-role, but from the prefix, whose features have been obscured until now due to the Rel. RHR. In other words, the prefix in these locative Vs is the rightmost head marked with the features [-c-m], because the \emptyset -suffix has a [+c] role and the base N has an R-role, which is not reinterpreted. The

[-c-m] features of the prefix will get index 2 once it is at the verbal node together with the [+c] role from the Ø-suffix, which will receive index 1. The resulting picture is illustrated in (62).

(62) V {[+c]1, [-c-m]2}
/ \
en [-c-m] V [+c]
/ \
N [R] V [+c]
| |
case/rage
$$\emptyset$$

A single representation for location and locatum Vs may not look sufficient. How is one going to distinguish the two if both have the same representation? I suggest that the distinction between the two may not be linguistically relevant, given the existence of some Vs which can be interpreted either as location or locatum Vs. For instance, consider *entangle* which can mean 'something (e.g. a whale) is caught in N' or 'to put N over somebody (e.g. people)'. The same phenomenon was found in Catalan. In the following section I will propose that the answer to the previous question has to do with semantics and pragmatics. If that view is correct, we are left with two semantic patterns with different Θ -percolations: one involving the creation of the N with the [-c-m] features coming from the reinterpreted R-role (cf. 61) and another one involving a change of location with the [-c-m] features coming from the prefix (cf. 62).

Now it remains to be seen whether the same analysis can explain other types of denominal Vs in English. Like in deadjectival Vs, locative en+N Vs also have a stage where the N has become a V but the prefix is still not present. Among the intermediate forms, some have a meaning related to the prefixed version and others have the same meaning, always according to the definitions given in the English dictionaries (CIDE, CCED, and COD). After checking these definitions with the speakers' judgements, the result is that of the intermediate forms whose meaning is related to the prefixed V, we get different patterns. First, one of the two forms may be non-existing, which can either be the unprefixed V (e.g. *crust, compass*) or the prefixed V (e.g. *entrain, engirdle*), the latter questioning my analysis, since there is no possible source for the [-c-m] features (i.e. the prefix is absent). Second, the intermediate form does not have a locative

meaning (e.g. *list, trench*), which according to my analysis follows from the absence of the prefix, the source of the locative features. Third, there are some intermediate forms which have a locative reading (e.g. *snare, tangle*), clearly going against my proposal.

Of all locative intermediate forms which are listed in the dictionaries as having the same meaning as their prefixed version, only three are really synonyms²⁷ for English speakers: *encode (code), encircle (circle)*, and *entitle (title)*. They all go against my analysis: there is no source for the locative features if the prefix is absent. According to English speakers, all the remaining intermediate forms which supposedly have the same meaning as their prefixed version are non-existing (e.g. *throne, shrine*), with the exception of four, namely *encipher, engraft, enshroud*, and *enwrap*. While the former do not pose any problem, the second ones do. Again, there is no source for the locative reading in *cipher, graft, shroud*, and *wrap*, the prefix being absent.

In short, all the unprefixed intermediate forms with a locative reading require some explanation. Although this set of Vs is small and could be disregarded (cf. in Appendix A, the section of denominal Vs lists all en+N Vs with a locative reading as well as all possible intermediate forms also having a locative interpretation), one still wants some explanation for their behaviour, and for another more productive type of unprefixed denominal Vs with a locative reading. Consider the following location (63) and locatum (64) Vs (see footnote 19 which gives references for lists of other location and locatum Vs).

- (63) a. box_N , $jail_N$, $kennel_N$ R b. box_V , $jail_V$, $kennel_V$ [+c] [-c-m]
- (64) a. $crown_N$, $curtain_N$, $chain_N R$ b. $crown_V$, $curtain_V$, $chain_V [+c] [-c-m]$

Given that the prefix *en*- is the source of the [-c-m] features (the theme role) in 'change of location' Vs, there is no visible source for such features in (63-64). This problem would be resolved if a null prefix performed the function of the visible prefix. Is there any evidence to postulate a zero-prefix for English? Is there an abstract element responsible for the [-c-m] features present in these Vs? Padrosa (2005) suggests that

²⁷ It seems that speakers do not like synonyms and in front of pairs of Vs whose meanings would in principle be identical, either one of the two forms takes precedence over the other leaving the latter unacceptable (e.g. *enthrone* wins over *throne*) or the two forms specialise in meaning (e.g. *list* vs. *enlist*). This would explain why according to speakers' judgments there are only three synonyms, which I believe will contrast in meaning or one of the two forms will become extinct in the future.

some historical reanalysis might have taken place, i.e. the prefix might have been attached to these Vs originally, and then for some reason, it was dropped, although the meaning remained the same. I pursue this idea here, and I suggest that the prefix originally attached to the V had the [-c-m] features still present in the prefix of Vs like *encase* and *enrage*. Historical data (cf. Marchand (1969) confirm my suggestion. All the forms in (63-64) were initially prefixed forms: *embox, enjail, enkennel, encrown, encurtain,* and *enchain*.

Now it needs to be explained how all the forms which lost the prefix still have a [-c-m] role. I propose that the loss of the prefix has been a gradual process in which speakers have disassociated the [-c-m] features from the prefix and have relinked them to the base N (cf. autosegmental phonology, see e.g. Kenstowicz (1994), Roca et al. (2000)). The prefix with no features of its own had no function in the word and was probably lost gradually. (Maybe phonological weakening helped to its loss). If that view is correct, one needs to explain how speakers can differentiate Vs of creation from locative Vs, because the [-c-m] features in both cases have the same source (the N), a question which will be discussed in the following section. Although the most productive type of denominal Vs in English seems to complicate the picture as for the source of the [-c-m] features, at the same time it provides some evidence to say that the Ø-suffix, apart from providing the [+c] role in Vs like (63-64), is the element responsible for the conversion of Ns to Vs. One could also entertain the idea that there is simply a change of category ([]_N \rightarrow []_V), but that option would leave the presence of the [+c] role unaccounted for.

The conclusion from this section is that the analysis proposed for Catalan en+N Vs can be maintained, but only for a few denominal Vs in English, namely Vs of creation (e.g. *enslave*) and those prefixed Vs with a locative reading (e.g. *encase, enrage*). In both cases the [+c] role originates in the Ø-suffix, also responsible for the conversion (N \rightarrow V). The [-c-m] features come from the reinterpreted R-role in Vs of creation and from the prefix in locative denominal Vs. However, another type of denominal Vs was found, viz. those that have no prefix but have a locative reading. For those, I proposed that the [-c-m] features are contained in the base N. Crucially, in all cases, the RHR is observed: the element containing a specific feature specification constitutes the rightmost element marked with those features.

4.3 Discussion

This section is mainly devoted to explaining some points left unresolved from the previous sections. First, I will explain how speakers can distinguish locatum Vs from location Vs given that they have the same structure. Second, I will present how English speakers can derive the locative reading in unprefixed Vs like *box*. Third, I will discuss how my analysis can explain the fact that the prefix *en*- seems to potentiate the suffix – *ment* if the prefix is not a head. Finally, HK's (1993, 1998, 2002) proposal will be briefly presented to see whether it can handle the data of my study satisfactorily.

As seen in the two previous sections, the [-c-m] features of the Catalan denominal Vs of creation come from the reinterpreted R-role, whereas the [-c-m] features of locatum and location Vs originate in the prefix. For those Vs which can be interpreted both as a V of creation (e.g. encoixinar, engraellar 'to make N (cushion/grill)' and as a locative V (either a locatum V: encoixinar 'to put N in a place (e.g. room)' (cf. 39) or a location V: engraellar 'to put something (e.g. meat) in N'), I suggested that the reading available will depend on the source of the [-c-m] features. If they come from the reinterpreted R-role, there will be a creation reading, but if they come from the prefix, there will be a locative reading. Finally, I noticed the existence of those Vs which can be interpreted as locatum and location, like envinagrar and entubar 'toEN-tube' with the paraphrases 'to put N into something' and 'to put something into the N'. Although the division between the two readings may not be linguistically relevant, one has to explain the fact that speakers can differentiate the two and assign the appropriate meaning (either locatum or location) to any denominal Vs given a specific context. This requires some explanation and so does the same phenomenon in English (cf. entangle).

According to Clark & Clark (1979), the characterization of denominal Vs into locatum and location depends on their predominant features. If the source N denotes things which are conventionally placed with respect to other objects (i.e. placeables in their terminology), then the locatum reading will be derived. If the source N denotes things which are used as places with respect to which other objects are placed, we will get the location interpretation. Clark & Clark note, though, that some Vs may have more than one predominant feature, thus giving rise to Vs like *envinagrar* and *entangle*.

Kiparsky (1997) reaches a similar conclusion by a conceptually-knowledge based principle making use of the canonical use (instead of Clark & Clark's predominant features) of the N on which the V is built. He derives the following fixed meanings for the two locative relations (p. 482):

(65) a. Locatum verbs: putting x in y is a canonical use of x.b. Location verbs: putting x in y is a canonical use of y.

Kiparsky explains that some Vs will be able to be interpreted either way if the object the source N denotes can have the two canonical uses, namely 'to be put on something' and 'to have something put on it'.

Although Clark & Clark and Kiparksy acknowledge the existence of Vs with two possible relations of location and explain them by the N having more than one predominant feature or canonical use respectively, nothing is said about how the speaker identifies which of the two locative relations is meant by a denominal V given a context. I assume speakers will resolve these ambiguities by looking at the context in which the V is uttered and by selecting the interpretation most relevant accordingly. This view is in line with Relevance Theory (RT) (cf. e.g. Sperber & Wilson (1986/1995), Wilson (1994), Wilson & Sperber (2004)), which is based on some simple assumptions. Every utterance has several linguistically possible interpretations, not all of which occur to the hearer simultaneously. Hearers are assumed to be equipped with a criterion for evaluating (accepting or rejecting) interpretations, as they occur to them. This criterion excludes all interpretations, except for one at most. So, the hearer can assume that the first acceptable interpretation they find is the intended one. In other words, the hearer considers interpretations in order of accessibility and stops when they find one that is relevant enough to satisfy their expectation of relevance, with the result that the first satisfactory interpretation is the only acceptable one. The criterion is ultimately based on the cognitive principle of relevance: human cognition is relevanceoriented (Wilson 1994: 17).

Following a relevance-theoretic account, when listeners are presented with the utterance 'to shelve the books' for example (*shelve* being a V that admits the two readings), the first interpretation they will consider will be that of 'putting books on the shelves' and not the other way round. Similarly, if they are given the utterance 'to shelve the closet', the first satisfactory interpretation they will find will be that of 'putting shelves in the closet', and not 'putting the closet on shelves'. By simply looking at the direct object of the V, hearers can pick out the interpretation they think

the speaker intended on that occasion, the most relevant interpretation for them. In 'to shelve the books/closet', the interpretations 'putting shelves on the books' and 'putting the closet on shelves' are not relevant enough to satisfy the hearer's expectation of relevance (and will be rejected). In short, the hearer can readily identify which locative relation is intended (locatum or location) within RT.

Another question which remained unresolved from the previous section was how English speakers can derive the locative reading in prefixless Vs like box, crown, circle and *snare* (the two last Vs being intermediate forms in the derivations of their prefixed version), if the prefix en- is the element responsible for such reading ([-c-m] features). I suggested that the picture for English denominal Vs was parallel to that of Catalan denominal Vs some time ago, but not now. In other words, there was one time when the [-c-m] features of Vs of creation also came from the N's reinterpreted R-role (e.g. enslave) and the [-c-m] features of locative Vs came from the prefix (e.g. encase, enrage). Although the first claim can still hold, the second one cannot, given the existence of many unprefixed Vs with a locative reading. To explain this, I proposed that the [-c-m] role once associated with the prefix was relinked to the base N, which resulted in the ultimate disappearance of the prefix. That proposal seems to be confirmed by the fact that locatum/location Vs that once had a prefix now do not have it any more. In addition, if we look at numbers, the locative Vs without prefix largely exceed those with prefix (see below though). As will be seen, the formation of unprefixed locative denominal Vs in English is the most common method nowadays, somehow leaving the prefixed forms as frozen forms from the past.

What I am implying here is a contrast between Catalan and English with respect to the productivity of *en*-prefixation. While it seems that this morphological process was and is still active in Catalan, it has become unproductive in English. However, one cannot identify productivity in morphology with numbers (cf. Aronoff (1976)), because the method of counting up the number of words does not take into account the morphological restrictions on the possible bases for a derivational morpheme. A further problem with this mechanical method is that although dictionaries (try to) list the new incorporations into the language, it is very difficult for them to include the new words speakers make up continually. Considering the possible bases the morpheme *en*- can attach to separately (V/A/N-to-V prefixation) solved the first problem, while the second one was resolved by designing an experiment in which speakers' judgments were considered. Ten speakers of Catalan and English were presented with sentences that contained both a prefixed and unprefixed version of a hypothetical V (15 pairs in total) and they had to choose the form most likely to be a possible word of the language.

Regarding English, there is a general tendency to choose the unprefixed version for denominal locative Vs (85.2%) and Vs of creation (78.8%) (see the graphs in Appendix C). That confirms the pattern suggested earlier: the prefix is not felt necessary to express the locative reading of the word. As already noted, existing prefixed forms (e.g. *encage, enrage*) are not recent words and could be seen as forms remaining from a period in which the *en*-prefixation process was productive. The same results extend to deadjectival Vs: speakers also prefer the V without prefix (77.3%). This explains why the *clean*-type group is the largest one, whereas the types *enrich* and *thicken* are more reduced in number. The fomer (type *enrich*) contains the forms that remain from a process no longer productive (few Vs are left), while the latter (type *thicken*) is restricted by some phonological constraints (cf. section 4.2.2). These limitations favour the creation of new deadjectival Vs of the type *thin/clean*, which is subject to no restrictions.²⁸

Unlike English, Catalan locative Vs need the prefix to be well-formed (73.3%), although to different degrees for location and locatum Vs. The need for the prefix is felt stronger for the former (85%) than for the latter (61.6%). The speaker seems to be fully conscious of the semantic value of the prefix. Although more research needs to be done to explain the contrast between location and locatum Vs in Catalan $(23.4\%)^{29}$ or the not so high percentage of unprefixed deadjectival Vs in English, my experiment has shown two opposite directions with respect to the productivity of *en*-prefixation in Catalan and English.

To recap, *en*-prefixation, once a productive morphological process both in English and Catalan, is still active in the latter, whereas it is no longer productive in English. If *en*- was (and is still for Catalan) the element responsible for the [-c-m] features of locative denominal Vs, one needs to explain how English speakers derive the locative reading without the prefix. I suggested that the role of the prefix was first taken over by the base N, with the consequence that the prefix was gradually lost. The prefix

 $^{^{28}}$ Booij & Kemenade (2003) find that a very common pattern for preverbs (defined by them as morphemes that appear in front of a V) is that of a grammaticalization path which ends in its ultimate disappearance. Whereas this generalization seems to be true for English, it does not hold for Catalan, at least nowadays.

²⁹ The slight contrast between location and locatum Vs observed in Catalan is stronger in French. Di Sciullo (1997) notes that denominal location Vs require a prefix whereas locatum Vs do not.

had no function to perform, i.e. the semantic content it had before (it contained the [-c-m] role) was affected and so was its productivity (cf. Marle (1988)). As a result, native speakers refrained themselves from coining new members with the prefix, a tendency which led to its disappearance.

If it is true that the [-c-m] features of English locative denominal Vs and Vs of creation both come from the same source, namely the base N, one also has to explain how English speakers differentiate the two. Again, I think a relevance-theoretic account can answer this question. The hearer will interpret a denominal V as locative if that is the first interpretation that satisfies their expectation of relevance. Similarly, a V will be interpreted as V of creation if that is the first acceptable interpretation for the listener. To illustrate the point, consider *to box the apples*. The first satisfactory interpretation will not be that of a V of creation, i.e. 'to make a N (box)', but that of a locative V (a location V in this case), 'to put the apples in the N (box)'. In short, one can readily pick out the interpretation intended by the speaker within RT.

A different question which also needs to be addressed in the Discussion is how my analysis can explain the fact that the the suffix *-ment* seems to be potentiated by the prefix en- (if the prefix is not a head wih respect to the category-changing ability, as I have defended). It is generally agreed that affixes may be sensitive to other affixes in their base (cf. Fabb (1988), Hoeksema (1988)). In line with this generalization some authors (cf. Aronoff (1976), Williams (1981a), Scalise (1984)) have proposed that the suffix *-ment* attaches most productively to Vs of the form en+X (e.g. *encroachment*), claiming that the prefix *en*- potentiates the suffix *-ment* because the prefix is the head. One could claim that the same phenomenon exists in Catalan, given the large quantity of words with the form en+X+ment (e.g. *encoratjament* 'the act of encouraging'). The GDLC lists more than 250 words with this form. However, the prefix en- is not the only element able to potentiate the suffix -ment. In English the prefix be- has the same ability (e.g. *bedazzlement*). The CCED and COD include more than 50 *en+X+ment* forms, and more than 30 be+X+ment forms. Although the number of the latter is lower, it is still significant. In Catalan it seems that several prefixes like *a*- and *des*- can also potentiate the suffix -ment (e.g. allargament 'the act of lengthening', descargolament 'the act of unscrewing'). In this case, the GDLC lists more than 200 words for a+X+ment forms and more than 150 for des+X+ment forms, both numbers being substantial. All these numbers (always relatively speaking; recall the discussion about 'numbers' above) seem to indicate that the suffix *-ment* is not favoured by a particular prefix but simply by the

presence of a prefix (see Scalise (1988b) for the same conclusion for Italian). To explain this fact I can only suggest that *-ment* has a particular feature [F] which needs to be satisfied and that the prefix has the relevant feature [F]. However, I am aware that this suggestion is only descriptively adequate since it explains why *-ment* seems to be potentiated by *en*-, but it does not say anything about the nature of the feature.

After discussing some points left unresolved from the previous sections, and before ending the present one, now I would like to briefly present another proposal, i.e. HK's (1993, 1998, 2002), to see whether it can handle the data satisfactorily. HK adopt a syntactic approach to the representation of lexical argument structure. Vs are derived by conflation³⁰ of a N or A into an empty phonological V base, thus giving it phonological content. The structural types of lexical argument structure relevant here are those associated with the morphosyntactic category A and N, given that now I will focus on how HK's theory can derive deadjectival and denominal Vs in English and Catalan. Recall that in V-to-V prefixation no systematic pattern was found, which explains its omission in the following discussion. Although HK's theory may seem to cope with the data adequately at first sight, there are some questions which cannot be answered within their syntactic approach.

As already said, conflation explains the formation of deadjectival Vs. The phonological matrix of the A replaces that of the V, which can be empty like in *clean* (66a), or partially empty as in *enrich* which has a prefix or *thicken* which has a suffix. For the latter cases, HK assume that the host V is bipartite, consisting of an empty phonological matrix together with an overt matrix corresponding to that of the prefix or suffix (66b/c) (HK 1998: 85).

 $^{^{30}}$ Note that the discussion that follows is based on HK (1993, 1998). The same results, though, would be obtained by using HK's more recent version. Let me just point out one remarkable difference between their earlier and later accounts, namely their use of the term conflation. In the more recent version, it does not refer to a movement operation. In HK's terms, 'it is merely the binding relation that holds between the semantic features of a V (phonologically overt now) and features of the nominal head of its complement (HK 2002: 103)

HK's treatment of deadjectival Vs can then explain the three types found in English. Regarding Catalan deadjectival Vs, they can also be accounted for by (66). The structure in (66a) would explain Vs like *agrir* ($< agre_A$ 'sour'), and the structure in (66b) could derive Vs like *endolcir*(-*se*) ($< dolc_A$ 'sweet'). Although the English and Catalan deadjectival Vs can be explained on the whole, Vs like *embolden* cannot be derived, because they involve simultaneous prefixation and suffixation, implying ternary branching. Although this weakness could be solved by appealing to the nonproductivity of the type *embolden*, HK still have to explain it. The type *embolden* was once an active process.

Denominal locative Vs present a similar scenario. The V will be bipartite in the case of Vs like *encase* and *enrage*, and it will not be so in the case of *box* and *butter*. The same problem presented for deadjectival Vs is also present now. Again, HK need some account for the existence of Vs like *enlighten*, whose formation was once productive. In addition, HK suggest that the distinction between location and locatum Vs is not one of structure (which is what one would expect from their account) but derives from the semantic properties of the head. Apparently, the P (the prefix in my terminology) distinguishes terminal and central coincidence. If that is true, HK's claim that the properties of word meaning follow from syntactic constraints can no longer be observed. In addition, I assume HK would use some kind of semantics to derive denominal Vs expressing creation (e.g. *enslave, enraiar*) given that P can only express terminal and central coincidence and there is no other element available in their analysis to account for the correct reading.

Also, HK would probably resort to a semantic account to explain the fact that some Vs can be interpreted as a locative V and as a V of creation. For instance, the V *encoixinar* could be interpreted as 'putting cushions in a place' and as 'making a cushion'. In the former interpretation the P would be the element responsible for such reading, but in the latter there would be no source for such reading, unless they resort to some semantics.

An additional problem for their analysis is the origin of Θ -roles. According to my approach, in the case of denominal Vs the [-c-m] features originate in the prefix in locative Vs, but in the N's reinterpreted R-role in Vs of creation. (Recall that this picture derives some English denominal Vs (the prefixed ones) and most Catalan denominal Vs). If my analysis is correct, then HK's approach cannot be on the right track. They cannot explain the non-uniform source of Θ -roles given their adherence to the UTAH³¹ (cf. Baker (1988)), according to which there is direct mapping between thematic roles and syntactic structure. More specifically, each thematic role must be linked to a single position in D-structure. A related problem that is a consequence of HK's configurational model of thematic relations is that the lower thematic VP only allows two theta-roles (generally the [-c-m] (theme) role and [-m] (locational) role, with the result that other roles, such as [+c-m] (instrument), cannot be represented although they cannot be considered adjuncts. In addition, the role assigned to the subject cannot be represented either.

In short, I think enough problems have been found in HK's account to pursue their approach here (see e.g. Di Sciullo (1997), Kiparsky (1997), Stiebels (1998) for other criticisms). The conclusion is that a syntactic account has not proved sufficient to account for the data presented in the previous sections. Next a brief summary and the main conclusions of my study will be presented.

³¹ UTAH stands for Uniformity of Theta Assignment Hypothesis and is defined by Baker (1988) in the following terms: 'Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.

5 CONCLUSIONS

In this thesis, I considered a potential class of counterexamples to the RHR, namely the class of prefixes in English and Catalan. More specifically, I looked at how the prefix *en*- present in the two languages apparently converts As and Ns to Vs in a productive way. However, on the basis of A/N-to-V prefixations, I argued that complex words derived by *en*-prefixation are not really exceptions to the (Relativized) RHR.

I showed that a Ø-suffix is responsible for the conversion of Ns and As to Vs, a process which takes place before the prefix is attached, thus not incurring any violation to the RHR (see e.g. Neeleman & Schipper (1992), Gràcia (1995), Stiebels (1997) for similar views). The crucial argument for the postulation of the Ø-suffix comes from the Θ -grid of the Vs. The Ø-suffix is responsible for the [+c] role, whose presence would be unaccounted for without the postulation of the conversion-suffix. The Ø-suffix also accounts for the observation that *en*-X words are always verbal.

As for the role of the prefix *en*-, we have seen that it is responsible for the [-c-m] role in the case of *en*+N Vs with a locative meaning. However, I have shown that the formation of locative *en*+N Vs is no longer productive in English. Although the presence of *en*- was once felt compulsory for the formation of locative denominal Vs both in English and Catalan, which according to my analysis follows from the fact that the prefix gives the locative reading to the V, there is now a contrast between speakers of the two languages. Catalan speakers still require the presence of the prefix to express both locatum/location N-based Vs suggesting that *en*-prefixation is still an active process, although the need for the prefix varies for each locative relation. In contrast, English speakers prefer denominal locative V without prefix, which I explained by disassociation of the [-c-m] role from the prefix and re-associating it to the base N.

Although the Rel. RHR can still be maintained for English unprefixed Vs, because the N constitutes the rightmost element specified for those features, the fact that some Vs can have a locative interpretation and a creation reading becomes difficult to explain. Both interpretations depend on the [-c-m] role now present in the same node, the base N. To solve this problem, I make use of a relevance-theoretic account, according to which hearers evaluate interpretations in order of accessibility (e.g. context, disambiguation, etc.) and stop considering them when their expectation of relevance is satisfied. The result is that the first adequate interpretation satisfying the hearer's expectation of relevance is the only possible one given a specific context.

When a listener is presented with a V which can be interpreted with a locative and creation reading, they will readily pick out the interpretation intended by the speaker, the only satisfactory interpretation on a particular occasion. I also showed that RT can explain the distinction between the location and locatum interpretations of some Vs.

If the use of semantics and pragmatics is necessary to explain some basic contrasts which otherwise would remain a mystery, a syntactic theory of argument structure like that of HK's (1993, 1998, 2002) is not sufficient. In fact, HK themselves recognize the need for some semantics in their account. For instance, they admit that the P (recall that it refers to the prefix in my terms) distinguishes terminal and central coincidence, clearly two semantic notions.

Another reason to reject HK's approach is their direct mapping between configurational positions and specific roles. As I have shown, semantics cannot be read off the structure. Recall that the [-c-m] features in Catalan denominal Vs can come from the prefix (when there is a locative reading) or the base N (when a creation reading is implied). This limitation shows that the framework adopted here, Reinhart's (2000, 2001), is superior to that of HK's at least in the sense just discussed.

Although the present thesis has adopted Reinhart's theta-system, her approach to reflexives has been rejected. On the basis of Catalan deadjectival and denominal Vs (e.g. *endolcir(-se)*, *encoratjar(-se)*), the approach of reflexives as unaccusatives (cf. Grimshaw (1990), Sportiche (1998)) has proved to deal with the data more satisfactorily than the view which favours reflexives as unergative entries (cf. Reinhart & Siloni (1999)). In most of the cases, the external argument is clearly reduced (i.e. the [+c] role undergoes reduction in Vs like *endolcir(-se)*). In other cases, it it hard to tell which argument has undergone reduction (e.g. *encaputxar(-se)*). Crucially, there are no cases of clear internal reduction. Hence, I proposed that it is the external argument that is always reduced.

Another question to which I intended to provide an answer in my study was whether a Θ -role percolation approach to the inheritance of thematic information (cf. Booij (1988), Levin & Rappaport (1988), Gràcia (1992, 1995) and Neeleman & Schipper (1992)) could be confirmed. I think the data have amply corroborated this question as well as Mateu's (2001a, 2002) view of complex denominal Vs in German, according to which the preverb (the prefix in my case) is part of the resulting thematic structure, thus also contributing to the Θ -grid of the predicate. As for the remark made by several authors (see e.g. Williams (1981a)) that the prefix *en*- potentiates the affix *-ment* in English and Catalan because the former is a head, I argued that it is not he presence of *en*-, but simply the presence of any prefix which triggers the suffix *-ment*. For that fact I suggested that the suffix *-ment* has a certain feature [F] which needs to be satisfied, and that the prefix *en*- has the relevant feature [F] (cf. Fabb (1988)). Obviously, this option needs to be further investigated to find the real feature behind the potentiation of the suffix *-ment*.

Other questions also need more study. One has to do with the existence of apparent synonyms with a locative reading in the English data (e.g. (*en*)*circle*). Do they show that the [-c-m] features of the prefix are still available and that the process of relinking these features to the base N has not died out completely? A further question which also needs to be addressed is whether the process of relinking the [-c-m] role to the base N also takes place in Catalan, given the not so high percentage (61.6%) of speakers requiring the presence of the prefix in locatum Vs in my experiment. To answer these questions a larger experiment (considering more speakers and pairs of prefixed and unprefixed pairs of hypotetical Vs) should be carried out. For the moment I leave these questions and the possibility of carrying a larger experiment for future research.

Appendix A³²

This appendix classifies the *en*-prefixed Vs in English into four different groups. The first three ones contain the prefixed Vs according to the base on which they are built: (a) a V, (b) an A and (c) a N. The base from which the V is derived is given within parentheses after the prefixed V. The fourth group (d) contains a variety of Vs which do not fit into the previous ones (i.e. lexicalized forms). The last section (e) presents a classification of the deadjectival (b) and denominal (c) Vs into semantic paraphrases. The Vs in (a) have not been classified due to the lack of semantic regularity.

On the whole, all deadjectival Vs below follow the semantic pattern 'to make (something/somebody) A'. Regarding denominal Vs, they have been divided into four groups: location Vs, locatum Vs, Vs which can have the two interpretations, and Vs of creation. Each group includes subgroups where intermediate Vs have been listed. According to my analysis, in the formation of prefixed deadjectival and denominal Vs there is an intermediate stage in which the A and N have become a V, but the prefix is not present as yet. These intermediate forms have been grouped depending on whether they have the same meaning as that of the prefixed version or a related one. Note that in the group of locatum Vs, the locatum can either be a physical object (e.g. *venom* in *envenom*) or an abstract one (e.g. *danger* in *endanger*).

adj.	adjective
C	century
COD	Concise Oxford Dictionary
fem.	feminine
Fr.	French
Gmc	Germanic
Gk	Greek
It	Italian
L.	Latin
MD	Middle Dutch (c.1100-1500)
ME	Middle English (c.1150-c.1470)
MFr.	Middle French
MHG	Middle High German (c.1200-1500)
MWO	Merriam-Webster Online
n.	noun
OE	Old English (up to about 1150)
OFr.	Old French (up to c.1400)
OHG	Old High German (up to c.1200)
ON	Old Norse
V.	verb

Abbreviations used in this appendix:

³² For space reasons, the English survey is provided fully, but from the Catalan survey only the final classification of Vs is given.

a) V-to-enV

Enact (act) 1 When a government or authority **enacts** a proposal, they make it into a law; a technical use. *The authorities have failed so far to enact a law allowing unrestricted emigration.* 2 If people **enact** a story or play, they perform it by acting. *She often enacted the stories told to her by her father.*

Enactment

ORIGIN ME: from EN^{-1} , $IN^{-2} + act$.

Act (v.) 1 When you act, you do something for a particular purpose. *The police acted to stop vandalism.* 3 If someone acts in a particular way, they behave in that way. *The gang acted suspiciously. The police acted to stop vandalism.* 8 If you act, or act a part in a play or film, you have a part in it. *Her husband was acting in Roberto's films.*

Act (n.) 9 An act is a single thing that someone does; a formal use. Language interpretation is the whole point of the act of reading. 11 An Act is a law passed by the government. Until 1857 a woman could not sue for divorce except by an Act of Parliament. 12 An act in a play, opera, or ballet is one of the main parts into which it is divided. Act II contained one of the funniest scenes I have ever witnessed.

ORIGIN ME: from L. *actus* 'event, thing done', from *act-, agere* 'do, act' reinforced by Fr. *acte*.

Enchant (chant) 1 Delight; charm. *Dena was enchanted by the house.* 2 In fairy stories and legends, to **enchant** someone or something means to put a magic spell on them. *Merlin enchanted the cave so that nobody should ever find them.*

Derivative: enchantment.

ORIGIN ME: from Fr. enchanter, from L. incantare, from in- 'in' + cantare 'sing'.

Chant (n.) 1 A repeated rhythmic phrase, typically a religious song or prayer. 2 A group of words repeated over and over again.

Chant (v.) 1 Sing a religious song or prayer. *They chanted mantras*. 2 Repeat the same words. *The demonstrators chanted the slogans*.

ORIGIN ME: from OFr. chanter 'sing' from L. cantare, frequentative of canere 'sing'.

Enclose (close) 1 If a place or object **is enclosed** by something, the place or object is inside that thing or completely surrounded by it. *The samples must be enclosed in two watertight containers. The surrounding land was enclosed by an eight foot wire fence.* **2** If you **enclose** something with a letter, you put it in the same envelope as the letter. *I have enclosed a cheque for £10.*

ORIGIN ME: from OFr. enclos, past participle of enclore.

Close (v.) 1 When you **close** something such as a door or lid or when it **closes**, it moves so that a hole, gap, or opening is covered. *If you are cold, close the window.* **4** When a shop or other public place **closes** or **is closed**, work or activity stops there for a short period, for example during the night or at lunchtime. *Shops close only on Christmas Day and New Year's Day.* **6** To **close** a road or border means to block it in order to prevent people from using it. *They were cut off from the West in 1948 when their government closed that border crossing.* **7** To **close** a conversation, event, or matter means to bring it to an end or to complete it. *Judge Isabel Oliva said last night: 'I have closed the case'.*

ORIGIN ME: from OFr. clos-, stem of clore, from L. claudere 'to shut'.

Close (adj.) 1 Only a short distance away or apart in space or time. *The whales were too close; this posed a problem for my photography.* 2 Denoting someone who is part of a

person's immediate family, typically a parent or sibling. The death of a close relative is always painful.

ORIGIN ME: from OFr. *clos*, from L. *clausum* 'enclosure' and *clausus* 'closed' (past participle of *claudere*).

Engrave (grave) If you **engrave** something with a design or inscription, or if you engrave a design on it, you cut the design into its surface. Cut or carve (a text or design) on a hard surface. Your wedding ring can be engraved with a personal inscription at no extra cost. I'm having 'John Law' engraved on the cap.

ORIGIN C15: from EN-^1 , $\text{IN-}^2 + grave^3$, influenced by obsolete Fr. *engraver*.

Grave³ (v.) 1 *archaic* Engrave (an inscription or image) on a surface. 2 *poetic/literary* Fix indelibly in the mind.

ORIGIN OE grafan 'dig', of Gmc origin; related to $grave^1$ (the place where a dead person is buried).

Enjoin (join) 1 If you **enjoin** someone to do something, you order them to do it. If you **enjoin** an action or attitude, you order people to do it or have it. This is a formal use. *She enjoined me strictly not to tell anyone else. It is true that Islam enjoins tolerance; there's no doubt about that.*

Derivative: enjoinment.

ORIGIN ME: from OFr. *enjoindre*, from L. *injungere*, from *in*-+*jungere* 'join, attach, impose'.

Join (v.) 1 If one person or vehicle joins another, they move or go to the same place. *His wife and children moved to join him in their new home.* 2 If you join an organization, you become a member of it or start wok as an employee of it. *She joined a dance company.* 3 If you join an activity that other people are doing, you take part in it or become involved with it. *Telephone operators joined the strike.* 5 To join two things means to fix or fasten them together. *The opened link is used to join the two ends of the chain.*

Join (n.) 8 A **join** is a place where two things are fastened or fixed together. ORIGIN ME: from OFr. *joindre*, from L. *jungere* 'to join'.

Enliven (liven) To **enliven** events, situations, or people means to make them more lively or cheerful. *Even the most boring meeting was enlivened by Dan's presence.* **Derivative: enlivenment.**

ORIGIN C17 (in the sense 'give life to'): from C16 *enlive, inlive* (in the same sense). Liven (v.) (usually liven something up) Make or become more lively or interesting. *He livens up after midnight, relaxing a little. Talking about her daughters livens her up.* ORIGIN: not given.

Ensue (sue) If something **ensues**, it happens immediately after another event, usually as a result of it. *If the Europeans did not reduce subsidies, a trade war would ensue.*

ORIGIN ME: from OFr. ensivre, from L. insequi, based on sequi 'follow'.

Sue (v.) Institute legal proceedings against (a person or institution), typically for redress.

ORIGIN ME (also in the sense 'follow'): from Anglo-Norman Fr. suer, based on L. sequi 'follow'.

Entreat 1 If you **entreat** someone to do something, you ask them very humbly and seriously to do it; a formal word. *Trevor Steven entreated them to delay their departure*. **2** *archaic* Treat in a specified manner.

ORIGIN ME: from OFr. *entraitier*, from *en-* + *traitier* 'to treat' from L. *tractare* 'to handle'

Treat (v.) 1 If you **treat** someone or something in a particular way, you behave towards them or deal with them in that way. *Artie treated most women with indifference.* **4** If you **treat** someone to something special which they will enjoy, you buy it or arrange it for them. *She was always treating him to ice cream.*

Treat (n.) 5 If you give someone a **treat**, you buy or arrange something special for them which they will enjoy. *Lettie had never yet failed to return from town without some special treat for him.* **6** A surprise gift, event, etc. that gives great pleasure.

ORIGIN ME: from OFr. *traitier*, from L. *tractare* 'handle', frequentative of *trahere* 'draw, pull'.

b) A-to-enV

Enable (able) 1 If someone or something **enables** you to do a particular thing, they give you the opportunity to do it. *The new test should enable doctors to detect the disease early*.

Derivative: enablement

ORIGIN ME: from EN^{-1} , $IN^{-2} + able$.

Able (adj.) 1 Having the power, skill, or means to do something. 2 Having considerable proficiency or intelligence.

ORIGIN ME: from OFr. hable, from L. habilis 'handy', from habere 'to hold'.

Endear (dear) If something **endears** you to someone or if you endear yourself to them, you become popular with them and well liked by them. *Their taste for gambling has endeared them to Las Vegas casino owners. He has endeared himself to the American public.*

Endearment

ORIGIN: not given

Dear (adj.) 1 You use **dear** to describe someone or something that you feel affection for. *Mrs Cavendish is a dear friend of mine*.

Dear (n.) 7 You can call someone a **dear** when you are fond of them and think that they are nice. *He's such a dear*.

ORIGIN OE deore, of Gmc origin.

Enfeeble (feeble) Weaken.

Derivative: enfeeblement.

ORIGIN ME: from OFr. *enfeblir*.

Feeble (adj.) Lacking physical strength.

ORIGIN ME: from OFr. *fieble*, earlier *fleible*, from L. *flebiblis* 'lamentable', from *flere* 'weep'.

Enlarge (large) 1 When you **enlarge** something or when it **enlarges**, it becomes bigger. *The plan to enlarge the Park into a 30,000 all-seater stadium was a success.*

Enlargement

ORIGIN ME: from OFr. enlarger.

Large (adj.) 1 A large thing or person is greater in size than usual or average. Of considerable or relatively great size, extent, or capacity. *A large river*.

ORIGIN ME (in the sense 'lavish, ample'): via OFr. from L. larga, fem. of largus 'copious'.

Ennoble (noble) 1 Something that **ennobles** someone or something makes them more dignified and morally better; a literary use. *These are principles of life that ennoble mankind.* **2** If someone is **ennobled**, they are made a member of the nobility; a formal use.

Derivative: ennoblement.

ORIGIN C15: from Fr. ennoblir.

Noble (adj.) 1 If you say that someone is a **noble** person, you admire and respect their honesty, bravery, and unselfishness. *He was a noble man who was always willing to help in any way he could.* **4 Noble** means belonging to a high social class and having a title. *Rich and noble families.*

ORIGIN ME: from OFr., from L. (g)nobilis 'noted, high-born'.

Enrich (rich) 1 To **enrich** something means to improve its quality, usually by adding something to it. *An extended family enriches life in many ways. It is important to enrich the soil prior to planting.* **2** To **enrich** someone means to increase the amount of money that they have. *He will drain, rather than enrich, the country.*

Derivative: enrichment.

ORIGIN ME: from OFr. enrichir.

Rich (adj.) 1 A **rich** person has a lot of money or valuable possessions. *You're going to be a very rich man.* **3** A **rich** country has a strong economy and produces a lot of wealth; so many people who live there have a high standard of living.

Riches (n.) 2 Riches are valuable possessions or large amounts of money. *An Olympic gold medal can lead to untold riches for an athlete.*

ORIGIN OE rīce, 'powerful, wealthy' of Gmc origin; ultimately from Celtic.

Ensure (sure) To **ensure** something, or to **ensure** that something happens, means to make certain that it happens; a formal word. *Britain's negotiators had ensured that the treaty which resulted was a significant change in direction. The President's Council ensures the supremacy of the National Party.*

ORIGIN ME: from Anglo-Norman Fr. *enseurer*, alteration of OFr. *aseurer*, earlier form of *assurer* (see *assure* (v.) from OFr. *assurer*, based on L. *ad*- 'to' + *securus* 'secure').

Sure (adj) 1 If you are **sure** that something is true, you are certain that it is true. If you are not **sure** about something, you do not know for certain what the true situation is. *The president has never been sure which direction he wanted to go in on this issue.* ORIGIN ME: from OFr. *sur*, from L. *securus* 'free from care'.

c) N-to-enV³³

Encamp (camp) Settle in or establish a camp.

Encampment.

ORIGIN: not given.

Camp (n.) 1 A place with temporary accommodation used by soldiers, refugees, or travelling people. \rightarrow A complex of buildings for holiday accommodation. 4 *Archaeology* A prehistoric enclosed or fortified site, especially an Iron Age hill fort.

Camp (v.) 1 Lodge temporarily, especially in a tent or caravan while on holiday.

ORIGIN C16: from Fr. camp, champ, from It. campo, from L. campus 'level, ground'.

Encapsulate (capsule) 1 Enclose in or as if in a capsule. **2** If something **encapsulates** particular facts or ideas, it represents all the most important aspects of those facts or ideas in a very small space or in a single object or event. *A Wall Street Journal editorial encapsulated the views of many conservatives*.

ORIGIN C19: from EN^{-1} , $IN^{-2} + L$. *capsula* (diminutive of *capsa*)

Capsule (n.) 1 A capsule is a very small tube containing powdered or liquid medicine, which you swallow. You can also take red ginseng in convenient tablet or capsule form.
4 A space capsule is the part of a spacecraft in which people travel, and which often separates from the main rocket. A Russian space capsule is currently orbiting the Earth. ORIGIN ME: via Fr. from L. capsula, diminutive of capsa.

Encase (case) (also **incase**) If a person or an object **is encased** in something, they are completely covered or surrounded by it. Enclose or cover in a case or close-fitting surround. *They encased the substance in a container*.

Derivative: encasement.

ORIGIN: not given.

case 2 (n.) 1 A **case** is a container that is specially designed to hold or protect something. A *black case for his spectacles*.

ORIGIN ME: from OFr. casse, chasse, from L. capsa, related to capere 'to hold'.

Encash (cash) Convert (a cheque, bond, etc.) into money.

Derivative: encashment.

ORIGIN: not given.

Cash (n.) Money in coins or notes.

Cash (v.) Give or obtain notes or coins for (a cheque or money order).

ORIGIN C16 (denoting a box for money): from OFr. *casse* or It *cassa* 'box', from L. *capsa*.

Encipher (cipher) Convert into a coded form. **Derivative: encipherment.**

³³ In the present section there is some disagreement with some of the verbs such as *envisage*, *entrammel*, *enforce*, *enfeoff* or *enmesh*. While some native speakers still perceive the word as two units (the prefix and the base), others regard the word as one unit. The result is that the placement of a verb in (c) or (d) will depend on the individual's perception, i.e. whether the two parts of the word are still active for the speaker or not. Given that more speakers saw the first two words as one unit and the last three as constituted by two elements, the former have been placed in group (d), while the latter have remained in the present section.

ORIGIN: not given.

Cipher (n.) 1 A code \rightarrow A key to a code. 2 *dated* Zero.

Cipher (v.) 1 Encode (a message). 2 archaic Do arithmetic.

ORIGIN ME: from OFr. cifre, based on Arab sifr 'zero, empty, cipher'.

Encircle (circle) To **encircle** something or someone means to surround or enclose them, or to go round them. *A concrete wall encircles the jail.*

Derivative: encirclement

ORIGIN: ME enserclen.

Circle (n.) 1 A shape consisting of a curved line completely surrounding an area. *I* wrote down the number 46 and drew a circle around it.

Circle (v.) 4 If something **circles** an object or place, or circles around it, it forms a circle around it. *This is the ring road that circles the city.* **7** If you **circle** something on a piece of paper, you draw a circle around it. *Circle the correct answers on the coupon below.*

ORIGIN OE: from OFr. cercle, from L. circulus 'small ring', diminutive of circus 'ring'.

Encode (code) If you **encode** a message, you put it into a code or express it in a different form. Convert into a coded form. *They encode data in a form that is not readable by people*.

ORIGIN: not given.

Code (n.) A system of replacing the words in a message with other words or symbols, so that nobody can understand it unless they know the system. *They used elaborate secret codes, as when the names of trees stood for letters.*

Code (v.) Convert into a code.

ORIGIN ME: via OFr. from L. *codex* 'trunk of a tree, document formed originally from wooden tablets'.

Encompass (compass) 1 If something **encompasses** particular things, it includes them. The extra services encompass a wide range of special interests. **2** To **encompass** a place means to completely surround or cover it. The mountainous domain encompasses over a million square miles. The map encompasses nine states.

Derivative: encompassment.

ORIGIN: not given.

Compass (n.) 2 Compasses are a hinged V-shape instrument used for drawing circles. **3** Something that is within the **compass** of something or someone is within their limits or their possible range of action or operation; a formal use. 36 *holes a day would be within the compass of most players*.

Compass (v.) archaic 1 Circle or surround. 2 Contrive to accomplish.

ORIGIN ME: from OFr. *compas* (n.), *compasser* (v.) 'to measure', based on L. *com*-'together' + *passus* 'a step or pace'.

Encourage (courage) 1 If you encourage someone, you give them confidence. *When things aren't going well, he encourages me.* 3 If you encourage someone to do something, you try to persuade them to do it.

Derivative: encouragement.

ORIGIN ME: from Fr. encourager, from en- 'in' + corage 'courage'.

Courage (n.) 1 Courage is the quality shown by someone who decides to do something difficult or dangerous, even though they may be afraid.

ORIGIN ME: from OFr. corage, from L. cor 'heart'.

Encrust (crust) (also incrust) (usually as adj. encrusted) Cover with a hard crust. ORIGIN C17: from Fr. *incruster* or *encroûter*, both from L. *incrustare*, from *in* 'into' + *crusta* 'a crust'.

Crust (n.) 1 The tough outer part of a loaf of bread. 2 A hardened layer, coating, or deposit on something soft.

Crust (v.) (often as adj. **crusted**) Form into or cover with a crust: *crusted port*. ORIGIN ME: from OFr. *crouste*, from L. *crusta* 'rind, shell, crust'.

Encrypt (crypt) Convert into code.

ORIGIN 1950s: from $EN^{-1} + Gk$ kruptos 'hidden'.

Crypt (n.) 1 An underground room or vault beneath a church, used as a chapel or burial place.

ORIGIN ME (in the sense 'cavern'): from L. *crypta*, from Gk *kruptē* 'a vault', from *kruptos* 'hidden'.

Encyst (cyst) Zoology Enclose or become enclosed in a cyst.

Derivative: encystment.

ORIGIN: not given.

Cyst (n.) 1 *Biology* A thin-walled hollow organ or cavity in an animal or plant, containing a liquid secretion. **2** *Medicine* A membranous sac or cavity of abnormal character in the body, containing fluid. **3** A tough protective capsule enclosing the larva of a parasitic worm or the resting stage of an organism.

ORIGIN C18: from late L. cystis, from Gk kustis 'bladder'.

Endanger (danger) To **endanger** something or someone means to put them in a situation where they might be harmed or destroyed completely. *The debate could endanger the proposed Midwest peace talks.*

Derivative: endangerment.

ORIGIN: not given

Danger (n.) 1 Danger is the possibility that someone may be harmed or killed. *My friends endured tremendous danger in order to help me.*

ORIGIN ME (in the sense of 'power to harm'): from OFr. *dangier*, based on L. *dominus* 'lord'.

Enfeoff (fief) (under the feudal system) Give freehold property or land in exchange for a pledge of service.

Derivative: enfeoffment. Also feoffment.

ORIGIN ME: from Anglo-Norman Fr. *enfeoffer*, from OFr. *en-* 'in' + *fief* 'fief'; cf. feoffment.

Fief (n.) 1 *historical* Another term for *fee* (in sense 2). 2 A person's sphere of operation or control.

ORIGIN C17: from Fr. (see *fee*).

Fee (n.) 2 *Law, historical* An estate of land, especially one held on condition of feudal service.

ORIGIN ME: from an Anglo-Norman Fr. variant of OFr. *feu, fief*, from medieval L. *feodum, feudum*, ultimately of Gmc origin; cf. *feu* and *fief*.

Enfold (fold) 1 If something enfolds an object or person, they cover, surround, or are wrapped around that object or person; a literary use. *He was now comfortably enfolded in a woolly dressing-gown.* **2** If you enfold somebody or something, you hold them close in a very gentle, loving way; a literary use. *Track enfolded him in his arms.* ORIGIN: not given.

Fold (v.) 1 If you fold something such as a piece of paper or cloth, you bend it so that one part covers another part, often pressing the edge so that it stays in place. *He folded the paper carefully. Fold the blanket back.* 2 Use (a soft or flexible material) to cover or wrap something in \rightarrow Affectionately clasp in one's arms.

ORIGIN OE: *fealdan*; akin to OHG *faldan* 'to hold'.

Fold (n.) 2 A fold in a piece of paper or cloth is a bend that you made in it when you put one part of it over another part and press the edge. 3 The folds in a piece of cloth are the curved shapes which are formed when it is not hanging or lying flat. OPIGIN OF: OF faled of Germanic origin

ORIGIN OE: OE falod, of Germanic origin.

Enforce (force) 1 If people in authority **enforce** a law or a rule, they make sure that it is obeyed, usually by punishing people who do not obey it. *The government has only enforced this ban.* **2** To **enforce** something means to force or cause it to be done or to happen. *They enforced a low-tech specification.*

Derivative: enforcement.

ORIGIN ME: from OFr. *enforcir, enforcier, en- + force* 'force' based on L. *in-* 'in' + *fortis* 'strong'.

Force (v.) 1 If someone or something forces you to do something, they make you do it even though you do not want to. 4 If you force something into a particular position, you use a lot of strength to make it move there. *They were forcing her head under the icy waters, drowning her.* 5 If someone forces a lock, a door, or a window, they break it violently in order to get into a building without using a key. *That evening police forced the door of the flat and arrested Mr Roberts.*

Force (n.) 6 If someone uses force to do something, or if it is done by force, strong and violent physical action is taken in order to achieve it. *The government decided against using force to break-up the demonstrations*. 7 Force is the power or strength which something has. *The force of the explosion*.

ORIGIN ME: from OFr. *force* (N), *forcer* (V), from vulgar L. *fortia*, based on L. *fortis* 'strong'.

Enfranchise (franchise) 1 To enfranchise someone means to give them the right to vote in elections; a formal word. *The company voted to enfranchise its 120 women members*. 2 *historical* Free (a slave).

Derivative: enfranchisement.

ORIGIN ME: from OFr. *enfranchiss-*, *enfranchir*, from *en-* (expressing a change of state) + *franc*, *franche* 'free'.

Franchise (n.) 3 Franchise is the right to vote in an election, especially one in which people elect a parliament. *The introduction of universal franchise*.

Franchise (v.) Grant a franchise to.

ORIGIN ME (denoting a grant of legal immunity): from OFr., based on *franc, franche* 'free'.

Engirdle (girdle) (also **engird**) *poetic/literary* Encircle. ORIGIN: not given.

Girdle¹ (n.) 1 A belt or cord worn round the waist. 4 A ring made around a tree by removing bark.

Girdle¹ (v.) 1 Encircle with a girdle or belt \rightarrow Surround; encircle 2 Kill (a tree or branch) by cutting through the bark all the way round.

ORIGIN OE: gyrdel, of Gmc origin; related to gird¹ or girth, akin to OE gyrdan 'to gird'.

Gird¹ (v.) *poetic/literary* 1 Encircle or secure with a belt or band.

ORIGIN OE: gyrdan, of Gmc origin; related to girdle¹ and girth.

Girth (n.) 1 The measurement around the middle of something, especially a person's waist. 2 A band attached to a saddle and fastened around a horse's belly.

ORIGIN ME: from ON gjorth, akin to OE gyrdan 'to gird'.

Girth (v.) archaic Surround; encircle.

Engorge (gorge) Swell or cause to swell with blood, water, etc.

Derivative: engorgement.

ORIGIN C15 (in the sense 'gorge oneself'): from OFr. *engorgier* 'feed to excess', from *en*- 'into' + *gorge* 'throat'.

Gorge (n.) 1 A steep, narrow valley or ravine. 3 archaic The throat.

Gorge (v.) Eat a large amount greedily.

ORIGIN ME: from OFr. gorger, from gorge 'throat', based on L. gurges 'whirlpool'.

Engraft (graft) (also **ingraft**) Another term for graft¹.

Derivative: engraftment.

ORIGIN: not given.

Graft¹ (n.) 1 *Horticulture* A scion inserted into a slit of stock, from which it receives sap. **2** *Medicine* A piece of living tissue that is transplanted surgically.

ORIGIN ME: *graff*, from OFr. *grafe*, via L. from Gk *graphion* 'writing implement' (with reference to the tapered tip of the scion), from *graphein* 'to write'.

ORIGIN: English dialect graft, verb, to work perhaps alteration of grave 'to dig'.

Graft¹ (v.) 1 Insert or transplant as a graft. 2 Integrate in or attach to something else, especially inappropriately.

ORIGIN: unknown.

Engulf (gulf) 1 If one thing **engulfs** another, it completely covers or hides it, often in a sudden and unexpected way. (Of a natural force) sweep over so as to completely surround or cover. *The flat is engulfed in flames*.

Derivative: engulfment.

ORIGIN: not given.

Gulf (n.) 1 A **gulf** is a large area of sea which extends a long way into the surrounding land. **2** A deep chasm or abyss.

ORIGIN ME: from OFr. golfe, from It. golfo, based on Gk kolpos 'bosom, gulf'.

Enlighten (lighten, light) To **enlighten** someone means to give them more knowledge and greater understanding about something; a formal use. *A few dedicated doctors have fought for years to enlighten the profession.*

Enlightenment

ORIGIN ME (in the sense 'make luminous'): in early use from OE *inlīhtan* 'to shine'; later from EN-¹, IN-² + *lighten*² or the noun *light*¹.

Lighten² (v.) 1 When something lightens or when you lighten it, it becomes less dark in colour. Make or become brighter. *The sky began to lighten. Leslie lightens her hair every month.* 2 *archaic* Enlighten spiritually

ORIGIN: ME *lightenen*, from *light*.

Light¹ (n.) 1 The natural agent that stimulates sight and makes things visible.

Light¹ (v.) 1 Provide with light. 2 Ignite or be ignited.

ORIGIN OE *lēoht līht* (n. and adj.), *līhtan* (v.) of Gmc origin.

Enlist (list) 1 If someone enlists or is enlisted, they join the army, navy, or air force. *Michael enlisted in the* 82^{nd} *Airbone 20 years ago.*

Derivative: enlistment.

ORIGIN: not given.

List (n.) 1 A list of things such as names or addresses is a set of them which all belong to a particular category. 2 *historical* Palisades enclosing an area for a tournament.

ORIGIN OE: *līste* (in the sense 'a border, edge') of Gmc origin.

List (v.) 3 To list several things such as reasons or names means to write or say them one after another usually in a particular order. Make a list of. *The pupils were asked to list the sports they loved most.* 4 *archaic* Enlist for military service.

ORIGN ME: from OE hlystan, from hlyst 'hearing'; akin to OE hlysnan 'to listen'.

Enmesh (mesh) (usually be enmeshed in) Entangle.

Derivative: enmeshment.

ORIGIN: not given.

Mesh (n.) 1 Material made of a network of wire or thread. 2 An interlaced structure.

Mesh (v.) 1 (of a gearwheel) Lock together with another \rightarrow Make or become entangled or entwined.

ORIGIN ME: probably from an unrecorded OE word related to MD *maesche*, of Gmc origin *masca* 'mesh', Lithuanian *mazgos* 'knot'.

Enplane (plane) (also emplane) Go or put on board an aircraft.

ORIGIN: not given.

Plane (n.) Short for *aeroplane*.

ORIGIN C19: from Fr. aéroplane, from aéro- 'air' + Gk -planos 'wandering'.

Enrage (rage) (usually **be enraged**) If you **are enraged** by something, it makes you extremely angry. *He enraged the government by renouncing the agreement.* ORIGIN C15: from Fr. *enrager.*

Rage (n.) 1 Rage is strong anger that is difficult to control. *He admitted shooting the man in a fit of rage.*

Rage (v.) 2 You say that something powerful or unpleasant **rages** when it continues with great force or violence. *Train services were halted as the fire raged for more than four hours.* **3** If you **rage** about something, you speak or think very angrily about it. *Monroe was on the phone, raging about her mistreatment by the brothers.*

ORIGIN ME: from OFr. *rage* (n.), *rager* (v.), from a variant of L. *rabies* 'rage', from *rabere* 'to be mad'; akin to Sanskrit *rabhas* 'violence'.

Enrapture (rapture) If something or someone **enraptures** you, you think they are wonderful or fascinating. Give intense pleasure to; a literary word. *The place at once enraptured me*.

ORIGIN: not given.

Rapture (n.) A feeling of extreme joy or pleasure; a literary word. *What joy, what rapture, what glory to see him again!*

ORIGIN C16 (in the sense 'seizing and carrying off'): from obsolete Fr. or from medieval L. *raptura* 'seizing'.

Enrobe (robe) formal Dress in a robe or vestment.

ORIGIN: not given.

Robe (n.) 1 A long, loose outer garment reaching to the ankles. \rightarrow Such a garment worn, especially on formal or ceremonial occasions, as an indication of the wearer's rank, office, or profession.

Robe (v.) (usually as adj. *robed*) Clothe in or put on a robe or robes.

ORIGIN ME: from OFr., from the Gmc base (in the sense 'booty') of *rob* (because clothing was an important component of booty); akin to OHG *roubon* 'to rob'.

Enshrine (shrine) (usually **be enshrined**) **1** Place (a precious object) in an appropriate receptacle. **2** If something such as an idea or a right **is enshrined** in something such as a constitution or law, it is protected by it. *His new relationship with Germany is enshrined in a new non-aggression treaty. The apartheid system which enshrined racism in law still existed.*

Derivative: enshrinement.

ORIGIN: ME

Shrine (n.) 1 A shrine is a holy place of worship which is associated with a sacred person or object. *The holy shrine of Mecca.* 2 A shrine is a place that people visit and treat with respect because it is connected with dead people that they want to remember. 3 A casket containing sacred relics; a reliquary.

Shrine (v.) *poetic/literary* Enshrine.

ORIGIN OE: scrīn 'cabinet, chest, reliquary', of Gmc origin.

Enshroud (shroud) *poetic/literary* To **enshroud** something means to cover it completely so that it can no longer be seen. Envelop completely and hide from view; a literary word. *Dispiriting clouds enshrouded us in twilight. The culture of secrecy enshrouds our politics.*

ORIGIN: not given.

Shroud (n.) 1 A **shroud** is a cloth which is used for wrapping a dead body. **2** You can refer to something that surrounds an object or situation as a **shroud of** something. A thing that envelops or obscures. *A shroud of mist. A parked car huddled under a shroud of grey snow.*

Shroud (v.) 3 Wrap or dress in a shroud. **4** If darkness, fog, or smoke **shrouds** an area, it covers it so that it is difficult to see. Cover or envelop so as to conceal from view. *Mist shrouded the outline of Buckingham Palace.* \rightarrow If something has been shrouded in mystery or secrecy, very little information about it has been made available. *For years the teaching of acting has been shrouded in mystery*.

ORIGIN OE: *scrūd* 'garment, clothing', of Gmc origin, from a base meaning 'cut'; related to *shred* (a strip of material that has been torn, cut or scraped from something larger).

Ensile (silo) Put (grass or another crop) into a silo.

ORIGIN C19: from Fr. ensiler, from Spanish ensilar.

Silo (n.) 1 A tall tower or pit on a farm, used to store grain. 2 A pit or other airtight structure in which green crops are compressed and stored as silage.
ORIGIN C19: from Spanish, via L. from Gk siros 'corn pit'.

Enslave (slave) 1 To **enslave** someone means to make them into a slave. \rightarrow Cause to lose freedom of choice or action.

Derivative: enslavement.

ORIGIN C17 (in the sense 'make subject to a superstition, habit, etc.'): from EN-¹, IN-² + *slave*.

Slave (n.) 1 A slave is someone who is the property of another person and has to work for that person.

Slave (v.) 3 If you say that someone is slaving over something or is slaving for someone, you mean that they work very hard. *When you're busy all day the last thing you want to do is spend hours slaving over a hot stove.* 4 [as n. *slaving*] *historical* The action or process of enslaving people.

ORIGIN ME: shortening of OFr. esclave, equivalent of medieval L. sclava (fem.).

Ensnare (snare) 1 If you **ensnare** someone, you gain power or control over them, especially by using dishonest or deceitful methods. *Feminism is simply another device to ensnare women.* **2** If an animal **is ensnared**, it is caught in a trap or snare.

Derivative: ensnarement.

ORIGIN: not given.

Snare (n.) A snare is a trap for catching birds or small animals.

Snare (v.) 3 If someone snares an animal, they catch it using a **snare**. He'd snared a rabbit earlier in the day. **4** If someone **is snared**, they are caught in a trap. *A motor-cyclist was seriously injured when she was snared by a rope stretched across the road*. ORIGIN OE *sneare*, from ON *snara*; akin to OHG *snuor* 'cord'.

Entangle (tangle) (usually be entangled in/with) 1 If something is entangled in something such as a rope, wire, or net, it is caught in it very firmly. Unfortunately, he managed to entangle his large feet with the small rudder bar.

Derivative: entanglement.

ORIGIN: not given.

Tangle (n.) 1 A **tangle** of something is a mass of it twisted together in an untidy way. *A tangle of wires is all that remains of the computer and phone systems.*

Tangle (v.) 2 If something **is tangled** or **tangles**, it becomes twisted together in an untidy way. To twist (strands) together into a confused mass. *Animals get tangled in fishing nets and drown*.

ORIGIN ME: *tangilen*, probably of Scandinavian origin and related to Swedish dialect *taggla* 'to disarrange'.

Enthrone (throne) 1 When kings, queens, emperors, or bishops are **enthroned**, they officially take on their role during a ceremony in which they are placed on a throne. Install (a monarch or bishop) on a throne with due ceremony; a formal use. *The emperor of Japan has been enthroned in Tokyo*

Derivative: enthronement.

ORIGIN: not given.

Throne (n.) 1 A **throne** is an ornate chair used by a king, queen, or emperor on important official occasions.

Throne (v.) *poetic/literary* Place on a throne.

ORIGIN ME: from OFr. trone, via L. from Gk thronos 'elevated seat'.

Entitle (title) 1 If you **are entitled** to something, you have the right to have it or do it. Give a right to. *The terms may entitle you to a replacement or refund.* **2** If the title of something such as a book, film, or painting is, for example, 'Sunrise', you can say that it **is entitled** 'Sunrise'. Give a title to (a book, play, etc). *Chomsky's review is entitled* '*Psychology and Ideology'*.

Derivative: entitlement.

ORIGIN ME: via OFr. from late L. intitulare, from in- 'in' + L. titulus 'title'.

Title (n.) 1 The title of a book, play, film, or piece of music is its name. 5 Someone's title is a word such as 'Mr', 'Mrs', or 'Doctor', which is used before their own name in order to show their status or profession.

Title (v.) (usually **be titled**) **2** When a writer, composer, or artist **titles** a work, they give it a title. *Pirandello titled his play 'Six Characters in Search of an Author'*. ORIGIN OE *titul*, reinforced by OFr. *title*, both from L. *titulus* 'inscription, title'.

Entomb (tomb) 1 If something **is entombed**, it is buried or permanently trapped by something; a formal word. *The city was entombed in volcanic lava*. **2** When a person's dead body **is entombed**, it is buried in a grave or put into a tomb; a formal use. *Neither of them had any idea how long the body had been entombed*.

Derivative: entombment.

ORIGIN ME: from OFr. entomber.

Tomb (n.) A **tomb** is a large grave that is above ground and that usually has a sculpture or other decoration on it.

ORIGIN OFr. tombe, from late L. tumba, from Gk tumbos.

Entrain (train) Board or put on board a train.

ORIGIN: not given.

Train (n.) 1 A series of railway carriages or wagons moved as a unit by a locomotive. ORIGIN ME (as a n. in the sense *delay*): from OFr. *train* (masc), *traine* (fem), from *trahiner* (v.) from L *trahere* 'pull, draw'.

Train (v.) 1 Teach (a person or animal) a particular skill. 5 dated Go by train.

ORIGIN ME: from MFr. *trainer*, from OFr., from (assumed) Vular L. *traginare*; akin to Latin *trahere* 'to draw'.

Entrance (trance) (usually **be entranced**) If something or someone **entrances** you, they cause you to feel delight and wonder, often so that all your attention is taken up and you cannot think about anything else. Fill with wonder and delight. *As soon as I met Dick, he entranced me because he has a lovely voice.*

Derivative: entrancement.

ORIGIN: not given.

Trance (n.) A **trance** is a state of mind in which someone seems to be asleep and to have no conscious control over their thoughts or actions, but in which they can see and hear things and respond to commands given by other people. *They went into a trance to communicate with the spirit world*.

Trance (v.) *poetic/literary* Put into a trance.

ORIGIN ME: from OFr. transir 'depart, fall into a trance', from L. transire 'go across'.

Entrap (trap) 2 If you entrap someone or something, you trick or deceive them and make them believe or do something wrong. Catch in or as in a trap. *He claimed the government had entrapped him into doing something that he would not have done otherwise.*

Derivative: entrapment.

ORIGIN C16: from OFr. entraper.

Trap (n.) 1 A **trap** is a device which is placed somewhere or a hole which is dug somewhere in order to catch animals or birds. **3** A **trap** is a trick that is intended to catch or deceive someone.

Trap (v.) 2 If a person **traps** animals or birds, he or she catches them using traps. Catch them in a trap. *The locals were encouraged to trap and kill the birds.* **4** If you **trap** someone into doing or saying something, you trick them so that they do or say it, although they did not want to. *Were you just trying to trap her into making some admission?* **5** To **trap** someone, especially a criminal, means to capture them; used in journalism. *The police knew that to trap the killer they had to play him at his own game.* ORIGIN OE: *trappe* (in *coltetrappe* 'Christ's thorn'); related to MD *trappe* and medieval L. *trappa*, of uncertain origin.

Entrench (trench) (also **intrench**) **1** If something such as power, a custom, or an idea **is entrenched**, it is firmly established, so that it would be difficult to change it. *A series of measures designed to entrench democracy and the rule of law.* **2** Establish (a military force, camp, etc.) in trenches or other fortified positions.

Derivative: entrenchment.

ORIGIN: not given.

Trench (n.) A **trench** is a long narrow channel that is cut into the ground, for example for drainage or in order to lay pipes. **2** A **trench** is a long narrow channel in the ground used by soldiers as a defensive position.

ORIGIN ME: *trenche* 'track cut through a wood', from MFr., 'act of cutting', from *trenchier* 'to cut', probably from (assumed) Vulgar L. *trinicare* 'to cut in three', from L. *trini* 'three each'.

Trench (v.) Dig a trench or trenches in.

ORIGIN ME: from OFr. trenche (n.), trenchier (v.), based on L. truncare.

Entrust (trust) If you **entrust** something important to someone or entrust them with it, you make them responsible for looking after it or dealing with it. *The parents wanted to entrust their prized child to the best surgeons, so they travelled to Bologna's famous medical school.*

Derivative: entrustment.

ORIGIN: not given.

Trust (n.) 2 Your **trust** in someone is your belief that they are honest and sincere and will not deliberately do anything to harm you. *He destroyed my trust in men.*

Trust (v.) 1 If you **trust** someone, you believe that they are honest and sincere and will not deliberately do anything to harm you. '*I trust you completely,*' he said. **3** If you **trust** someone to do something, you believe that they will do it. *That's why I must trust* you to keep this secret. **4** If you **trust** someone **with** something important or valuable, you allow them to look after it or deal with it. *This could make your superiors hesitate* to trust you with major responsibilities.

ORIGIN ME: from ON traust, from traustr 'strong'; the verb from ON treysta.

Enurn (urn) Place or bury (ashes) in an urn.

ORIGIN: not given.

Urn (n.) 1 A tall, rounded vase with a stem and base, especially one for storing a cremated person's ashes.

Urn (v.) archaic Place in an urn.

ORIGIN ME: from L. urna; related to urceus 'pitcher'.

Envenom (venom) *Zoology and Medicine* Poison by biting or stinging. ORIGIN: not given.

Venom (n.) 1 A poisonous fluid secreted by animals such as snakes and scorpions and typically injected into prey or aggressors by biting or stinging.

ORIGIN ME: from OFr. *venim*, variant of *venin*, from an alteration of L. *venenum* 'poison'.

Envision (vision) If you **envision** something, you envisage it, you visualize it; used mainly in American English. *In the future we envision a federation of companies. Most people do stop at this point, not envisioning that there is anything beyond.* ORIGIN: not given.

Vision (n.) 1 Your vision of a future situation or society is what you imagine or hope it would be like, if things were very different from the way they are now. *I have a vision of a society that is free of exploitation and injustice.* 4 Your vision is your ability to see clearly with your eyes. *It causes blindness or serious loss of vision*.

Vision (v.) Imagine, envision.

ORIGIN ME: via OFr. from L. visio(n), from videre 'to see'.

Enwrap (also inwrap) Wrap; envelop.

ORIGIN: not given.

Wrap (v.) 1 Cover or enclose in paper or soft material \rightarrow Arrange (paper or soft material) round something, as a covering or for warmth or protection. \rightarrow Place around so as to encircle.

Wrap (n.) 1 A loose outer garment or piece of material. 2 Paper or material used for wrapping.

ORIGIN: of unknown origin.

d) This section presents those Vs which do not fit into the previous sections. The different relations which can be established between the base and the resulting V are shown in (1-4). Below are the Vs listed in alphabetical order.

- 1. There is no relation between the prefixed verb and the base: encore (core), endue (due), and enquire (quire).
- 2. The base does not exist in English (most of them have a foreign origin): encroach (croach), endure (dure), energize (ergize), engineer (gineer), enhance (hance), entertain (tertain), enthuse (thuse), ensorcell (sorcell), entice (tice), i/enure (ure), envelop (velop), and environ (viron).
- 3. The derivation works in the opposite direction (from the prefixed verb to the unprefixed base): enchase (chase), encumber (cumber), ensilage (silage), and envy (vie).
- 4. The relation between the prefixed verb and their base is very distant, if not lost: enamour (amour), encounter (counter), endeavour (devoir), endorse (dorse), endow (dowry), engage (gage), engender (gender), e/ingrain (grain), enjoy (joy), enrol (roll), ensconce (sconce), entail (tail), enthral (thrall), entrammel (trammel), entwine (twine). and envisage (visage).

Enamour (amour) Be filled with love or admiration for. ORIGIN ME: from OFr. *enamourer*, from *en*- 'in' + *amour* 'love'. **Amour (n.)** A love affair or lover, especially a secret one. ORIGIN ME: via OFr. from L. *amor* 'love'.

Enchase (chase) Another term for $chase^2$.

ORIGIN ME: from OFr. enchasser 'set gems, encase'

Chase² (v.) (usually as adj. *chased*) Decorate (metal) by engraving or inlaying. ORIGIN ME: apparently from earlier *enchase*, from OFr. *enchasser* (see *enchase*).

Encore (core) 2 If an entertainer encores, they perform an encore; an informal use. *They encore with a superlative version of The Who's 'The Kids Are Alright'*.
Encore (n.) 1 An encore is a short extra performance at the end of a longer one. ORIGIN C18: Fr. literally 'still again'

Core (n.) 1 The **core** of a fruit is the central part of it. It contains seeds or pips. *Someone threw an apple core.* **3** The **core** of an object, building, or city is the central part of it. *The earth's core.*

Core (v.) 2 If you **core** a fruit, you remove its core. ORIGIN: of unknown origin.

Encounter (counter) 1 If you **encounter** problems or difficulties, you experience them. 2 If you **encounter** someone, you meet them, usually unexpectedly.

ORIGIN ME: from OFr. encontrer (v.), encontre (n.), based on L. in- 'in' + contra 'against'.

Counter (n.) 1 In a place such as a shop or café, a **counter** is a long narrow table or flat surface at which customers are served. **5** A **counter** is a mechanical or electronic device which keeps a count of something and displays the total.

ORIGIN ME (in sense 5): from OFr. *conteor*, from medieval L. *computatorium*, from L. *computare*.

Counter (v.) 2 If you do something to **counter** a particular action or process, you do something which has an opposite effect to it or makes it less effective. ORIGIN ME: from OFr. *contre*, from L. *contra* 'against'.

Encroach 1 If one thing **encroaches** on another, the first thing spreads or becomes stronger, and slowly begins to restrict the power, range, or effectiveness of the second thing.

Derivative: encroachment.

ORIGIN ME (in the sense 'seize'): from OFr. *encrochier* 'seize, fasten upon', from *en*-'in, on' + *crochier* (from *croc* 'hook').

Croach: non-existing.

Encumber (cumber) 1 Impede, burden. If you **are encumbered** by something, it prevents you from moving freely or doing what you want. **2** If a place **is encumbered** with things, it contains so many of them that it is difficult to move freely there. *The narrow quay was encumbered by hundreds of carts.*

ORIGIN ME: from OFr. *encombrer* 'block up', from *en-* 'in' + *combre* 'river barrage'.

Cumber (n.) archaic A hindrance, obstruction or burden.

Cumber (v.) dated Hamper, hinder, or obstruct.

ORIGIN ME (in the sense 'overthrow, destroy'): probably from encumber.

Endeavour (endeavor in American English) **1** If you endeavour to do something, you try very hard to do it; a formal use. *I will endeavour to arrange it*. ORIGIN ME: from the phrase 'put oneself in devoir' 'do one's utmost'.

Devoir (n.) A person's duty.

ORIGIN ME: from OFr. deveir, from L. debere 'owe', influenced by Fr. devoir.

Endorse (dorsum) (also **indorse**) **1** If you **endorse** someone or something, you say publicly that you support or approve of them. **3** When you **endorse** a cheque, you write your name on the back of it so that it can be paid into someone else's bank account. *The payee of the cheque must endorse the cheque*.

Derivative: endorsement.

ORIGIN C15: from medieval L. *indorsare*, from L. *in-* 'on' + *dorsum* 'back'.

Dorsum (n.) [pl. *dorsa*] *Anatomy and Zoology* The dorsal part of an organism or structure.

ORIGIN C18 (denoting a long hill or ridge): from L. back.

Endow (dower) 1 Give or bequeath an income or property to. **2** You say that someone **is endowed** with a particular desirable ability, characteristic, or possession when they have it.

Endowment.

ORIGIN ME: from legal Anglo-Norman *endouer*, from *en-* 'in, towards' + OFr. *douer* 'give as a gift' (from L. *dotare*: see *dower*).

Dower (n.) 1 A widow's share for life of her husband's estate. **2** *archaic* A dowry. **Dower (v.)** *archaic* Give a dowry to.

ORIGIN ME: OFr. *douaire*, from medieval L. *dotarium*, from L. *dotare* 'endow', from *dos*, *dot*- 'dowry'; related to *dare* 'give'.

Endue (also indue) *poetic/literary* Endow with a quality or ability.

ORIGIN ME: from OFr. *enduire*, partly from L. *inducere* (see *induce*), reinforced by the sense of L. *induere* 'put on clothes'.

Due (adj.) 1 Expected at, planned for, or required by a certain time.

Due (n.) 1 A person's right.

ORIGIN ME: from OFr. deu 'owed', based on L. debitus 'owed', from debere 'owe'.

Endure 1 If you **endure** a painful or difficult situation, you experience it and do not avoid it or give up, usually because you cannot. Suffer (something painful and prolonged) patiently. *The company endured heavy financial losses.* **2** If something **endures**, it continues to exist without any loss in quality or importance. Remain in existence. *Somehow the language endures and continues to survive.*

ORIGIN ME: from OFr. *endurer*, from L. *indurare* 'to harden, endure'. **Dure**: non-existing.

Energize (energy) (also spelled **energise** in British English) To **energize** someone means to give them the enthusiasm and determination to do something. ORIGIN: not given.

Energy 1 The strength and vitality required for sustained activity.

ORIGIN C16: from Fr. *énergie*, or via late L. from Gk *energeia*, from *en-* 'in, within' + *ergon* 'work'.

Ergize: non-existent.

Engage 1 If you **engage** in an activity, you do it or are actively involved with it; a formal use. *You can engage in croquet on the south lawn.* **2** If something **engages** you or your attention or interest, it keeps you interested in it and thinking about it. *They never learned skills to engage the attention of the others.*

Engagement.

ORIGIN ME (originally in the sense 'pawn or pledge something'): from Fr. *engager*, ultimately from the base of *gage*.

Gage (n.) 1 A valued object deposited as a guarantee of good faith. **2** A pledge, especially a glove, thrown down as a challenge to fight.

Gage (v.) Offer as a gage.

ORIGIN ME: from OFr. gage (n.), gager (v.), of Gmc origin; related to wage and wed.

Engender (gender) If someone or something **engenders** a particular feeling, atmosphere, or situation, they cause it to occur; a formal word. *He could engender delight in students*.

ORIGIN ME: from OFr. engendrer, from L. ingenerare, from in- 'in' + generare 'beget'.

Gender (n.) 1 A person's gender is the fact that they are male or female. 3 In grammar, the gender of a noun, pronoun, or adjective is whether it is masculine, feminine, or neuter.

ORIGIN ME: from OFr. gendre (modern genre) based on L. genus 'birth, family, nation'.

Engineer (engine) 5 If you **engineer** an event or situation, you arrange for it to happen, in a clever or indirect way. *Stalin engineered the murder*.

ORIGIN ME: from OFr. *engigneor*, from medieval L. *ingeniator*, from *ingeniare* 'contrive', from L. *ingenium* (see *engine*).

Engine (n.) 1 A machine with moving parts that converts power into motion.

ORIGIN ME (originally in the sense 'ingenuity, cunning'): from OFr. *engin*, from L. *ingenium* 'talent, device', from *in-* 'in' + *gignere* 'beget'. **Gineer**: non-existent.

Engrain (grain) (also **ingrain**) Firmly fix or establish (a habit, belief, or attitude) in a person.

ORIGIN ME: from EN^{-1} , $IN^{-2} + grain$.

Grain (n.) 1 Wheat or other cultivated cereal used as food. 2 A small, hard particle of substance such as sand. 4 The longitudinal arrangement of fibres in wood, paper, etc. 5 The rough or wrinkled outer surface of leather.

Grain (v.) 1 Give a rough surface or texture to. 2 Form into grains. 4 Remove hair (from a hide).

ORIGIN ME: from OFr. grain, from L. granum.

Enhance To **enhance** something means to improve its value, quality, or attractiveness. **Derivative: enhancement.**

ORIGIN ME: *enhauncen*, from Anglo-French *enhauncer*, alteration of OFr. *enchaucier*, from (assumed) Vulgar L. *inaltiare*, from Latin *in* + *altus* 'high'. **Hance**: non-existing.

Enjoy (joy) 1 Take pleasure in. *He had always enjoyed the company of women.*2 Possess, have and benefit from. *He enjoys a reputation for honesty.*

Derivative: enjoyment.

ORIGIN ME: from OFr. *enjoier* 'give joy to' or *enjoir* 'enjoy', both based on L. *gaudere* 'rejoice'.

Joy (n.) 1 A feeling of great pleasure and happiness \rightarrow Cause of joy. 2 *informal* Success or satisfaction.

Joy (v.) *poetic/literary* Rejoice.

ORIGIN ME: from OFr. joie, based on L. gaudium, from gaudere 'rejoice'.

Enquire Ask for information.

ORIGIN ME: *enquere*, from OFr. *enquerre*, based on L. *inquirere*, based on *quaerere* 'seek'.

Quire (n.) 1 Four sheets of paper or parchment folded to form eight leaves, as in medieval manuscripts.

ORIGIN ME: from OFr. quaier, from L. quaterni 'set of four'.

Enrol (roll) 1 If you **enrol** or **are enrolled** on a course, you officially join it and pay a fee for it. *She enrolled on a local Women Into Management course.* \rightarrow Recruit \rightarrow *Law historical* Enter (a deed or other document) among the rolls of a court of justice.

Enrolment.

ORIGIN ME: from OFr. *enroller*, from *en-* 'in' + *rolle* 'a roll' (names being originally written on a roll of parchment).

Roll (n.) 1 A cylinder formed by rolling flexible material. 6 An official list or register of names \rightarrow The total numbers on such a list. \rightarrow A document, typically an official record, in scroll form.

Roll (v.) 1 Move by turning over and over on an axis.

ORIGIN ME: from OFr. *rolle* (n.), *roller* (v.) from L. *rotulus* 'a roll', variant of *rotula* 'little wheel'.

Ensconce (sconce) (often **ensconce oneself**) Establish in a comfortable, safe, or secret place.

ORIGIN C16 (in the sense 'fortify' + 'shelter within or behind a fortification'): from EN^{-1} , $IN^{-2} + sconce^{2}$.

Sconce 2 (n.) *archaic* A small fort or earthwork.

ORIGIN ME: from Dutch schans 'brushwood', from MHG schanze.

Ensilage (silage) Another term for *ensile*. Put (grass or another crop) into a silo. ORIGIN C19: from Fr. *ensiler*.

Silage (n.) Grass or other green fodder that is compacted and stored in airtight conditions, without first being dried, and used as animal feed in the winter.

Silage (v.) 1 Make silage. 2 Preserve as silage.

ORIGIN C19: alteration of ensilage, incluenced by silo.

Ensorcell *poetic/literary* Enchant; fascinate.

Derivative: ensorcellment.

ORIGIN C19: from OFr. *ensorceler*, alteration of *ensorcerer*, from *sorcier* 'sorcerer'. **Sorcell**: non-existing.

Entail (tail) 1 If one thing entails another, it involves it or causes it; a formal word. *Such a decision would entail a huge political risk in the midst of the presidential campaign.* **2** *Law* Settle the inheritance of (property) over a number of generations so that ownership remains within a particular family.

Derivative: entailment.

ORIGIN ME (in the sense of 2): from EN-^1 , $\text{IN-}^2 + \text{OFr. } taille$ (see $tail^2$).

Tail² (n.) *Law, chiefly historical* Limitation of ownership, especially of an estate or title limited to a person and their heirs.

ORIGIN ME (denoting a tallage): from OFr. taille 'notch, tax', from taillier 'to cut'.

Tail¹ (n.) 1 The **tail** of an animal, bird, or fish is the part extending beyond the end of its body. **2** You can use **tail** to refer to the end or back of something, especially something long and thin. *The horizontal stabilizer bar on the plane's tail.*

ORIGIN OE: tag(e)l, from Gmc base meaning 'hair, hairy tail'.

Tail¹ (v.) **4** To **tail** someone means to follow close behind them and watch where they go and what they do; an informal use. *Officers had tailed the gang from London*.

Entertain 1 If a performer, performance, or activity entertains you, it amuses you, interests you, or gives you pleasure. *All these games entertain children*.

Derivative: entertainment.

ORIGIN ME: *entertinen*, from MFr. *entretenir*, from *entre*- inter + *tenir* 'to hold'. **Tertain:** non-existing.

Enthral (thrall) (usually **be enthralled**) **1** If you **are enthralled** by something, you enjoy it and give it your complete attention and interest. *The passengers were enthralled by the scenery*. **2** (also **inthrall**) *archaic* Enslave.

Derivative: entrhalment.

ORIGIN ME: from EN^{-1} , $IN^{-2} + thrall$.

Thrall (n.) 1 The state of being in another's power: eg. *She was in thrall to her abusive husband* **2** *historical* A slave, servant, captive.

ORIGIN OE: thræl 'slave' from ON thræll.

Enthuse 1 If you **enthuse** about something, you talk about it in a way that shows how excited and thrilled you are about it. Be or make enthusiastic. *David enthuses about the taste, fragrance and character of Provencal cuisine.*

ORIGIN: back-formation from *enthusiasm*. **Thuse**: non-existing.

Entice To **entice** someone to go somewhere or to do something means to try to persuade them to go to that place or to do that thing.

Derivative: enticement.

ORIGIN ME: from OFr. *enticier*, probably from a base meaning 'set on fire', based on an alteration of Latin *titio* 'firebrand'. **Tice**: non-existing.

Entrammel (trammel) *poetic/literary* Entangle.

ORIGIN: not given.

Trammel (n.) poetic/literary Restrictions or impediments to freedom of action.

Trammel (v.) Constrain or impede.

ORIGIN ME: from OFr. *tramail* 'a kind of net', from a medieval L. variant of *trimaculum*, perhaps from L. *tri*- 'three' + *macula* 'mesh, spot'.

Entwine (twine) 1 If one thing is entwined with another thing, or if you entwine two things, the two things are twisted around each other. *He entwined his fingers with hers.* Facing each other, the giraffes were managing to entwine their necks in the most astonishing manner ...with silk ribbons and flowers entwined in their hair. 2 If two things entwine or are entwined, they closely resemble or are linked to each other, and they are difficult to separate or identify. The book entwines the personal and the political to chart the history of four generations of the family. Once, years ago, he told me our lives should entwine.

Derivative: entwinement.

ORIGIN: not given.

Twine (n.) 1 Twine is strong string used especially in gardening and farming.

ORIGIN OE: *twīn* 'thread, linen', from the Gmc base of *twi*- 'two' (with reference to the number of strands).

Twine (v.) If you **twine** one thing around another, or if one thing **twines** around another, the first thing is twisted o wound around the second. *He twined his fingers into hers*.

ORIGIN: alteration of Scots twin, from ME twinnen, from twin 'double'.

Enure variant spelling of *inure*.

Inure (usually **be inured to**) Accustom to something, especially something unpleasant. **Derivative: inurement.**

ORIGIN ME: *inure, enure*, from an Anglo-Norman Fr. phrase meaning 'in use or practice', from *en-* 'in' + OFr. *euvre* 'work' (from L. *opera*). **Ure**: non-existent.

Envelop If one thing **envelops** another, it covers or surrounds it completely. Wrap up, or surround completely. *That lovely, rich fragrant smell of the forest enveloped us.* ORIGIN ME: from OFr. *envoluper*, from *en-* 'in' + a second element of unknown origin

(also found in *develop*).

Derivative: envelopment.

Velop: non-existing.

Environ formal Surround; enclose.

ORIGIN ME: from OFr. *environer*, from *environ* 'surroundings', from *en-* 'in' + *viron* 'circuit, cercle', from *virer* 'to turn'.

Environment.

Viron: non-existing.

Envisage (visage) If you **envisage** something, you imagine that it is true, real, or likely to happen. Regard as a possibility. \rightarrow Form a mental picture. *He envisages the possibility of establishing direct diplomatic relations in the future.*

ORIGIN C19: from Fr. envisager, from en- 'in' + visage 'face'.

Visage (n.) Someone's visage is their face; a literary word. *His milky-white innocent visage*.

ORIGIN ME: via OFr., from L. visus 'sight' from videre 'to see'.

Envy 2 If you **envy** someone, you wish that you had the same things or qualities that they have. Feel envy of. *I don't envy the young ones who've become TV superstars and know no other world.*

ORIGIN ME (also in the sense 'hostility'): from OFr. *envie* (n.), *envier* (v.), from L. *invidia*, from *invidere* 'regard maliciously', from *in-* 'into' + *videre* 'to see'.

Vie (v.) Compete eagerly with others in order to do or achieve something.

ORIGIN C16: probably a shortening of obsolete *envy*, via OFr. from L. *invitare* 'challenge'.

e) Classification of the deadjectival and denominal Vs into semantic paraphrases³⁴:

$\mathbf{A} \rightarrow [\mathbf{en} \textbf{+} \mathbf{A}]_{\mathrm{V}}$

Trans [+c] [-c-m] 'to make A'

Enable (able), endear (dear), enfeeble (feeble), enlarge (large), ennoble (noble), enrich (rich), and ensure (sure).

$N \rightarrow [en+N]_V$

A) Trans [+c] (usually [+c+m]) [-c-m] 'to put something around/in/onto/towards N' Location Vs.

Encapsulate (capsule), encase (case), encode (code), encyst (cyst), engorge (gorge), engulf (gulf), enlist (list), enmesh (mesh), enplane (plane), enrobe (robe), enshrine (shrine), enshroud (shroud), ensile (silo), ensnare (snare), enthrone (throne), entomb (tomb), entrain (train), entrance (trance), entrap (trap), entrench (trench), and enurn (urn).

> Intermediate Vs which have meanings related to the prefixed Vs (A.1):

Engorge (gorge), enlist (list), enmesh (mesh), ensnare (snare), entrap (trap), entrain (train), and entrench (trench).

> Intermediate Vs which have the same meaning as the prefixed Vs (A.2):

Encode (code), enrobe (robe), enshrine (shrine), enshroud (shroud), enthrone (throne), entrance (trance), and enurn (urn).

B) Trans [+c] (usually [+c+m]) [-c-m] 'to put N around/in/into/on something somebody' Locatum Vs.

Encircle (circle), encompass (compass), encrust (crust), endanger (danger), enfold (fold), enforce (force), engirdle (girdle), engraft (graft), enlighten (light), enrage (rage), entrust (trust), and envenom (venom).

\rightarrow [+c] (usually [+c+m]) [-c-m] 'to give N' (='to put N in somebody')

Encourage (courage), enfeoff (fief), enfranchise (franchise), enrapture (rapture), and entitle (title).

³⁴ Unlike the Catalan classification, the intermediate forms in the English classification have not been provided with the direction of derivation. The dictionaries did not allow me to see which form came first most of the time.

> Intermediate Vs which have meanings related to the prefixed Vs (B.1):

Encompass (compass), encrust (crust), enfold (fold), enforce (force), engirdle (girdle), enlighten (light), enrage (rage), and entrust (trust).

> Intermediate Vs which have the same meaning as the prefixed Vs (B.2):

Encircle (circle), engraft (graft), enfranchise (franchise), and entitle (title).

A/B) Some verbs fit into either group (A or B):

Although all 'locative' verbs have been placed either in group (A) or (B), some could be argued to belong to both groups. For instance, consider the verb *encrypt* (*crypt*), *encipher* (*cipher*), *entangle* (*tangle*), and *enwrap* (*wrap*).

> Intermediate Vs which have meanings related to the prefixed Vs (A/B.1):

Entangle (tangle).

> Intermediate Vs which have the same meaning as the prefixed Vs (A/B.2):

Encipher (cipher), and enwrap (wrap).

C) N as a result 'to make N' Vs of creation

Encamp (camp), encash (cash), enslave (slave), and envision (vision).

> Intermediate Vs which have meanings related to the prefixed Vs (C.1):

Envision (vision)

> Intermediate Vs which have the same meaning as the prefixed Vs (C.2):

Encamp (camp), encash (cash), and enslave (slave).

Appendix B

In the classification of deadjectival Vs, the A from which the V is derived is given in the masculine form within parentheses after the V. The clitic *se* within parentheses () indicates that the V can be either transitive (without *se*) or unaccusative (with *se*). The Vs with clitic can only be unaccusative and those without are mostly transitive. The clitic *se* within square brackets [] indicates that the V can be used transitively (without the clitic), and intransitively (as an unaccusative) either with the clitic or without. The same holds for denominal Vs.

On the whole, all deadjectival Vs below follow the semantic pattern 'to make (something/somebody) A' and '(something/somebody) becomes A', when used transitively and intransitively, respectively. If some Vs slightly differ from this pattern (one on this list), their behaviour can still be explained. For example, the V *enaltir (alt)* 'praise' '(tall)' can be understood as 'making someone high/putting someone in a high position by prasing him'. Regarding denominal Vs, they have been divided into four groups: location Vs, locatum Vs, Vs which can have the two previous patterns, and Vs of creation. Each group includes subgroups where intermediate Vs have been listed; i.e. according to my analysis, in the formation of prefixed deadjectival and denominal Vs there is an intermediate stage in which the A and N have become a V, but the prefix is not present as yet. These intermediate forms have been grouped depending on whether they have the same meaning as that of the prefixed version or a related one. Note that in the group of locatum Vs, the locatum can either be a physical object (e.g. *caputxa* 'hood'in *encaputxar*) or an abstract one (e.g. *amor* 'love' in *enamorar*).

Deadjectival Vs like *fosquejar*, *groguejar*, *lluentejar* and *rossejar* have not been taken into account, since they all contain the suffix $-e_j$ - between the adjectival base and the inflectional morpheme. The same applies to denominal Vs and prefixed Vs whose source is already verbal (i.e. verbs like *encamellar* ($< cama_N$) and *endormiscar-se* ($< dormir_V$) have also been avoided because they contain suffixes (*-ell-* and *-isc-* respectively) intervening between the nominal/verbal base and the inflectional element, although most of them do not seem to affect the resulting argument structure of the V).

Lexicalized deadjectival and denominal Vs have not been included in this survey. For instance, denominal Vs like *ensenyar*<*senya* and *enviar*<*via* have been disregarded.

Concerning the prefixed Vs whose source is a V, they have not been divided into different semantic groups due to its variability in meaning. The base V is included within parentheses after each prefixed V, and due to its reduced number, all en-prefixed Vs have been included on the first list. That is, the first list does not distinguish prefixed Vs with a lexicalized meaning. For instance, speakers do no longer associate the Vs encantar or endrecar with cantar and drecar respectively. Also, there are a few pairs of Vs (i.e. with and without the prefix) of which the speaker only uses one form and not the other for different reasons: one of the two forms may belong to Old Catalan (e.g. encercar, enseguir) or to one specific dialect (enfondre, engronsar, enxautar-se) and these have also been included on the first list. Finally, there is a third group of Vs (i.e. with and without the prefix) of which speakers do not use any of the two forms and these have not been filtered out from the first list either (e.g. enforfollar (forfollar), ensulsi(a)r-se (sulsir)). However, the first list is followed by a second list from which all the previous forms have been removed. The reduced number of verbs on the second list shows that it is very difficult to find a pattern similar to those found in deadjectival and denominal Vs.

$A \rightarrow [en+A]_V$

Transitive [+c] [-c-m] 'to make A' / Reflexive 'to become A' [-c-m]

Enagrir(-se) (agre), enaltir (alt), enardir(-se) (ardit), enasprar(-se)/enasprir(-se) (aspre), encalbir(-se) (calb), encalentir (calent), encalmar-se (calm), encanudir (canut), encarir[se] (car), encegar (cec), encertir(-se) (cert), encoixir(-se) (coix), encrespar(-se) (cresp), encruar-se (cru), encruelir(-se) (cruel), encuriosir (curiós), endoblar (doble), endoblir-se (doble), endolcir(-se) (dolc), endolentir(-se) (dolent), endropir(-se) (dropo), endurir(se) (dur), enfadeir(-se) (fat), enfellonir(-se) (felló), enfereir-se (fer), enferestir-se (ferest), enferotgir-se (ferotge), enfollir[-se] (foll), enfondir(-se) (fondo), enfortir(-se) (fort), enfoscar[-se] (fosc), enfosquir[-se] (fosc), enfranquir (franc), enfredar(-se) (fred), enfredolicar(-se) (fredolic<fred), engalanar (galà), engallardir(-se) (gallard), engallofir(se) (gallof), engandulir(-se) (gandul), engegantir (gegant), engelosir(-se) (gelós), engolosir (golós), engordir(-se) (gord), engormandir(-se) (gormand), engrandir[-se] (gran), engrevir(-se) (greu), engroguir(-se) (groc), engrossir(-se) (gros), enguerxir(-se) (guerxo), enjogassar(-se) (jogasser<joc), enjovenir (jove), enllefernar(-se) (llefre), enllefiscar(-se) (llefiscós), enllepissar(-se) (llepissós<llepar), enllepolir(-se) (llèpol), enllestir(-se) (llest), enlletgir(-se) (lleig), enllordar(-se) (llord), enlluentir (lluent), enllustrar-se (llustre), ennegrir(-se) (negre), ennoblir(-se) (noble), ennovar(-se) (nou), enrancir(-se) (ranci), enrarir(-se) (rar), enrellentir(-se) (rellent), enrigidir(-se) (rígid), enriquir(-se) (ric), enrobustir(-se) (robust), enrogir(-se) (roig), enronquir(-se) (ronc), enrossir(-se) (ros), ensalvatgir(-se) (salvatge), enseriosir-se (seriós), ensordir(-se) (sord), ensuperbir(-se) (superb), ensutzar/ensutzir/ensutzeir* (sutze), entebeir(-se) (tebi), entebionar (tebió), entendrir(-se) (tendre), enterbolir(-se) (tèrbol), entoixar (toix), entorpir (Spanish torpe), entossudir-se (tossut), entristar(-se)* (trist), entristir(-se) (trist), entumir(-se) (túmid), envalentir(-se) (valent), envanir(-se) (va), envellir(-se) (vell), enverdir(-se) (verd), enverinosar (verinós), envermellir(-se) (vermell), envilanir(-se) (vilà), envilir(-se) (vil), and enxiquir (xic).

According to my analysis, in the formation of prefixed deadjectival Vs there is an intermediate stage in which the A has become a V, but the prefix is not present as yet.

> Here is a list of some of the existing intermediate Vs:

```
Agre \rightarrow agrir(-se) \rightarrow enagrir(-se)
Cec \rightarrow cegar \rightarrow encegar
Corb \rightarrow corbar(-se) \rightarrow encorbar(-se)
Cresp \rightarrow crespar \rightarrow encrespar(-se)
Doble \rightarrow doblar(-se) \rightarrow endoblar
Guerxo \rightarrow guerxar(-se) \rightarrow enguerxir(-se)
Rellent \rightarrow rellentar \rightarrow enrellentir(-se)
```

*Note that the verbs *ensutzar/ensutzir/ensutzeir* and *entristar(-se)* belong to Old Catalan.

$N \rightarrow [en+N]_V$

A) Trans [+c] (usually [+c+m]) [-c-m] 'to put something around/in/onto/towards N' Location Vs.

enarbrar(-se) (arbre), encabassar (cabàs), encadellar (cadell), encaixar (caixa), encaixonar (caixó), encalaixonar (calaixó), encambrar(-se) (cambra), encaminar(-se) (camí), encanalar (canal), encanastrar (canastra), encanonar (canó), encanyonar (canyó) encapçalar (capçal), encapsar (capsa), encapsular(-se) (càpsula), encarcanyar (carcanyell), encarcerar (càrcer), encarrerar(-se) (carrera), encarrilar(-se) (carril), encartar (carta), encartutxar (cartutx), encasar (casa), encasellar (casella), encastellar(se) (castell), encauar(-se) (cau), encelar-se (cel), encinglar-se (cingle), encistellar (cistell), enclaperar-se (clapera), enclaustrar(-se) (claustre), encletxar(-se) (cletxa), enclotar(-se) (clot), encoblar (cobla), encofinar (cofi), encofrar (cofre), encofurnar(-se) (cofurna), encollar (coll), encorralar (corral), encossiar (cossi), encotxar-se (cotxe), encovar-se (cova), encovenar (cove), encubar (cup), encubellar (cubell), endollar (dolla), endossar(-se) (dors), enfilosar (filosa), enfonsar(-se) (fons), enforatar (forat), enfornar (forn), enfotjar (fotja), enfundar (funda), engabiar(-se) (gàbia), engaltar (galta), engalzar (galze), engargamellar (gargamella), engarjolar (garjola), engatjar (gatge), englotir(-se) (glotis), engolar(-se) (gola), engolir(-se) (gola), engorgar-se (gorg), engorjar(-se) (gorja), engraellar (graella), engranerar (graner<gra), enguardiolar (guardiola), enguierar (guier), enjovar (jou), enllistar (llista), enllitar(-se) (llit), enllomar (llom), enqueixalar (queixal), enquistar-se (quist), enregistrar (registre), enriuar (riu), enrocar(-se) (roca), enrodar (roda), enrolar(-se) (rol), ensacar (sac), ensarriar (sàrria), ensarrionar (sarrió), ensarronar (sarró), ensenderar (sender), ensitjar (sitja), ensobrar (sobre), ensolcar (solc), ensotar(-se) (sot), entaular (taula), entinar (tina), entrampar(-se) (trampa), entrapar (trapa), entrullar (trull), envaixellar (vaixell), envalisar (valisa), envasar (vas), and envergar (verga).

> Intermediate Vs which have meanings related to the prefixed Vs (A.1):

Arbre \rightarrow arbrar(-se) \rightarrow enarbrar(-se) Camí \rightarrow caminar \rightarrow encaminar(-se) Càpsula \rightarrow capsular \rightarrow encapsular(-se) Clot \rightarrow clotar \rightarrow enclotar(-se) Coll \rightarrow collar \rightarrow encollar Llista \rightarrow llistar \rightarrow encollar Llit \rightarrow llistar \rightarrow enllistar Llit \rightarrow llitar \rightarrow enllitar(-se) Queixal \rightarrow queixalar \rightarrow enqueixalar Roda \rightarrow rodar \rightarrow enrodar Solc \rightarrow solcar \rightarrow ensolcar Trull \rightarrow trullar \rightarrow entrullar

> Intermediate Vs which have the same meaning as the prefixed Vs (A.2):

Registre \rightarrow registrar \rightarrow enregistrar

B) Trans [+c] (usually [+c+m]) [-c-m] 'to put N around/in/into/on something somebody' Locatum Vs

enaiguar(-se) (aigua), enamorar(-se) (amor), enarçar (arç), enartar (art), enasprar(-se) (aspre), encabestrar (cabestre), encabironar (cabiró), encadarnar (cadarn), encadenar(se) (cadena), encadirar (cadira), encaironar (cairó), encalcinar (calcina<calç), encalimar (calima), encalitiar(-se) (calitia), encalmar-se (calma), encamisar(-se) (camisa), encanyar (canya), encanyissar (canyis<canya), encaparrar(-se) (caparra<cap), encapellar(-se) (capell), encaperonar(-se) (capero), encaperullar(-se) (caperull), encaperutxar(-se) (caperutxa), encapirotar(-se) (capirot), encapotar(-se) (capot), encapotar (capota), encapritxar(-se) (capritx), encapullar(-se) (capulla), encaputxar(-se) (caputxa), encaramel.lar (caramel), encarbonar(-se) (carbó), encarestiar (carestia), encasquetar (casquet), encatifar (catifa), encausar (causa), encendrar (cendra), encerar (cera), encerclar (cercle), encercolar (cèrcol), encimbellar(-se) (cimbell), encimolsar (cimolsa), encintar (cinta), enciriar (ciri), enclavar (clau), enclavillar (clavilla), encobertar (coberta), encobertorar (cobertora), encoblar (coble), encofiar (còfia), encoixinar (coixí), encolar (cola), encolerir-se (còlera), enconxar (conxa), encoratjar(se) (coratge), encordar (corda), encordillar (cordill), encordonar (cordó), encortinar (cortina), encotillar (cotilla), encotonar (cotó), encrestar (cresta), encrocar (croca), encrostar(-se) (crosta), encrostimar(-se) (crostim), encuirar (cuir), encuirassar (cuirassa), enderiar-se (dèria), endeutar(-se) (deute), endiablar (diable), endimoniar (dimoni), endogalar (dogal), endolar (dol), endomassar (domàs), endosserar (dosser), endrapar (drap), enfaixar (faixa), enfardar (farda), enfarinar (farina), enfebrar-se (febre), enferrar (ferro), enferritjar-se (ferritja), enfervorir(-se) (fervor), enfeudar (feu), enfilar (fil), enflocar(-se) (floc), enflorar(-se) (flor), enfocar (focus), enfredorar(-se) (fredor<fred), enfredorir(-se) (fredor<fred), enfrenar (fre), enfuriar(-se) (fúria), enfurir (fúria), enfusellar (fusell), enfustar (fusta), engafar (gafa), engafetar (gafet), engalbar (galba), engallinar (gallina), engalonar(-se) (galó), engalvanir(-se) (galvana), engandallar (gandalla), enganxar (ganxo), engarlandar (garlanda), engarrotar (garrot), engassar (gassa), engavatxinar (gavatxi), engelabrir-se (blend of gel + gebre), engolfar (golfo), engomar (goma), engranar (gra), engravar (grava), engredar (greda), engreixar (greix), engreixinar (greixina<greix), engrescar(-se) (gresca), engrillonar (grilló), engronyar (grony), engualdrapar (gualdrapa), enguantar(-se) (guant), enguixar (guix), enherbar(se) (herba), enjardinar (jardí), enjoiellar (joiell), enjoncar (jonc), enjovar (jou), enjullar (jull), enjuncar (junc), enlacrar (lacre), enllagrimar-se (llàgrima), enllaminir (llamí), enllandar (llanda), enllangorir(-se) (llangor), enllardar(-se) (llard), enllardonar (llardó<llard), enllatar (llata), enlleganyar-se (lleganya), enlliçar (lliç), enllistonar (llistó), enllosar (llosa), enllotar(-se) (llot), enllustrar(-se) (llustre), enneguitar-se (neguit), ennigular-se (nígul), ennuvolar(-se) (núvol), enorgullar(-se) (orgull), enorgullir(-se) (orgull), enquimerar(-se) (quimera), enquitranar (quitrà), enrabiar(-se) (ràbia), enrajar (raig), enrajolar (rajola), enramar (ram), enramellar (ramell<ram), enrampar(-se) (rampa), enrandar (randa), enredoltar (redolta), enredortar (redorta), enreixar (reixa), enriallar(-se) (rialla), enrivetar (rivet), enrogallar-se (rogall), enrondar (ronda), enrosar(-se) (ros), enrovinar (rovina), enrubinar (rubina), ensabonar (sabó), ensafranar (safrà), ensaginar (sagí), ensagnar(-se) (sang), ensalivar(-se) (saliva), ensamarrar-se (samarra), ensellar (sella), ensementar (sement), enserrellar (serrell), ensetinar (setí), enseuar (sèu), ensivellar (sivella), ensucrar (sucre), ensulfatar (sulfat), ensutjar (sutja), entacar (taca), entapissar (tapís), entarimar (tarima), entataxar (tatxa), entaulellar (taulell<taula), entelar(-se) (tel), entelar (tela), entendar (tenda), entenebrar(se) (tenebra), entenebrir(-se) (tenebra), enteranyinar-se (teranyina), enterrosar(-se) (terròs), entintar (tinta), entoiar (toia), entovar (tova), entuixegar (túixec), enturar (turo), envelar (vel), envelar (vela), envellutar (vellut), enverdescar (verdesca), enverinar(-se) (verí), envermellonar (vermelló), envernissar (vernís), envescar(-se) (vesc), envetar (veta), envidrar (vidre), envidriar (vidre), envigorir(-se) (vigor), envinar (vi), envinyar (vinya), envirollar (virolla), enviscar(-se) (visc), envitrallar (vitrall), enxarolar (xarol), and enxavetar (xaveta).

> Intermediate Vs which have meanings related to the prefixed Vs (B.1):

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Calma \rightarrow calmar(-se) \rightarrow encalmar-se
Carbó \rightarrow carbonar \rightarrow encarbonar(-se)
Cendra \rightarrow cendrar \rightarrow encendrar
Clau \rightarrow clavar \rightarrow enclavar
Corda \rightarrow cordar \rightarrow encordar
Ferro \rightarrow ferrar \rightarrow enferrar
Fil \rightarrow filar \rightarrow enfilar
Fre \rightarrow enfrenar
      \rightarrow frenar
Garrot \rightarrow garrotar \rightarrow engarrotar
Gra \rightarrow granar \rightarrow engranar
Greix \rightarrow engreixar
         \rightarrow greixar
Guix \rightarrow guixar \rightarrow enguixar
Ros \rightarrow rosar \rightarrow enrosar(-se)
Sagi \rightarrow saginar \rightarrow ensaginar
Sang \rightarrow sagnar \rightarrow ensagnar(-se)
Saliva \rightarrow salivar \rightarrow ensalivar(-se)
Taca \rightarrow tacar \rightarrow entacar
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> Intermediate Vs which have the same meaning as the prefixed Vs (B.2):

Aspre \rightarrow asprar \rightarrow enasprar(-se) Cabestre \rightarrow cabestrar \rightarrow encabestrar $Cairó \rightarrow caironar \rightarrow encaironar$ Cercle \rightarrow encerclar \rightarrow cerclar $Cercol \rightarrow encercolar$ \rightarrow cercolar Cinta \rightarrow cintar \rightarrow encintar Clavilla \rightarrow clavillar \rightarrow enclavillar Cuirassa \rightarrow cuirassar \rightarrow encuirassar $Drap \rightarrow drapar \rightarrow endrapar$ $Faixa \rightarrow faixar(-se) \rightarrow enfaixar$ Lacre \rightarrow lacrar \rightarrow enlacrar $Llustre \rightarrow llustrar$ \rightarrow enllustrar(-se) $Orgull \rightarrow orgullar(-se) \rightarrow enorgullir(-se)$ Rivet \rightarrow rivetar \rightarrow enrivetar $Seti \rightarrow setinar \rightarrow ensetinar$ Sulfat \rightarrow sulfatar \rightarrow ensulfatar

Tela \rightarrow telar \rightarrow entelar Verí \rightarrow verinar \rightarrow enverinar(-se) Xarol \rightarrow xarolar \rightarrow enxarolar

A/B) Some verbs fit into either group A or B:

Enastar (ast), encarar(-se) (cara), encarnar (-se) (carn), encartonar (cartó), encastellar (se) (castell), encepar (cep), endentar(-se) (dent), enfangar(-se) (fang), enforcar (forca), enforquillar (forquilla), enformar (forma), enfrontar(-se) (front), engarbullar (garbull), engrapar (grapa), enguerrar (guerra), enjoiar(-se) (joia), enjudiciar (judici), enllaunar (llauna), enrastellar (rastell), enroscar (rosca), ensabar (saba), ensorrar (sorra), enterrar (terra), entonar (to), entubar (tub), envinagrar (vinagre), and enxarxar (xarxa).

Some intermediate Vs have related meanings to the prefixed Vs (A/B.1):

Dent \rightarrow dentar \rightarrow endentar(-se) Grapa \rightarrow grapar \rightarrow engrapar Rastell \rightarrow rastellar \rightarrow enrastellar Sorra \rightarrow sorrar \rightarrow ensorrar

Some intermediate Vs have the same meanings as the prefixed Vs (A/B.2):

Forma \rightarrow formar(-se) \rightarrow enformar Rosca \rightarrow roscar \rightarrow enroscar

C) N as a result 'to make N' [+c] [-c-m] / Reflexive 'to become N' [-c-m] Vs of creation

Enarcar(-se) (arc), encadastrar (cadastre), encallir(-se) (call), encanallar-se (canalla), encarrellar (carrell), encartonar-se (cartó), encirar-se/enciriar-se (ciri), encistar(-se) (cist), encoixinar (coixí), enconcar(-se) (conca), encordonar (cordó), encrestar (cresta), endosserar (dosser), enfarcellar (farcell), enfardar (farda), enfardellar (fardell), enfardar (farda), enfeixar (feix), enfistular(-se) (fístula), enfolcar (folc), enforcar (forc), engallarse/engallir-se (gall), engarbullar (garbull), engolfar-se (golf), engorgar-se (gorg), engraellar (graella), engruixar (gruix), engruixir(-se) (gruix), enjardinar (jardí), enllacar (llac), enllaçar (llaç), enquadernar (quadern), enraiar (rai), enrastellerar (rastellera), enrinxolar(-se) (rínxol), enrotllar (rotlle), enrullar(-se) (rull), enrunar(-se) (runa), ensenyorir(-se) (senyor), entoiar (toia), entollar(-se) (toll), entortellar (tortell), entorxar (torxa), entrunyellar (trunyella), envesprir (vespre), envetar (veta), envidreir-se (vidre), envidriar-se (vidre), enviduar (vidu), and enviudar (viuda).

Some intermediate Vs have related meanings to the prefixed Vs (C.1):

Feix \rightarrow feixar \rightarrow enfeixar Rotlle \rightarrow rotllar \rightarrow enrotllar(-se)

Some intermediate Vs have the same meanings as the prefixed Vs (C.2):

Arc \rightarrow arcar-se \rightarrow enarcar(-se) Llaç \rightarrow llaçar \rightarrow enllaçar Rínxol \rightarrow rinxolar(-se) \rightarrow enrinxolar(-se) Rull \rightarrow rullar \rightarrow enrullar(-se)

$V \rightarrow [en+V]_V$

List 1

Encantar (cantar), encarregar (carregar), encercar (cercar), encavalcar (cavalcar), encarregar (carregar), encobrir (cobrir), encomanar (comanar), encórrer (córrer), endreçar (dreçar), endurar (durar), endur-se (dur), enfondre (fondre), enfonyar (fonyar), enforfollar (forfollar), enfugir-se (fugir), engronsar (gronxar), enlluir (lluir), ennavegar-se (navegar), enreveixinar (reveixinar), enretirar (retirar), enseguir (seguir), ensibornar (subornar), ensomniar (somniar), ensostrar (sostrar), ensulsi(a)r-se (sulsir), entallar (tallar), entorcir (tòrcer), entravessar (travessar), envolar-se (volar), and enxautar-se (xautar-se).

List 2

Encarregar (carregar), encloure (cloure), encobrir (cobrir), endur-se (dur), enretirar (retirar), ensibornar (subornar), and entravessar (travessar).

Appendix C

This appendix includes the questionnaire given to English and Catalan speakers, to whom a kind of introduction was given.

Questionnaire for English speakers

Speakers of any language are creative and can form new words every day without noticing. In the following sentences, there are two possible verbs, most of which you won't probably have heard or used before. But, if you had to use one, which one would you choose? Which one sounds better? Please circle or underline the verb you choose. Many thanks for taking part in this experiment.

- 1. John drove home from work. When he arrived home he **garaged** / **engaraged** the car, because he didn't need it until the following day.
- 2. The villagers didn't have a boat to cross the river and they needed one desperately. So they decided to **enraft / raft** some logs together.
- 3. Nancy **emperfumed** / **perfumed** the girl before leaving home.
- 4. He **jammed** / **enjammed** his toast for breakfast.
- 5. Hundreds of spots have enuglied / uglied the teenager's face.
- 6. The dressmaker had to create an original piece of work for a contest, and she decided that she would **enleaf** / **leaf** the jumper she had just finished.
- 7. She had **embeautied** / **beautied** since she had put on some weight.
- 8. Her sister **jugged** / **enjugged** the water, as her father had told her.
- 9. The king **poored** / **empoored** the servant by taking away all his possessions.
- 10. Julie was bored, so she decided to **pencil** / **empencil** the schoolbag
- 11. The boyfriend **bouqueted** / **embouqueted** the flowers for his girlfriend.
- 12. She kept all the poems he had written to her. In fact, she had **booked** / **embooked** all of them.
- 13. The photographer **smalled** / **ensmalled** the picture because it didn't fit into the photo frame.
- 14. He **endrawered** / **drawered** the jumper. The weather was warm and he decided he wouldn't take it.
- 15. Little John was playing with shells on the beach. After a while, he **embucketted** / **bucketted** them. He wanted to take them home to show them to his grandma.

Questionnaire for Catalan speakers

Els parlants de qualsevol llengua són creatius i poden formar noves paraules sense adonar-se'n. En les següents frases hi ha una sèrie de verbs que potser no hauràs sentit o utilitzat mai. Per cada frase, hi ha més d'un verb possible. Si n'haguessis de triar un, quin triaries? Quin sona millor? Si us plau encercla o subratlla el verb que tu triïs. Moltes gràcies per haver participat en aquest experiment.

- 1. En Joan va arribar a casa del treball. Quan va arribar a casa, va **garatjar** / **engaratjar** el cotxe, ja que no l'havia d'utilitzar més fins l'endemà.
- 2. Ara fa una mica de vent. Si no podrem anar amb bici.
 a. s'esventa / es venta gaire
 - b. esventa / venta gaire
- 3. La Maria es va **emmelmelar** / **melmelar** la torrada, i el seu germà, en canvi, la va **mantegar** / **emmantegar**.
- 4. La mare va gerrar / engerrar l'aigua que havia tret del pou.
- 5. El petit Marc estava jugant amb petxines a la platja. Després d'una estona, les va **engadellar / galledar**. Se les volia emportar a casa per ensenyar-les a l'àvia.
- 6. L'Anna quan li fan trucades anònimes.
 - a. s'enfurioseix / enfurioseix
 - b. es furioseix / furioseix
- 7. La Dolors va perfumar / emperfumar la nena abans de sortir de casa.
- 8. El cuiner té el costum d'**orengar** / **enorengar** les pizzes una mica massa i llavors els clients es queixen.
- 9. L'Adrià tenia tots els llibres sobre la taula i la seva mare li va dir que hauria d'enlleixar-los / de lleixar-los, perquè ja era hora de parar taula per dinar.
- 10. Crec que no podrem anar a la platja aquesta tarda.
 - a. S'està entempestant / tempestant.
 - b. Està tempestant / Està entempesant.
- 11. M'ennervioso / em nervioso molt quan es fa tard i no arribo a temps.

Results: English questionnaire

When calculating the percentages the pair *garage/engarage* has not been included, because of its existence for some American English speakers. Similarly, the pair *poor/empoor* has also been omitted, due to the similarity between the prefixed version and the existing word *impoverish*.



Graph 1: English locative denominal Vs

	Location	Locatum	Locative
Prefixed	11.3	18.2	14.8
Unprefixed	88.7	81.8	85.2

Percentages of the prefixed Vs:

- Location Vs (en)jug: 9% [(en)garage: 0%] (em)book: 18.2% (en)drawer: 9% (em)bucket: 9%
- Locatum Vs (em)perfume: 0% (en)jam: 9% (en)leaf: 45.5% (em)pencil: 18.2%

Graph 2: English denominal Vs of creation



	Creation Interpretation
Prefixed	21.2
Unprefixed	78.8

Percentages of the prefixed Vs (en)raft: 9% (em)beauty: 36.4% (em)bouquet: 18.2%

Graph 3: English deadjectival Vs



	Deajectival Verbs	
Prefixed	22.7	
Unprefixed	77.3	

Percentages of the prefixed Vs

(en)ugly: 9% [(em)poor: 54.5%] (en)small: 36.4%

Results: Catalan questionnaire

Of all the Catalan sentences, the following graph illustrates only those Vs implying a locative relation. The first pair of columns correspond to the location reading while the second pair correspond to the locatum interpretation. The last two columns show the average of the two previous interpretations.



Graph 4: Catalan locative denominal Vs

	Location	Locatum	Locative
Prefixed	85	61.6	73.3
Unprefixed	15	38.4	26.7

Percentages of the prefixed Vs:

- Location Vs (en)garatjar: 73% (en)gerrar: 93.3% (en)gadellar: 86.7% (en)lleixar: 86.7%
- Locatum Vs (em)melmelar: 53.3% (em)mantegar: 66.6% (em)perfumar: 60% (en)orengar: 66.6%

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