SPANISH VERBALISATIONS AND THE INTERNAL STRUCTURE OF LEXICAL PREDICATES

Antonio Fábregas

Spanish Verbalisations and the Internal Structure of Lexical Predicates

Spanish Verbalisations and the Internal Structure of Lexical Predicates provides the first comprehensive and empirically detailed theoretical analysis of the different ways in which Spanish builds verbs from nouns and adjectives.

This book poses questions about the nature of theme vowels, parasynthesis and the structural relation between the three major lexical word classes from within a Neo-Constructionist framework that highlights the correlations between the syntactic and semantic behaviour of verbs and their morphological make up. Provided within are detailed empirical descriptions of each of the nine major ways of building lexical verbs in Spanish, as well as an integral analysis of those patterns that shows the significance of the contrast between them and their uses to address some foundational questions in morphological theory.

Spanish Verbalisations will be of particular interest to researchers in formal linguistics and Spanish.

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Antonio Fábregas

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To my parents

Contents

1 Introduction

What a verbalisation is and what we assume in this monograph

1.1 Verbalisations: the basics

This monograph presents an analysis of verbalisations, their internal structure and how the surface morphological make up is in fact the reflection of identifiable syntactic structures that condition how the resulting verb will be interpreted. For the purposes of this monograph verbalisation is defined in the strict sense, as an operation that builds a lexical verb from a base that belongs to a different category (see as an introduction Lang 1990; Hale & Keyser 1993; 2002; Rainer 1993; Lavale Ortiz 2011, 2013; Gibert-Sotelo & Pujol 2015; Batiukova 2021, as well as the detailed description in RAE & ASALE 2009: §8). By far, the two most frequent verbalisation processes are those that build verbs from adjectives (1a) and nouns (1b).

(1) a. grande 'big' > agrandar 'to make big'
   b. botella 'bottle' > embotellar 'to put into a bottle'

There are a few examples of etymologically adverbial or prepositional bases (*delante* 'in front of' > *adelantar* 'to pass'; *tras* 'behind' > *atrasar* 'to delay'), but their number is negligible in the context of verbalisations, and their properties can be independently diagnosed as those expected from deadjetival or denominal bases. In this monograph we will concentrate only on nominal and adjectival bases.

Traditionally, verbs in Spanish are cited in the infinitive, characterised by the suffix *-r*. Once this inflectional morpheme is removed and only the shape of lexical verbs is considered, it can be seen that verbalisation in Spanish involves what seems to be three separate processes: addition of a theme vowel, addition of a verbalising suffix with a theme vowel selected by it, and simultaneous addition of a prefix and a theme vowel with or without a suffix – a pattern called traditionally 'parasynthesis', (2c, 2d).

(2) a. forro 'cover' > forr-a 'to put a cover'
   b. claro 'clear' > clar-ific-a 'to clarify'
   c. claro 'clear' > a-clar-a 'to clear'
   d. palo 'stick' > a-pal-e-a 'to hit with sticks'

The term 'parasynthesis' deserves some clarification: traditionally, this term is introduced by Darmesteter (1875) to describe compounds where the non-head

element to the left of the base is compulsory and cannot be removed (cf. *tercer-mund-ista* 'related to the third world' vs. **mund-ista*). However, Darmesteter considered Romance prefixation an instance of compounding because he viewed prefixes as prepositions or adverbs, so he also extended this term to formations like (2c) and (2d), where the verb is not grammatical without the prefix. This second sense is the one that has become frequent in modern morphological studies, particularly within Spanish, and it is in this sense that we use it in this monograph: to define situations where the prefix and the suffix must co-occur in order to form a verb.

The maximal shape of a verbalisation in Spanish, excluding affixes that are not directly related to defining the base as a verb, is reproduced in (3).

(3) prefix-base-verbaliser-theme vowel

This monograph concentrates on the elements in (3), how they combine together, how they select their bases and what types of structures are associated to them. This includes their theme vowels (Chapter 2), the question of how and when parasynthesis applies and what its consequences are for the structure (Chapter 3), and also the different patterns that the suffixes involved in verbalisation trigger (Chapters 4–10). In this sense, we will examine five types of productive suffixal material:

   i) Verbalisations where the suffixal material reduces to the theme vowel (*-a*) and the verbaliser is zero (traditionally *-ar*, Chapters 4, 5 and 6)
  ii) Verbalisations where the suffix is *-ec-e* (*-ecer*, Chapter 7)
 iii) Verbalisations where the suffix is *-ific-a* (*-ificar*, Chapter 8)
 iv) Verbalisations where the suffix is *-e-a* (*-ear*, Chapter 9)
  v) Verbalisations where the suffix is *-iz-a* (*-izar*, Chapter 10)

Parasynthesis is very common with the suffixes in (i) and (ii). It is unattested with (iii), and restricted to nominal bases with (iv) and (v); parasynthesis in (v) is almost non-existent with nominal bases, but it is more productive with (iv). Thus, this monograph concentrates on 16 specific patterns of verbalisation:

Table 1.1 Patterns of verbalisation considered in this book

	From adjectives		From nouns	
	Parasynthetic	Prefix-less	Parasynthetic	Prefix-less
-a	prefix-A-a (Chapter 4)	A-a (Chapter 5)	prefix-N-a (Chapter 6)	N-a (Chapter 6)
-ec-e	prefix-A-ec-e (Chapter 7)	A-ec-e (Chapter 7)	prefix-N-ec-e (Chapter 7)	N-ec-e (Chapter 7)
-ific-a	Unattested	A-ific-a (Chapter 8)	Unattested	N-ifica (Chapter 8)
-e-a	Unattested	A-e-a (Chapter 9)	Prefix-N-e-a (Chapter 9)	N-e-a (Chapter 9)
-iz-a	Unattested	A-iz-a (Chapter 10)	Prefix-N-e-a (Chapter 10)	N-e-a (Chapter 10)

1.2 Main verb types

One important preliminary question in the study of verbalisations is how many types of semantic interpretation should be admitted when verbs are derived from nouns and adjectives. Here, there are two ways of classifying that should be differentiated: those that describe the semantic relation between the verb and the base (Clark & Clark 1979), and those that treat the verb as a whole without considering the contribution of the base.

1.2.1 Base-verbalisation relation

With respect to the first, some classifications of verbs can be hyper-specific and identify a high number of semantic categories (see for instance Lavale Ortiz 2013, who differentiates more than a dozen readings of the suffix *-iz-a*). In this monograph I will adopt an empirical view where I will only differentiate between verb classes when the class is defined by displaying a grammatical behaviour that differentiates it from others. My resulting classification is close to the more parsimonious classification in Gibert-Sotelo and Pujol (2015), which only recognises four relevant classes. I will propose a classification that makes an initial division between predicate and participant/argument. In the first group, the base is taken to define the predicational content of the verb; for instance, if the verb denotes a change of state – by far the most frequent situation – the base is used to provide the dimension, scale and degree which are used to give conceptual content to the change.

(4)   gordo 'fat' > en-gord-a 'to become fat'

When the base is a predicate, I will differentiate three main readings, which as we will see are matched by some relevant syntactic properties that have a direct reflection on the morphemes involved. Next to the change of state reading ('to become N', which can be causativised), I identify a stative, attributive reading meaning 'to be A', and a manifestation activity where the property is exhibited by the entity during the running time of the event, 'to show A', without entailing that the property was not possessed before the event. Nouns also exhibit these interpretations when used as bases of verbs. When the base is a noun, however, a fourth interpretation emerged – perhaps the corresponding one to 'exhibit A' in the nominal domain – which is generally characterised as 'manner', where the subject performs an event acting in a way that reproduces the manner typically associated to that base.

The participant reading, restricted to nouns because only nouns can act as arguments of verbs, involves a restricted number of systematic interpretations:

a)   Locative verbs, where the relation between the base and the internal argument is defined spatially. I divide these verbs in two subcategories.

    i.   Eventive locative verbs, involving change of location. These are traditionally differentiated in locatio and locatum verbs, where the first has a base noun that defines a region ('to locate something in N') and the

second has a base noun that defines some object that is located in the internal argument ('to locate N in something'; see Mateu 2002). Transfer verbs, closely related to locatum verbs – as we will see in chapter 6 – involve in essence the same relation, only that generally the endstate is interpreted as possessive rather than locative.

ii.   Stative locative verbs, meaning 'to be in N', or possessive verbs that can be considered the stative version of transfer verbs, 'to have N'.

b)   Instrumental and manner verbs. Instrumental verbs imply performing an action in a way that use of the instrument defines and can be paraphrased generally as 'to use N with something'. As I will argue in Chapters 6 and 9, I take this traditional class of verbs as in fact derived from the more typologically established class of manner verbs, that is, verbs where the base defines a particular way of performing the event.

c)   Creation and activity verbs, which denote an event whose endstate, if telic, is the creation of an object, or the causation of a state in someone. In its atelic reading, these verbs are rather paraphrased as 'to perform the activity N'.

These are, as we will see, the systematic readings, but next to them we will find cases where the relation between the base and the verb is less systematic and requires extra levels of semantic complexity. Crucially for the hypothesis that will be put forth in this book, these readings where the conceptual semantics of the base have to be exploited emerge with verbalisation patterns that lack prefixes. (5) gives one example where the base is interpreted as defining a type of attending an event that implies being there in person:

(5)   Juan se personó en la cena.
       Juan SE person-ThV in the dinner
       'Juan attended the dinner in person'

Nothing in the noun *persona* 'person' defines a manner through a type of behaviour, and the interpretation is connected, rather, to the expression *en persona* 'in person'. This case, where the structure is almost completely ignored and the meaning is calculated based on encyclopaedic or conceptual information associated to the base, including idioms and other expressions that relate to it, is typical of cases which lack parasynthesis.

Table 2 summarises the systematic readings that I propose in this monograph.

1.2.2 Verb types: Aktionsart and argument structure

It is customary to define verb classes based on two properties: lexical aspect and argument structure. In this monograph I assume the standard Vendler-Dowty classification (e.g., Dowty 1979), with four main types of verbs divided by three parameters – dynamicity, telicity and duration – which produce the standard four-way classification into states, activities, accomplishments and achievements.

Table 1.2 Base-verbalisation interpretations

	Dynamic	*Stative*
Predicate-base	change of state verb (become N/A); cf. §4.2, §4.3, §5.2 property exhibiting verb (to show A in an event); cf. §8.2.2 manner of acting verb (act in the manner of N); cf. §8.3	attributive verb (be N/A); cf. §4.4.3
Participant-base	locatio verb (to place something in N); cf. §5.3 locatum verb (to place N somewhere); cf. §5.3 transfer verb (to give/add N to something); cf. §5.4 creation verb (to produce N); cf. §5.6.1 activity verb (to perform N); cf. §5.6.1	stative locative verb (be in N); cf. §5.3.5 possessive verb (to have N); cf. §5.4.2

With respect to the aspectual types, I assume in particular, with Piñón (1997), that achievements correspond to boundaries (left or right) of situations, and with Marín and McNally (2011) that those boundaries can be independent of the extensions that they delimit, so that they can appear in combination with them or not. Given this situation, I assume that achievements lack any reading where the event is extended in time – when coerced into those readings, they are no longer achievements. From Piñón (1997) and Marín and McNally (2011) I take the following two tests as a sign that the verb is an achievement: (i) the in-phrase is interpreted as equivalent to 'after', denoting a delayed event (an event that is delayed by X time from the reference point) and (ii) the progressive form is interpreted as a prospective periphrasis involving a preparatory stage, along the lines of 'to be about to'.

(6) Juan llegó en una hora.
    Juan arrived in one hour
    'Juan arrived after one hour'
(7) María está llegando.
    María is arriving
    'María is about to arrive'

A relevant and controversial subcase in the Aktionsart realm in fact involves deadjectival verbalisations involving change of state verbs. Many of the deadjectival verbs display a vague aspectual behaviour that alternates between telic and atelic readings; the name 'degree achievements' has been coined to cover these cases since at least Dowty (1979), and there is a general intuition that degree and scalar structure are somehow involved in the fact that these verbs show such a variable aspectual behaviour (see 8).

(8) a.   The screen cleared for three minutes.
    b.   The screen cleared in three minutes.

However, judgements are not always easy to produce; speakers show a good degree of variability in these verbs, and as expected their analysis is unclear, with some approaches favouring more pragmatic accounts, and others proposing specific semantic primitives that determine, or at least strongly restrict, the range of aspectual readings. Chapter 4 will discuss these cases in some detail.

In terms of argument structure, I assume the standard three argument-structure classes of predicates since at least Perlmutter (1978): transitive verbs, in this context, are defined as verbs with both an internal and an external argument, and intransitive verbs are divided in unergative and unaccusative, depending on whether the only argument is assumed to be interpretable as an agent, causer or external initiator of the event or not. I assume in this monograph that the number and location of arguments is in principle orthogonal to the case assigning possibilities of the predicate, and therefore that a verb can be underlyingly transitive without assigning accusative.

Famously, it is difficult to identify tests that clearly differentiate between unergative and unaccusative verbs, but here we will concentrate on two main tests that, in our experience, work particularly well (although not always perfectly) in Spanish: (i) in an unaccusative verb, without the help of an initial locative adverb, the subject can be a bare noun phrase when postverbal and (ii) unaccusative verbs allow for absolute participle structures.

(9) a. Nacieron   niños   ese   año.
        were.born   children   that   year
     'Children were born that year'
    b. *Corrieron   niños   ese   año.
        ran   children   that   year
     Intended: 'Children ran that year'
(10) a. Nacido el niño, nos fuimos.
         born the child, us went.1pl
     'Once the child was born, we left'
     b. *Corrido el niño, nos fuimos.
         run the child, us went.1pl
     Intended: 'Once the child had run, we left'

1.2.3 The decomposition of lexical verbs

In my assumptions about the internal structure of the lexical verb area, I follow Ramchand (2018), who revises Ramchand (2008), in a set of basic claims that I summarise in what follows:

a) The lexical verb is in fact a syntactic area that consists of a number of independent syntactic projections.
b) The denotation of a lexical verb corresponds to a Davidsonian event (Davidson 1967; Parsons 1990), that is, a description of an eventuality that can be anchored to time and world.

c)   However, contra traditional Neo-Davidsoninan approaches, the Davidsonian event is divided into two parts: a set of heads that describe the eventuality and a head that adds time and world parameters to that description. Without the second, the lexical verb cannot combine with tense, mood and aspect and it cannot project into a full clause.

The event descriptive area consists of four heads which are largely described and motivated in Ramchand (2008). The role of these heads is to define subevents within the Aktionsart of the predicate at the same time that they introduce arguments that are related to those subevents. On top of these heads, a specific head Event (Evt) can be merged. Its sole role is to add time and world parameters to the event description and to provide a syntactic space to define the external argument of the predicate, which assimilates part of the functions that VoiceP has in other approaches (see Alexiadou et al. 2015; Fábregas & Putnam 2020 for different similar instantiations of the idea that Voice dominates the event descriptive heads, but without the proposal that such head also adds time and world parameters to the eventuality). (11) presents the basic configuration where all heads are present at the same time.

(11)   EvtP
       /   \
     DP   Evt
            /   \
          Evt   InitP
                 /   \
               Init   ProcP
                       /   \
                     DP   Proc
                             /   \
                           Proc   PathP
                                  /   \
                                Path   ResP
                                        /   \
                                      DP   Res
                                             /   \
                                           Res   BASE
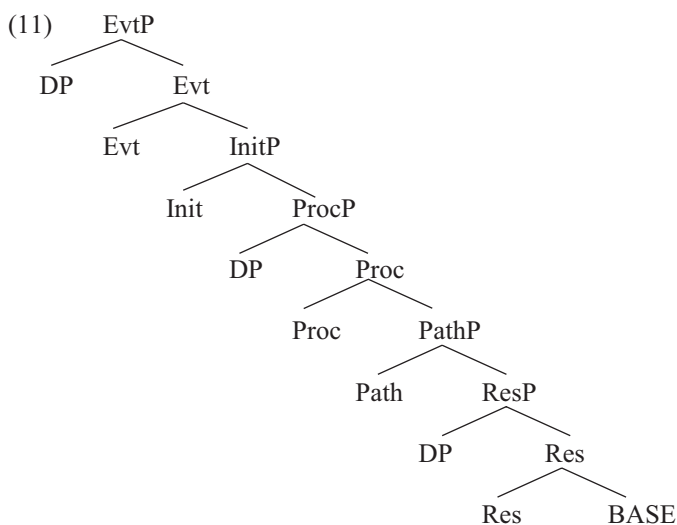
The event descriptive heads are the set Init(iation), Proc(ess) and Res(ult). In the revision of the structure made in Ramchand (2018), these heads fall into two classes: stative and eventive. Proc is the only head that is dynamic and defines an event where there is some measure of change or progression; this means that stative verbs must necessarily lack Proc. Proc introduces in its specifier an argument called 'Undergoer', which is affected through the process and experiences the change that is defined by Proc in combination with its complement.

Both Init and Res are stative heads. In Ramchand (2008) they were considered to be identical to each other and only differentiated by their relative position with

respect to Proc. In Ramchand (2018), in contrast, the two heads are differentiated by the availability of a specifier, that is: Res is a relational head, like Proc, which introduces both a specifier and a complement; the complement defines the result state in which the specifier, interpreted as Resultee, ends after the completion of the process. In contrast, Init is a non-relational stative head which introduces the triggering of the eventuality. Although in (11) the entity responsible for triggering that eventuality – the initiator – is not present in InitP, the specifier of EvtP is interpreted as initiator when EvtP has Init as its complement.

In addition to these three verbal heads, Ramchand (2008) allows for the presence of a PathP layer that intervenes between Proc and a possible ResP layer. Path is defined as a general trajectory, a set of ordered points in time, space or any other dimension, which can be used to measure the change introduced by Proc. Following Fábregas and Jiménez-Fernández (2016), I assume that Path is crucial in order to provide the dynamic part of Proc with internal extension denoting change across time: the telicity properties of that event, and its duration, depend on the presence of Path. When Path is not present, but ResP is, the event is defined as a non-durative event which must be telic.

Here is how I assume that these four event descriptive heads map to the aspectual and argumental types of verbs.

a)   Stative verbs are projections of either Init or Res without Proc. In Ramchand (2008), Init and Res could not combine together, because they were the same head in different configurational positions; in (2018), they are inherently different and the causing and the result of a process are not identical, so I take it that in principle a stative verb may be defined by both Init and Res at the same time.
b)   Activity verbs are projections of Proc with an unbounded Path that does not set a natural endpoint to the event, and therefore no culmination. Res must be missing, as it would define the event as telic, but Init might be present or not, depending on argument structure.
c)   Accomplishment verbs involve at least Proc and a constituent in the complement of Proc that defines telicity. This constituent should be in principle PathP, this time bounded, in order to provide extension to the measure of change defined by Proc.
d)   Achievements involve Init, Proc and Res, without Path, or with a Path that consists of only two points and therefore defines a sudden and punctual unique change.

In terms of the argument structure, a transitive verb in Ramchand's system involves a situation where at least the specifier of EvtP is distinct from one of the specifiers of Proc or Res. In principle, some transitive verbs would have an initiator that is also defined as undergoer experiencing a change ('to eat'), while others would be initiators that are distinct from the entity that experiences the change or the one that suffers it ('to break'). I take unergative verbs to be verbs where Init is necessarily present, as in verbs of the type of 'to eat', and where Proc introduces in its specifier position the same argument that later on becomes interpreted as initiator.

(12)   [EvtP DP   Evt   [InitP   Init   [ProcP   D̶P̶   Proc . . .]]]

As for unaccusatives, Ramchand (2008) treats them as projections of Init-Proc-Res (that is, ultimately as agentive or causative verbs) where there is only one argument that acts as the specifier of all three heads. I do not follow her in this claim. I take unaccusative verbs, at least those involved in the causative-inchoative pair that characterises change of state verbs and some other verb classes, to be the result of removing InitP in a verb whose result and process component shares the same argument in its specifier. In other words, I assume that if (13a) is a causative change of state verb, (13b), where InitP has been removed, is its unaccusative inchoative version, where the specifier of EvtP is interpreted as non agentive.

(13) a. [EvtP DP Evt [InitP Init [ProcP DP   Proc . . .]]]
      b. [EvtP DP Evt   [ProcP ~~DP~~ Proc . . .]]]

Let me be a bit more precisely about the role of EvtP, beyond providing a syntactic position to project the external argument in the eventuality and therefore acting as VoiceP. Evt has as its role to take the event description in its complement and to add to it the properties that make it possible that this description can be modified in terms of its temporal and modal properties, therefore allowing it to project within a clause.

The core intuition in Ramchand (2018) is that the event descriptive heads do not have properties of time or world; that is, they are incomplete event descriptions because they lack the information that allows them to get anchored to particular temporal periods and worlds. Evt is the head whose only function is to add those time and world parameters to the event description, making it possible then that the resulting syntactic configuration combines with grammatical aspect (AspP), tense (TP) and gets anchored to different sets of worlds (MoodP).

(14)   AspP
      /   \
    Asp   EvtP
          /   \
        DP   Evt
              /   \
            Evt   ProcP
            $e^{t,w}$ / \
                     DP   Proc
                         /   \
                       Proc   PathP
                       e   /   \
                           Path   ResP
                                   /   \
                                 DP   Res
                                       /   \
                                     Res   BASE
                                     e
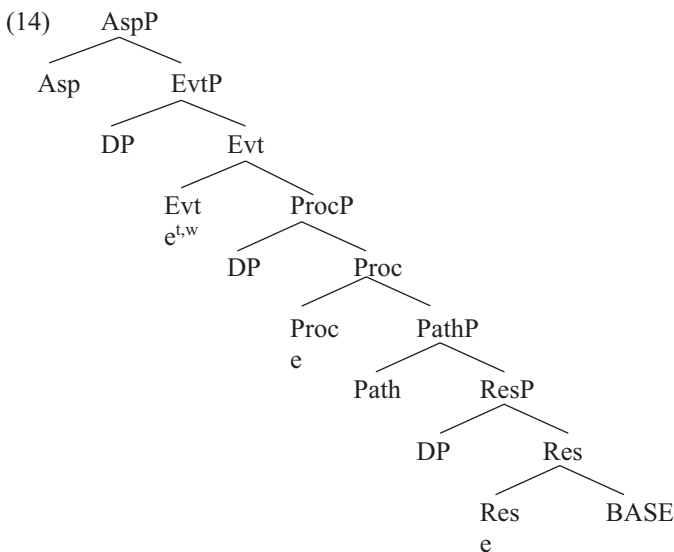
Finally, we would like to say a bit about our assumptions about category labels. We follow Wood and Marantz (2017) in their proposal that there are some under-specified labels in syntax which only become specified at the PF and LF interfaces. Specifically, we adhere to their proposal about the existence of a iotta head (ι) which is non-dynamic and corresponds to the following syntactic configuration:

(15)

```
        ιP
      /    \
   DP        ι
           /   \
          ι      X
```
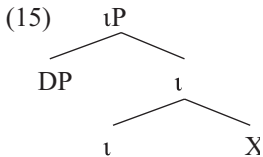
That is, ι is a relational head that contains a specifier and a complement and which is stative by default because it does not denote any dynamic change. In Wood and Marantz (2017), iotta can be manifested, among other heads, as Applicative and the functional prepositional head little p – Svenonius (2010); see §1.4.2 below in this chapter: in their analysis, the difference between these heads is not defined syntactically, but at the semantic and phonological interface, where the broader configuration where it appears will determine its interpretation.

Once the head Res has been deprived of time and world parameters of its own in Ramchand (2018), Res is identical to a iotta phrase, that is, identical to a little p functional projection, and to an applicative. All of them, abstractly, correspond to the configuration in (18).

In this monograph, there are three relevant heads that correspond to iotta and that, because of that, will be configurationally interpreted in the same way once the head that selects them is the same: Res, little p and PredP (Bowers 1993, 2001; Baker 2002), the relational head that introduces the subject of predication of adjectives. Note that we assume Ramchand (2018) in that Init is no longer a rela-tional head, which means that Init is not a manifestation of iotta, and that ProcP is relational but non stative, so it is not a manifestation of iotta either.

1.3 Nanosyntax and spell out

Our analysis of verbalisations assumes that there is no separate morphological component – not even a postsyntactic one – and assumes, therefore, the tenets of Nanosyntax (Starke 2002; 2009; Ramchand 2008; Caha 2009; Lundquist 2009; Dékány 2012; DeClercq 2013,; Fábregas 2016, 2020; Gibert Sotelo 2017; see Baunaz & Lander 2018 for a recent overview). In Nanosyntax lexical exponents are directly inserted into syntactic constituents, and there are no operations that adapt the syntactic terminals to the specific exponents that the language has, unlike what happens in Bonet (1991), Noyer (1997) and other works in Distrib-uted Morphology.

1.3.1 Primitive elements

Nanosyntax, in my view, contains two types of claims. The first set of claims has to do with the assumptions that the system makes about the syntactic structure and the nature of the primitive components involved. In that sense, Nanosyntax rejects specifiers, assumes that each syntactic head consists of only one feature – which means that uninterpretable features are impossible – and adopts an extreme cartographic position where there is a rigid Functional Sequence consisting of what seems to be a very high number of strictly ordered heads (Starke 2009; Baunaz & Lander 2018). I will not adopt these tenets of Nanosyntax; with Ramchand (2008, 2018) and Svenonius (2016), as in previous works (Fábregas 2016, 2020; Fábregas & Putnam 2020), I will use specifiers, allow my heads to have more than one feature and assume a structure along the lines of Wiltschko (2014), where the only universal hierarchy is the one that orders regions associated to different functions – the equivalents to the VP-area, the TP-area, the CP-area, etc.; within each one of those regions, however, heads are free to combine with each other provided that the result is semantically and phonologically interpretable.

I assume that combines three types of primitives, out of which in principle the second and the third can involve complex matrixes of features and the first lacks any syntactic feature at all:

(i) Roots ($\sqrt{1789}$, $\sqrt{1870}$, $\sqrt{1945}$ . . .), which lack a grammatical category and other syntactic features but which are defined by a phonological index that points to a particular exponent in the lexical repertoire (*red, wheat, chair* . . .; Borer 2013). I assume that the root, alone, also lacks conceptual semantics, which is assigned to them contextually once dominated by lexical or functional heads carrying syntactic features (Bermúdez-Otero 2013).

(ii) Lexical heads (N, V, P . . .), which in principle define the traditional word classes; as lexical items, these elements contain conceptual semantic information of their own and can categorise roots adding them conceptual semantics.

(iii) Functional heads (Gender, Mood, p . . .), that expand the information related to the configurations defined by lexical heads but do not add conceptual semantics to them; they can also categorise roots, but again without adding conceptual semantics to them. Functional heads partition the domain of elements defined by their complement (Déchaine 2019).

The second set of claims in Nanosyntax has to do with the procedure whereby one introduces exponents into the syntactic structures built by the computational system. I fully adopt Nanosyntax in this domain. Nanosyntax is defined by the three principles

(a) Phrasal Spell Out
(b) The Exhaustive Lexicalisation Principle
(c) The Superset Principle

1.3.2 *Phrasal spell out*

In standard accounts of spell out, exponents are taken to correspond to single heads. Nanosyntax allows exponents to identify any syntactic constituent, also heads, but including complex combinations of elements in a particular configuration. In Nanosyntax, the context of insertion of an exponent can be a syntactic tree, which is therefore specified in its lexical entry:

(16) /morpheme/   <---->   XP

```
        XP
       /  \
      X    YP
          /  \
         Y    Z
```
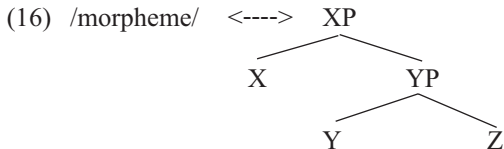
The claim is that a tree is built in the syntax, and once it is sent to spell out, an exponent that corresponds to that tree is searched. (17) could be the tree built, and (16) is introduced at spell out.

(17) MP

```
        MP
       /  \
      M    CP
          /  \
        DP    C
        /\   /  \
       /__\ C    [ XP        ]  <--- morpheme
                 [  /  \     ]
                 [ X    YP   ]
                 [     /  \  ]
                 [    Y    Z ]
```
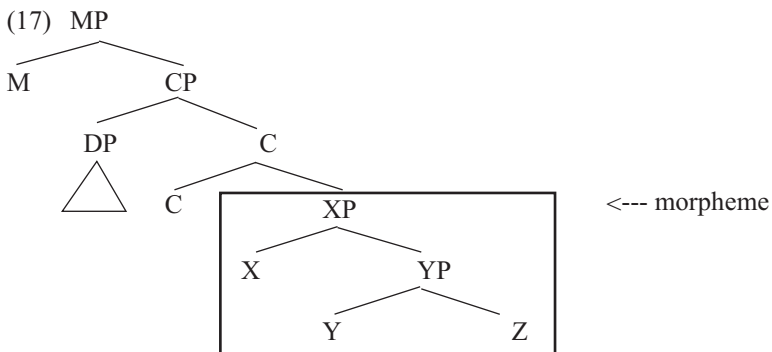
See Caha (2009) and Fábregas (2020) for more details about this procedure; I assume with Caha (2009) that the material that has already been identified with an exponent does not count for the purposes of defining the remaining structure as a constituent or not.

1.3.3 *The exhaustive lexicalisation principle*

I furthermore assume the Exhaustive Lexicalisation Principle (Fábregas 2007) as a condition on the spell out procedure that mandates that the insertion of exponents must identify each one of the features in the syntactic representation. Thus, if in (17) the labels correspond to the features contained in the tree, exponents that spell out each one of the features must be introduced, and no feature can be left unidentified. Unlike DM, there is no option like impoverishment (Bonet 1991)

that can remove features or terminals from syntax prior to identification through exponents. This, I think, should be the unmarked option in a system: if syntax precedes lexical insertion, one expects that syntax will condition the lexical items involved and not that the lexical items involved should play any role in determining which features can be kept in the syntactic representation and which ones have to go.

The Exhaustive Lexicalisation Principle means, in practice, that some configuration will be syntactically well-formed in a language, but still not grammatical in the sense that it cannot be spelled out, and therefore it cannot be externalised. If the configuration is such that the language in question lacks an exponent to spell out the set of syntactic features in that particular configuration, the Exhaustive Lexicalisation Principle will make that tree impossible in that language, something that might result in movement of some constituent in order to modify the configuration and make it spellable.

1.3.4 The superset principle

If features in the syntax cannot be removed, it follows that situations where the exponents do not match perfectly the features contained in a particular configuration will always be resolved by introducing exponents that have more features than represented in the syntax and not fewer features, as Distributed Morphology proposes (Halle & Marantz 1993). This means that in contrast to the DM Subset Principle, Nanosyntax adopts a Superset Principle (Caha 2009).

Let us illustrate it with a simple example. Assume the exponents in (18).

(18)   a. blah <---> [W, X, Y, Z]
       b. blih <---> [Y, Z]
       c. bluh <---> [Z]

What happens if syntax generates a tree which combines the heads in the order [X, Y, Z]? None of them reflects this specific combination. In Nanosyntax the proposal is that one uses (18a), which is the smallest lexical entry that contains a Superset of the features in the syntactic representation: all features in the syntax are thus identified – (18b) would leave X unidentified – even if the exponent includes a feature W that is not represented syntactically.

The intuition is that whenever there is no one-to-one correspondence between the stored lexical entries and the syntactic information, the tension is solved in benefit of syntax, all whose features are licensed by the lexicon, even if that means that the exponent will carry with it features that are useless in that particular syntactic configuration. I take this to be, in fact, a reflection of the well-known principle which states that the lexicon carries with it information that is irrelevant for syntax, such as the segmental content of the exponent and its conceptual semantic information. In my view, within the big picture, the Superset Principle exists simply because the lexicon always introduces information that is syntactically irrelevant.

The Superset Principle, then, allows an exponent that in principle lexicalises three layers of structure to reduce so that it only lexicalises two or even one of them, provided that no other exponent is a perfect (or closer) match to lexicalise that area. There are several proposals to restrict the Superset Principle, and here I adhere to the one proposed in Ramchand (2008), Underassociation, which I formulate as follows:

(19)   In an uninterrupted sequence of adjacent heads an exponent can lexicalise any uninterrupted sequence of heads within its lexical entry, provided that the heads involved are not separated by an additional constituent not contained in the lexical entry of the exponent.

In other words, if the exponent in question materialises X, Y and Z and the syntactic tree only shows Y and Z, the exponent can in principle spell out this chunk by the Superset Principle. However, if Y and Z are separated as a sequence by an additional head (e.g., W), as in (20), the exponent will not be able to spell out Y and Z and in the best-case scenario it would reduce to Y or Z, leaving the other head without spell out. If the language in question does not have another exponent that identifies this other head, the sequence will be ungrammatical because of the Exhaustive Lexicalisation Principle.

(20)   [YP   Y   [WP   W   [ZP   Z]]]

1.4 Nouns, adjectives and prepositions

Even though this monograph is about verbalisations, adjectives and nouns are crucially involved. This section presents our assumption about the internal structure of Spanish adjectives, drawing from Fábregas (2020).

1.4.1 Nouns vs. adjectives

Following Fábregas (2020), we take adjectives to be a derived category crosslinguistically (see also Stassen 1997). Specifically for the case of Spanish adjectives are taken to be derived using prepositional structure in combination with a non-relational head that can be identified, configurationally, as a noun (N).

The first explicit attempt to characterise the main lexical categories is Hale and Keyser (1993), who use bare phrase structure (Chomsky 1995) to define the categories through the basic relations complement-head and head-specifier, further restricted by the constraint that no head can project a specifier without projecting a complement first. In this view, the adjective is taken to be a head that needs a specifier but does not select a complement. Given bare phrase structure, no head can project a specifier without a complement. This conflict is resolved by merging the adjective with a relational head which takes it as its complement. Once that relational head has selected the adjective as a complement, it can project a specifier which will be interpreted as the subject of predication of the adjective.

(21)

```
          h
        /   \
     spec     h
            /   \
           h    X = A
```
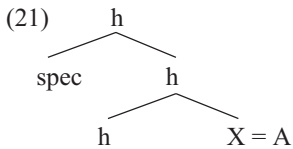
This relational head 'h' corresponds to what Hale & Keyser propose as the structure of a preposition (22). The preposition is defined as a head that selects a complement and projects a specifier, establishing a relation between the two arguments.

(22)

```
          X = P
        /   \
     spec     X
            /   \
           X    comp
```
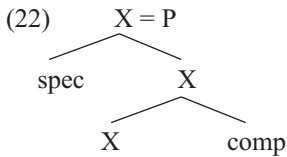
Thus, (21) is a structure where a relational head establishes a (predication) relation between the adjective and its subject argument. Going one step further, part of the literature has interpreted this proposal in a strongly configurational way: the adjective is obtained when a head that does not combine directly with any complement or specifier – that is, a noun – combines with a relational structure – that is, a preposition. In short, the claim is that an adjective is obtained by projecting prepositional structure above a noun (Mateu 2002). Fábregas (2020) expands this idea within a strongly Neo-Constructionist framework where all structural relations are defined in syntax, specifically arguing that adjectivalisations from nouns involve merging prepositional structure above the nominal base, in a way that the adjective integrates the noun as one of the arguments of the relational structure that characterises adjectives.

1.4.2 Prepositions

(23) represents the structure of locative prepositions according to Svenonius (2010).

(23)

```
          pP
        /   \
      DP      p
            /   \
           p    PathP
                /   \
             Path    PlaceP
                    /   \
                 Place    KP
                        /   \
                       K    DP
```
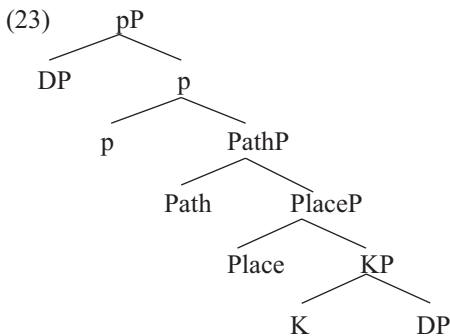
Reading the structure from bottom to top, we can identify three areas. The first area is the complement (DP), which is generally labelled 'ground' when the structure manifests as a prepositional phrase (Talmy 2000). This ground is adapted as an argument of the prepositional structure by a case phrase (KP). The role of this KP – which in Fábregas (2020) and Fábregas and Cabré (2019) I take to be a manifestation of inherent case, that is, case that is satisfied internally by presence of that head and not through an agreement relation with a functional projection, as structural case – is to turn the individual denoted by the DP into a relation R whose first term is the individual DP taken as ground, and which still lacks a figure. Svenonious relates the semantic role of this head with Wunderlich's (1991) proposal that locative prepositions turn their complements into spatial regions; that is, KP adapts the denotation of the DP so that it can be one member within a relation.

The second area is the lexical prepositional area, here characterised by two layers, Place and Path. Both have the role of modifying the relation defined by K in a way that it receives conceptual content, that is, that it becomes characterises as a spatial relation, a temporal one, an instrumental one, etc., depending on the content of the lexical heads involved. In (28) these heads have a locative semantics, and therefore the relation is defined as a spatial relation which can be lexically specified further as 'inclusion', 'behind', 'before', etc. By hypothesis, there would be other heads that could be merged in the lexical area of the preposition to define all the other types of relations that prepositions can express across languages, as partially explored in Roy and Svenonius (2008).

The difference between the place and the path layers, which can co-occur but always in the order shown in (28), is the type of spatial relation expressed. Place defines a static location, contained or not within a region, as in *John (is) at home* or *The book (is) on the table*; the difference between the lexical locative prepositions in each language depends on the type of static place relation expressed (containment in a three-dimensional space, as in *in*, containment on a surface as in *on*, contact in a point as in *at*, etc.).

Path is defined (Zwarts 2005) as an ordered series of points that define a trajectory that takes the location defined by Place as a reference point. It corresponds to the trajectory prepositions *to, towards, from*, etc., which express different types of trajectories – source, direction, etc. – and different boundedness relations – movement bounded by a final or initial location, unbounded movement towards a location.

Additionally, the prepositional structure allows for Degree projections, modifying the set of spatial relations that the preposition projects through its lexical layer, which in the case of spatial prepositions involves measuring the extension of the vector projected in a place P or of the path (Svenonius 2010: 134). (24) shows one such example:

(24) a. John is <u>ten meters</u> behind Mary.
      b. John ran <u>ten meters</u> into the tunnel.

The third area is the functional prepositional area, that corresponds to pP. The role of this area is to provide the second member of the relation defined by KP and whose content is provided by the lexical area. This second member, technically known as the figure (Talmy 1985), acts as the subject of the predication defined by the second member – the ground – and the relational predicate. Functional prepositions, that do not contain any conceptual semantic information about the type of relation expressed, are truncated prepositional projections that lack the lexical area and only contain the functional structure.

1.4.3 *Adjectives are built as prepositional phrases in Spanish*

Fábregas (2020) proposes that, in building adjectives from nouns, the same prepositional structures presented in (23) are recycled, but adapted to the adjective semantics. The minimal difference is that in such cases the base of the derivation is not a DP, but an NP. (24) represents the structure with the labels adapted to an adjectival structure, as introduced in Fábregas (2020).

(24)

```
          PredP
         /    \
       DP      Pred
              /    \
           Pred     ScaleP
                   /      \
                Scale      PropP
                          /     \
                       Prop      KP
                                /   \
                               K     NP
```
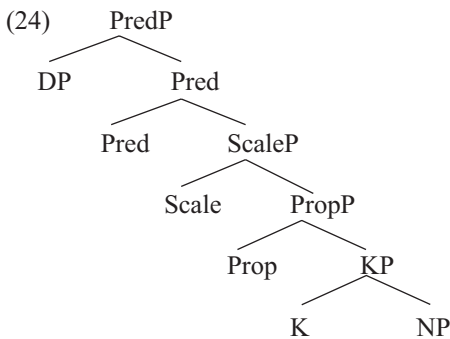
Reading from bottom to top, we can identify the same three areas. The base is composed of a nominal category, that becomes defined as a relation by introduction of KP. K turns the base into an argument of the adjectival structure, and uses the properties supplied by the noun to define some type of relation (e.g., *biología* 'biology' > *biológ-ico* 'biolog-ical, related to biology'). Some adjectives stop the derivation here, and thus do not come to be descriptive predicates or have a scalar structure related to them. Relational adjectives are such structures, where the KP is present but no lexical layer has been introduced to associate descriptive content to that relation. Relational adjectives, then, are structures like (25a), while qualifying adjectives contain in addition to this PropP and ScaleP (25b).

(25)   a.   [KP K [NP]]]]
       b.   [ScaleP   Scale   [PropP Prop   [KP K [NP]]]]

The lexical area involves minimally two heads, corresponding respectively to Place and Path. Prop(erty), like Place, acts as a modifier that specifies the semantic content of the relation defined by KP. In a possessive adjective like *aren-oso* 'sandy', the relation with *arena* 'sand' is one of possession (that has sand); in a causative adjective like *angusti-oso* 'stressful', the relation with *angustia* 'stress' is causative (that causes stress), etc. Note that I here use the label Prop(erty), which is equivalent to the lexical preposition P, for clarity. In the rest of the monograph, I will reduce Prop to P, to highlight the equivalence between the two labels.

The equivalent of Path in the adjective is the Scale. Like a path, the scale is a set of ordered points; in contrast to Path, the points are not defined within a spatial dimension, but are different values of the property defined at Prop: different degrees of 'sandiness', 'stressfulness', 'beauty', etc. Like paths, scales can be bounded or unbounded: adjectives with closed scales allow modification with *completely* (26a), and those whose scales are open reject it (26b). Like paths, the boundedness can be performed at the initial point of the sequence of ordered points, at the final point or at both, producing a taxonomy of scalar structures that has been studied in some detail by Kennedy and McNally (2005).

(26) a.   completamente borracho
            completely   drunk
      b.   *completamente alto
            completely   tall

Of course, as in the prepositional domain Degree can be projected above the scale, only that then the interpretation selects an interval within the scale of values of the adjective, which is considered to be equal, higher and lower that some reference point (see Kennedy 1999).

(27) a.   muy alto
            very tall
      b.   más alto que Juan
            more tall than Juan

With respect to the functional area, the translation of pP is PredP (Bowers 1993, 2001). As in the prepositional domain, PredP provides the second member of the relation, traditionally called 'subject of predication' in the adjectival domain.

1.4.4 *Exponency: adjectival exponents are bigger than nominal exponents*

With respect to exponency, Fábregas (2020) argues that adjectivalisers spell out the structure from KP to ScaleP. Pred is lexicalised in Spanish by the adjectival

agreement markers – on the assumption that Pred contains uninterpretable gender and number features. (28a) represents the spell out of the structure, assuming a feminine singular adjective. (28b) provides the entry for the adjectivaliser; (36c), the entry for the agreement marker features.

(28)   (mezcla) aren-os-a
         mixture sand-y-f
         'sandy mixture'

a.

```
              PredP
           ___/\___
        DP          Pred
                 ___/\___
              Pred |    ScaleP
              -a   |  __/\__
                   | Scale   PropP        <--- -os-
                   |       __/\__
                   |    Prop     KP
                   |   [poss]  _/\_
                   |         K    |  NP   <--- aren-
                   |_____|
```

b.

```
         ScaleP              <----> /'os/
       __/\__
    Scale    PropP
           __/\__
        Prop    KP
               _/\
              K
```
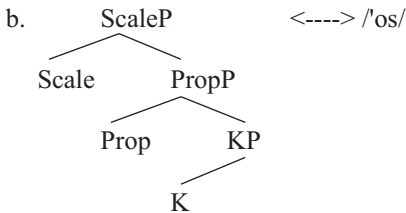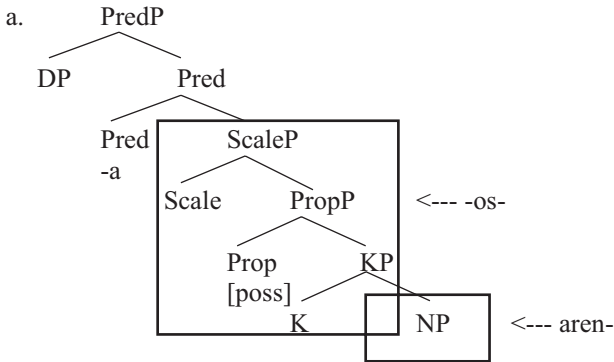
c.   Pred[f.sg]   <----> /-a/

In other words: the syntactic space required to build an adjective is bigger than the one required to build a noun; the syntactic space of a noun, taken to be a non-relational category, is minimal, corresponding only to one X projection that lacks complements and specifiers (Hale & Keyser 1993). In contrast, the adjective must spell out also the layers KP and PropP, which correspond to the lexical PP that gives lexical content to the relation denoted by K.

I propose a systematic difference in exponence size between nouns and adjectives in Spanish: adjectival exponents spell out the layers corresponding to the KP and the lexical prepositional structure, in their case Prop and Scale, while nominal exponents do not include this material in their spell out domain. This

means, by the Exhaustive Lexicalisation Principle in §1.3.3 above, that if present with nominal exponents, the equivalent to P and K will have to be spelled out by prepositions or other morphemes, while in adjectives the adjectival stem already spells them out.

(29)

PredP

DP   Pred

Pred   ScaleP
Agr
               Scale   PropP

                        Prop   KP

                              K   X...

Adjective syntactic space

Noun syntactic space
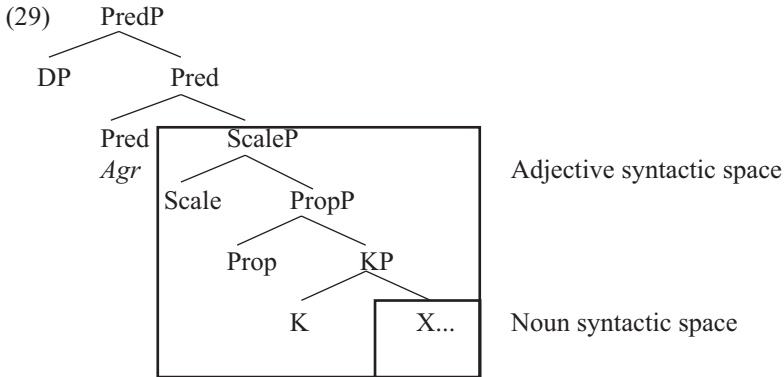
    I am assuming, with Baker (2002) that adjectives cannot introduce their subjects directly, within their lexical projection. In this sense, the adjective is structurally smaller than the verb. As we saw in §1.2.3 above, the lexical verb is built with a number of heads which have the capacity to introduce arguments in their comple-ment and specifier. In contrast, I assume that adjectives need an additional projec-tion which is a manifestation of iotta phrase: PredP. There is strong evidence that adjectives do not introduce their subjects directly, where 'directly' means 'within their lexical projection'. We have already spoken of the PredP that introduces that subject; PredP does not properly correspond to the lexical adjective – rather, it takes the complex of heads that define a lexical adjective as its complement – and in fact we have seen that in Spanish the adjectival layers are spelled out excluding the PredP layer. The proposal is that a lexical adjective might be semantically a predicate in the sense that it expresses a relation between a set of properties and an individual, but it cannot introduce that individual in its lexical layer: it needs to combine with a functional layer, PredP, which does the job.

    The expectation is that, then, natural languages should overtly illustrate in some cases situations where that functional layer is visible in adjectival predicates, in contrast with verbal predicates, where that functional layer should not be present. Baker (2002: 38 and folls.) shows that this is indeed the case. Some copular par-ticles in specific languages are bona fide candidates to spell out this functional projection – and note that in chapter 2 I will argue that this is not the right analysis for the elements that in Spanish are called 'copulas', which in Spanish behave rather as voice elements. Thus, from the perspective of the introduction of argu-ments, it seems that a lexical verb equals a lexical adjective plus a predicational structure. The lexical layers of the verb can perform the same function as the set

formed by the adjective, which provides the descriptive content of the predicate, and PredP, that provides the functional syntactic space to introduce the argument that relates to that predicate.

In terms of spell out, I will for the time being assume that the spell out of Pred in Spanish is generally the agreement between the subject – the figure – and the adjective – the ground.

Beyond the technical details, let us not lose the spirit of the claim: adjectives are built from heads without complements or specifiers by adding additional structure. In the case of Spanish, that additional structure is prepositional, or at least is recycled from the prepositional domain.

Going one step further, the stronger claim can be that all adjectival structures are built from nouns, in the configurational definition of 'noun' that Hale and Keyser (1993) proposed: nouns are heads without complements or specifiers. This is, in fact, the core of Mateu's (2002) proposal, and we will adopt it here. Consider an underived adjective structure, whose complement is a root:

(30)   PredP
       /   \
     DP   Pred
            /   \
          Pred   ScaleP
               /   \
             Scale   PropP
                       /   \
                     Prop   KP
                              /   \
                            K   √
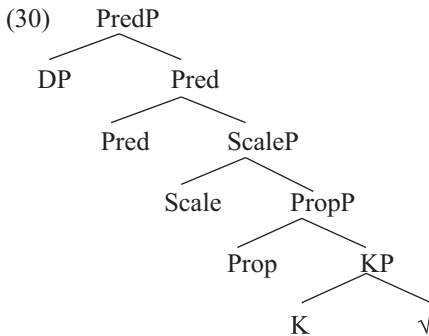
The complement of K is here a root. A root is by definition a head without any complement or specifier (Borer 2013). Configurationally, then, the root equals a noun. This implies treating nouns as the categorially simpler lexical word class, the one that emerges by default in the absence of additional structure. In fact, there is one robust piece of empirical evidence supporting this: any linguistic expression, when used in its citation form – and therefore treated in isolation from the broader syntactic context – is recategorised as a noun.

(31)   Hay demasiados 'que' en este texto.
       there.are too.many 'that' in this text

Treating an utterance in its citation form blocks it from taking other elements in the structure as complements or specifiers, and correlatively the expression is recategorised as a noun, as witnessed by its use as an argument of the predicate and the possible combination with determiners and quantifiers.

If nouns are the default lexical categories due to their reduced syntactic space, without possibility of taking arguments, then derivation from a root amounts to derivation from a noun, configurationally. Adjectives that seem underived from nouns would still have the structural configuration of adjectives derived from nouns. The KP layer defines a relation that PropP turns into a property by adding conceptual semantics to it; in this context, the root comes to name that property.

1.5 Main claims in this monograph

In a nutshell, here is what I will argue for in this monograph: a verbalisation is special among the category change processes because it involves integrating a noun or adjective within a predicate. Verbs are structurally bigger than both adjectives and nouns, and for this reason they are forced to absorb the denotation and properties of the noun or adjective in the resulting formation. The morphological make up of a verbalisation in Spanish allows us to see the ingredients that are used to build lexical predicates irrespective of the grammatical category of the base used in the word formation process.

From this perspective, parasynthesis is the situation that emerges when the language uses relational heads – prepositional structure, in more traditional terminology – to define syntactically how that integration must take place. The projection of syntactic structure sets limits and restrictions to how the verb will behave grammatically and how the base will be interpreted, because semantics cannot ignore the syntactic information. The more relational structure is projected, the more restricted the interpretation of the verb is, because each layer between the verbaliser and the base further restricts the information of the base that is relevant for the verb and the specific position in which the base will be located within the syntactic structure of the verb.

With a suffix that can both appear in parasynthesis and not, absence of prefixation with nominal bases means that the integration is not being performed through syntactic means and the conceptual semantics of the base determines the range of possible readings. There is, moreover, a difference is size between an adjective and a noun that makes it possible for nouns to appear in parasynthesis to a greater extent than adjectives, in essence reflecting the general proposal that adjectives in a language like Spanish are built by combining other structures with relational heads.

This general proposal will be applied to the 16 patterns of verbalisation that have been introduced in §1 above, and in the course of it we will examine how the meaning of bases defines the different verb classes, what types of prepositional structures are contained in change of location or instrumental verbs, and how the aspectual definition of the verb depends on degree and scalar structure. This monograph, we hope, reduces the role of 'morphology' in creating derived verbs, which in our account only need to refer to the lexical information when different verbalisation patterns can select the same base and as a result each one of the resulting formations specialises in different conceptual meanings of the adjective or noun involved in the process.

Let us begin.

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2   Theme vowels

A syntactic analysis for Spanish

2.1 Overview of the chapter

In this chapter we will provide an analysis of the theme vowel (ThV) that char-
acterises virtually all verbs in Spanish. We will concentrate on two questions: (i)
what syntactic position they occupy in a framework where they are not treated as
ornamental morphology (as in Distributed Morphology or Lexicalism) and (ii)
what contribution they make to the syntactic structure that characterises verbs,
that is, what explains the need in a language like Spanish to mark virtually all
verbs with a theme vowel.

Our main claim will be that theme vowels in Spanish spell out the head that
builds a full Davidsonian event with time and world parameters, which is labelled
EventP (EvtP) in Ramchand (2018).

(1)

```
            EventP
          /        \
        DP         Event
                 /       \
             Event       InitP
              ThV      /        \
                    Init        ProcP
                            /         \
                         Proc        ResP
                                   /       \
                                 Res      √1945
```
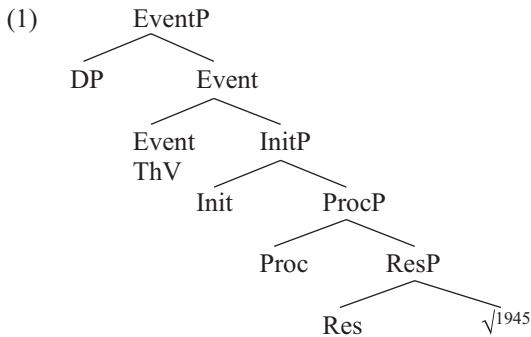
Along a line started in Kayne (2019), I will argue here that theme vowels
are functional verbs in the sense that they spell out the layer that verbs need in
order to become integrated in the clausal structure and combine with aspect,
mood and tense. As EvtP tags the event description performed by Init, Proc,

Res and Path with time and world parameters, without this head the verb cannot become a full verbal predicate that locates a situation involving participants in time and world.

(2)

```
                      AspP
                     /    \
                 Asp      EventP
                         /     \
                      DP        Event
                               /     \
                          Event       InitP
                          ThV        /     \
                              Init       ...√¹⁹⁴⁵
```
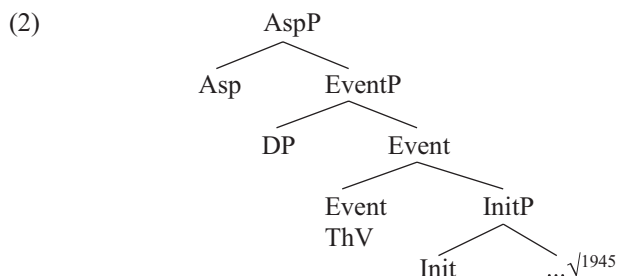
In the case of a lexical verb, the spell out associates the verbal exponent to the root and the verbal descriptor heads, as in the previous examples, while the theme vowel marks the verb as a Davidsonian event where time and world notions are added to the description of the eventuality in terms of argument structure and Aktionsart.

In order to argue for this analysis, we will use two types of evidence. The first one is the case of nominal or adjectival formations that contain a theme vowel but do not contain any verbal descriptors, such as (3) and (4), where the corresponding verbs do not exist.

(3) a.   leñ-a-dor
         wood-ThV-er, 'wood-cutter, lumberjack'
    b.   *leñ-a
         wood-ThV
         Intended: 'to cut wood'
(4)   intencion-a-do
         intention-ThV-ed, 'willing, '

Even though we will briefly discuss the theme vowel distinctions in Spanish, we want to be clear that our analysis does not give the type of principled account expected in a syntactico-centric theory for the alternations between -*a*-, -*e*- and -*i*- as theme vowels. To be clear, we will be unable to provide an account where the differences between these three exponents follow from lexical exponents associated to different syntactic configurations or heads, and will have to assume that the three vowels are allomorphs of the same exponent, that are idiosyncratically selected by the closest exponent contained in the complement of Event. In an underived verb, that exponent is the exponent corresponding to

the root (5), while in a derived verb, it is the verbaliser, when it has a non-zero exponent (6).

(5) a.   Event – -> -e/_____   *cog-, ca-, com-, beb-* . . .
     b.   Event – -> -i/_____   *aburr-, exist-, decid-, cruj-* . . .
     c.   Event – -> -a/Elsewhere
(6) a.   Event – -> -e/_____   *-ec-*
     b.   Event – -> -a/Elsewhere

2.2 Theme vowels: problems and restrictions

Theme vowels are morphemes that, in some languages, tag bases belonging to the verb grammatical category, both derived and underived. With different sets of properties, they have been identified in several language families (see for instance Medová & Wiland 2018 for their use in Slavic languages, where they argue that they spell out aspectual properties), but here we will concentrate on the version of theme vowel that appears in Romance languages, and particularly in Spanish. In Spanish, in fact, the presence of a theme vowel with a root is enough, on the surface, to ascribe it to the verbal category.

(7) a.   transparent-e
          transparent-NM, 'transparent'
     b.   transparent-a
           transparent-ThV, 'to be transparent'
(8) a.   ataqu-e
          attack-NM, 'attack'
     b.   atac-a
          attack-ThV, 'to attack'

Spanish has three theme vowels, which define three different conjugation patterns or subparadigms (Camus 2021). Traditionally, these three conjugation classes are numbered, with *-a* being the most frequent one, followed by *-i*, and finally *-e*, whose presence in Spanish is restricted to a small set of verbs. An estimate based on how many verbs of each conjugation are collected in the Real Academia Española dictionary shows that 84.2% of verbs belong to the first conjugation, with 8.1% of verbs in the second and 7.6% in the third.

(9) a.   cant-a
          sing-ThV[1]
     b.   beb-e
          drink-ThV[2]
     c.   viv-i
          live-ThV[3]

2.2.1 *Theme vowels: problems for morphological analysis*

Theme vowels provide several problems for morphological analysis. The first one is cross-linguistic: not all languages mark their verbs with such a morpheme.

(10) a. sing
      b. drink
      c. live

There is no known typological implication of having theme vowels or not, that is, verbs in languages with or without theme vowels behave in the same way otherwise, combining with tense, aspect or mood markers if the language has such inflectional properties, or with auxiliary verbs expressing these notions.

Secondly, the marking of a verb with a theme vowel does not reflect any known property of its semantic or syntactic behaviour. All (lexical) verbs are marked with a theme vowel in Spanish, irrespective of their aspectual properties, their case assigning possibilities, their argument structure or their conceptual content. (11) shows that verbs belonging to each one of the Vendler-Dowty classes carries a theme vowel, showing that the morpheme cannot mark aspectual differences, as it has been proposed for Slavic languages.

(11) a. bast-a   State
          be.enough-ThV
      b. nad-a   Activity
          swim-ThV
      c. cocin-a   Accomplishment
          cook-ThV
      d. lleg-a   Achievement
          arrive-ThV

Transitive or intransitive verbs also carry it, and the same verb allows both uses with the (same) theme vowel:

(12) a. sal-i   Intransitive
          exit-ThV
      b. sac-a   Transitive
          take.out-ThV
      c. cambi-a   Transitive or intransitive
          change-ThV

Verbs with agents or without them, with two or three arguments, or impersonal also carry theme vowels.

(13) a. nev-a   Impersonal
          snow-ThV
      b. entr-a   One argument
          enter-ThV

    c.   quem-a   Two arguments
          burn-ThV

    d.   entreg-a   Three arguments
          deliver-ThV

Moreover, the argument structure properties of the verb are preserved in nominalisations with or without the theme vowel, as well as the aspectual properties. Nominalisations in Spanish that exhibit a theme vowel can have exactly the same argument structure and aspectual properties as nominalisations without them; one could argue for a zero manifestation of the theme vowel in the second case, however.

(14) a.   la edific-a-ción del puente por parte de los obreros
          the build-ThV-ation of.the bridge by part of the workers
          'the building of the bridge by the workers'

      b.   la construc-ción del puente por parte de los obreros
          the build-ation of.the bridge by part of the workers
          'the building of the bridge by the workers'

Thus, there is no obvious property within the structure or semantics of the Spanish verb that can be matched with material expressed by the theme vowel. The same problem gets replicated by the distribution of the three theme vowels, where nobody has been able to identify a syntactic, semantic or phonological principle that explains their distribution. Example (11) previously shows that the same theme vowel is compatible with verbs of any aspectual class, and (13) shows the same for argument structure. (12c) shows that the theme vowel is not related to any transitivity value, as the theme vowel is unchanged in the transitive or intransitive use. Phonologically, the absence of any principle that explains the distribution of the theme vowels becomes obvious when one sees that roots that are completely homophonous produce verbs with different theme vowels:

(15) a.   sum-a
          add-ThV, 'to add'

      b.   sum-i
          plunge-ThV, 'to plunge'

Semantically, there is no signal again that the type of eventuality expressed by the verb plays any role in determining the choice of theme vowel: virtual synonymous verbs can take different theme vowels, as for instance in *aniquilar* 'annihilate' vs. *destruir* 'destroy', or *comer* 'eat' vs. *devorar* 'devour', or *subir, ascender* and *trepar*, all different verbs expressing the event of moving upwards.

The only generalisations that can be made about theme vowels are, on the surface, purely morphological, to the satisfaction of those following a Lexicalist

framework (Halle 1973; Scalise 1983; Varela 1990, among many others): words that the lexicon classifies as verbs receive, idiosyncratically, a particular extra morpheme in some languages, and the function of this morpheme is not syntactic, phonological or semantic. Theme vowels are treated as ornamental, idiosyncratic morphological markers even in the most established Neo-Constructionist theories, such as Distributed Morphology. Oltra-Massuet (1999; see also Oltra-Massuet & Arregi 2005) treats Romance theme vowels, in fact, as morphological exponents introduced in positions that are created to satisfy a morphological well-formedness condition of some languages. The syntactic representation does not have designated terminals for theme vowels, but a language like Spanish has a morphological rule that forces any verbal functional head to be tagged with an additional morphological terminal where the theme vowel is introduced. As such, the representation of a lexical verb like *cant-a* 'sing' in the syntax would be as in (16).

(16)   vP
      _____
     /   \
    v   √cant
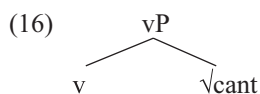
The functional head represented as little v in (16) receives a zero materialisation in the case of this root, but before the insertion of exponents, Spanish has a morphological rule that turns v into a branching node where the position for the theme vowel is added.

(17)   vP
      _____
     /   \
    v   √cant
  _____
 /   \
v   ThV
ø   -a
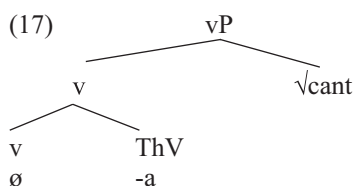
Oltra-Massuet's analysis makes this proposal in order to explain that the theme vowel does not express any syntactic or semantic property of the verb: the position for this exponent is not present in the syntax, but is added in the morphological component, which is part of the PF branch of the grammar, and therefore does not affect the semantic interpretation, which is performed on the other branch, LF. Technically, within DM, the theme vowel is then a dissociated morpheme, a case of ornamental morphology whose only impact is on the morphological component itself, where it can define the verb as belonging to a specific conjugation class – by selecting different allomorphs of the morphemes that spell out aspect,

mood or tense – and intervene in phonological processes – for instance, for stress assignment.

The reader has certainly understood already that, given the theoretical desiderata that were described in Chapter 1 (§1.3), the Lexicalist explanation or the Dissociated Morpheme analysis of theme vowels cannot be adopted in this monograph. Our system lacks any designated morphological component, and therefore any level where the syntactic structure can be expanded or modified to add an additional morpheme not corresponding to any syntactic feature. By the same token, our theoretical premises do not allow for a lexical component that acts before syntax, and defines words belonging to one grammatical category as having to carry a theme vowel. We will adopt a different analysis here.

2.2.2 *Toward a syntactic solution: Kayne (2019)*

One immediate obvious option that Oltra-Massuet's view opens within a system that lacks a morphological component, and which we will reject for the same reasons that Oltra-Massuet (1999) originally rejected it, is to treat the theme vowel as the exponent that materialises the verbal head itself, as in (18).

(18)   vP

      v   √cant
      -a
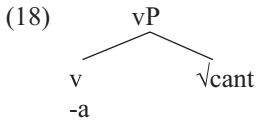
This is, in fact, the proposal that Kayne (2019) makes for theme vowels, claiming that they are the manifestation of the head that, within the syntactic structure, is responsible for the categorisation of a constituent – the root in (18) – as a verb. Kayne goes even further, and proposes that despite appearances, English also has theme vowels, only that they manifest as ø in the case of verbs in the present. In Kayne's (2019) proposal, the English theme vowel is the schwa that appears between the root and the *-d* morpheme in the past or participle form of a regular verb, thus segmenting *explained* as in (19a), and by implication its present form as (19b).

(19) a. explain-e-d
     b. explain-ø

Even though Kayne (2019) does not provide a concrete syntactic structure for his proposal, he is clear that the theme vowel should correspond to the verbal head, which means that, if we translate his proposal to a minimal verbal structure, we would obtain (20).

(20)

```
        TP
       /  \
      T    vP
     -d   /  \
         v   ...√explain
        -e-
```
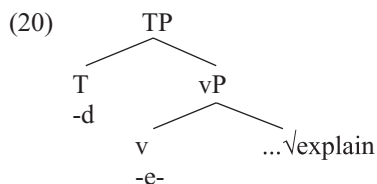
Kayne's (2019) argument in favour of this view has to do with the distribution of the -e- marker in English past and participle forms. In (20), the verbaliser little v turns a root that provides conceptual content into a verb. The presence of the theme vowel as an exponent presupposes that there is no other exponent introduced to spell out the little v. If instead of (20) we had a light verb structure where the conceptual content is provided by a noun or adjective, the light verb would then occupy the v position.

(21)

```
         TP
        /  \
       T    vP
           /  \
          v    XP
         get  / \
             sick
```
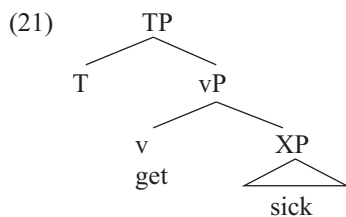
From (21) it straightforwardly follows that light verbs should not have themselves the -e- component that corresponds to the theme vowel, because light verbs should occupy the v position and the theme vowel is another exponent for the same head, not a different one. Kayne (2019) then shows that the best candidates to be a light verb in English systematically lack this -e- morpheme that triggers regular insertion of -d for the past or participle: *beed, *haved, *doed, *canned, *getted, *gived, *maked . . .

This proposal, in our view, has several advantages that advance our understanding of the theme vowel in a syntactic framework. One of them is that it solves the problem of why some languages apparently lack a theme vowel without any significant syntactic difference with respect to languages that have it. If the theme vowel is the expression of the verbal head in some languages, given that all languages have verbs in their syntax, the distinction between languages with and without theme vowels only reflects a surface difference at the level of vocabulary insertion on how the v head is spelled out, whether there is a separate exponent for this head or the head is spelled out together with the base, or through a light verb.

However, this theory also has a number of problems that will lead us to not adopting it in this monograph. The main one, noted by Kayne (2019) himself, is that the notion of light verb is not sufficiently precise in the grammar for us to make clear predictions about which verbs should carry the *-e-* element or not. Light verbs (Butt 2010) are generally defined by opposition to lexical verbs just by negative properties: they carry less conceptual semantics, ideally none, in contrast to lexical verbs. In this sense, verbs of different types can be defined as light, including copulative verbs, some auxiliaries and even lexical verbs in uses where they have lost their main conceptual meaning (as *run* in *run into trouble*). Light verbs, rather than a well-defined grammatical class with their own properties, describes a set of probably heterogeneous verbs that have some family resemblance in failing to describe completely an eventuality and needing combination with other elements that get interpreted as part of the predicate content. Given this, it is unclear what example of a verb carrying *-e-* should be taken as a counterexample to the claim that light verbs should not carry *-e-*: would the fact that English *appear* seems to take *-e-* (*appeared*) falsify the theory, given that one can argue that *appear* is light in structures like *His comments appeared likely to increase pressure on the administration*? It is equally unclear how the fact that write, seemingly lexical, takes an irregular past *wrote* would affect this theory. What are the limits of lightness in verbs, and how light needs a verb to be in order to be generated in little v?

Secondly, there is a more serious problem, which becomes apparent when one considers derived verbs with morphemes like *-ify* or *-ise* in English. These verbs always take a regular past form, and by Kayne's (2019) reasoning they should then take the theme vowel *-e-*.

(22) a.   classified
      b.   emphasised

However, verbalisers should plausibly be analysed as exponents in little v, so like light verbs they should prevent insertion of *-e-*. This is not the case, however. The same problem would be reproduced in Spanish, where the theme vowel is manifested in a phonologically robust way: presence of a verbaliser forces always insertion of a theme vowel.

(23) a.   clas-ific-a
           class-ify-ThV
      b.   humed-ec-e
           wet-vbls-ThV
      c.   vandal-iz-a
           vandal-ise-ThV

I will now present a proposal which removes the problem of the compatibility of verbalisers with theme vowels, and moreover, as I will argue, has the nice additional outcome that it sets the stage to lead us towards a principled and restricted

definition of what a light verb is, in contrast to what we saw with Kayne (2019). Let us see how this proposal works.

2.2.3 *Theme vowels as manifestations of EventP*

In chapter 1, §1.2.3, we presented the structure that we assume for the verbal domain. There we introduced Ramchand's (2018) proposal, where the Davidsonian eventuality is built compositionally in syntax by two different types of layers: the heads that partially describe an eventuality (Init, Proc, Res and Path in her proposal, and v and V in other, more widespread proposals) and the head Event, which adds to that description the parameters of time and world that allow the verb to combine with aspect, mood and tense at a clausal level.

(24)

```
              EvtP
            /      \
         DP         Evt
                  /      \
               Evt        InitP
                        /       \
                    Init         ProcP
                               /        \
                           Proc          ResP
                                       /      \
                                    Res         √
```
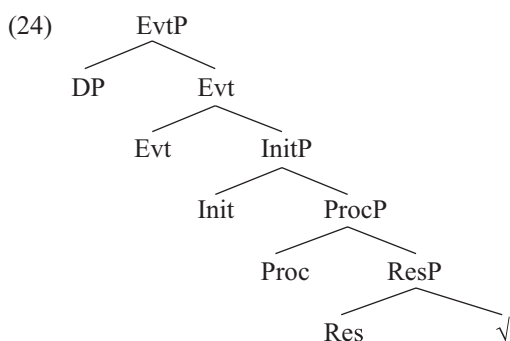
Remember from §1.2.3 that the event descriptive heads Init, Proc and Res are responsible for two things: defining the internal phases of the eventuality, in terms of Aktionsart, and defining the corresponding participants that participate in the eventuality, but lack the temporal or world-related information that allows that description to be instantiated in particular situations, that is, particular worlds and specific time periods or points. EventP adds the parameters of time and world that introduce the semantic variables that, later on, are ordered by grammatical aspect, mood and tense, and in addition to this is responsible for introducing syntactically the external argument, building on the information provided by InitP, or, lacking this projection, the highest eventuality descriptive head.

My proposal is that the theme vowel in Spanish is the spell out of EventP. Let us examine, in this order, the consequences of this view for how the different components of a verb divide the work in defining a Davidsonian eventuality, how the situation changes when the verb is derived and the immediate predictions that this theory makes for the distribution of theme vowels and verbs.

EventP is responsible for introducing the time and world parameters and is therefore necessary for a verb to be included as part of a clause, where the

eventuality is located in time and world and therefore becomes a proposition whose content can be evaluated as true or false. EventP does not introduce any descriptive content for the eventuality, in terms of Aktionsart, argument structure or conceptual content. Proposing that theme vowels are introduced in Event, then, accounts for the fact that (virtually) all verbs, irrespective of their argument structure, aspectual value or conceptual information carry a theme vowel in Spanish.

At the same time, the proposal explains that verbs need to be marked by a theme vowel. The reason is that the theme vowel spells out Event, which is the head that adds the properties that allow the event description to be linked to grammatical aspect, mood and tense. Without Event, and thus without a theme vowel, the verb cannot become a Davidsonian event. Take, as an illustration, a verb like *romper*, 'break'.

(25)

```
            TP
          /    \
        T      MoodP
              /     \
           Mood     AspP
                   /    \
                 Asp    EventP
                       /     \
                     DP      Event
                            /      \
                        Event    ┌──────────────────┐
                         -e      │  InitP           │   <--- romp-
                                 │  /    \          │
                                 │ Init  ...√^{1941} │
                                 └──────────────────┘
```
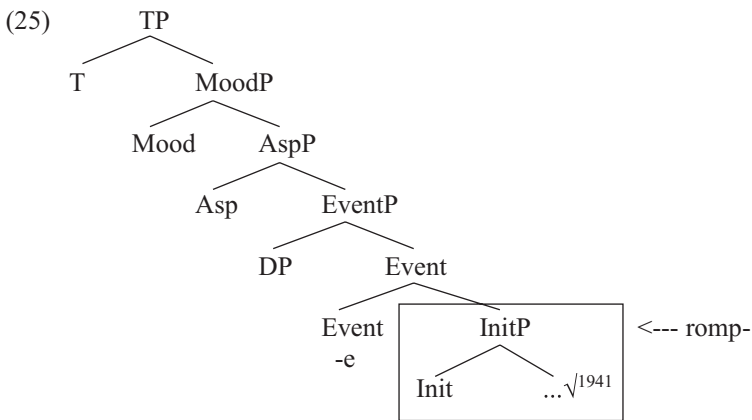
Event has the role of taking a partial description of eventualities (e) and mapping them into and event with time and world parameters ($e_{t,w}$). Mood operates over the world parameter of that event, while aspect and tense take the time parameters. If Event is missing, the verb cannot be combined with the functional structure of the clause, as it would happen, also, in the case of an adjectival or nominal predicate (26).

(26)   a.   *Juan enfermo-ba.
            Juan sick-ed
         Intended: 'Juan was sick'
       b.   *Juan presidente-ba
            Juan president-ed
         Intended: 'Juan was the president'

In a verb, like with an adjectival or nominal predicate, absence of Event – hence, absence of the theme vowel in our analysis – implies that the tense, aspect and mood do not find the right domain to operate over in the predicate.

(27)   a.   * TP

```
          TP
         /  \
        T    MoodP
            /    \
         Mood    AspP
                /    \
              Asp    InitP          <--- romp-
                    /     \
                  Init   ...√^1941
```

b.   * TP

```
          TP
         /  \
        T    MoodP
            /    \
         Mood    AspP
                /    \
              Asp     XP           <--- enferm-
                    /    \
                 Juan   ...√^1936
```
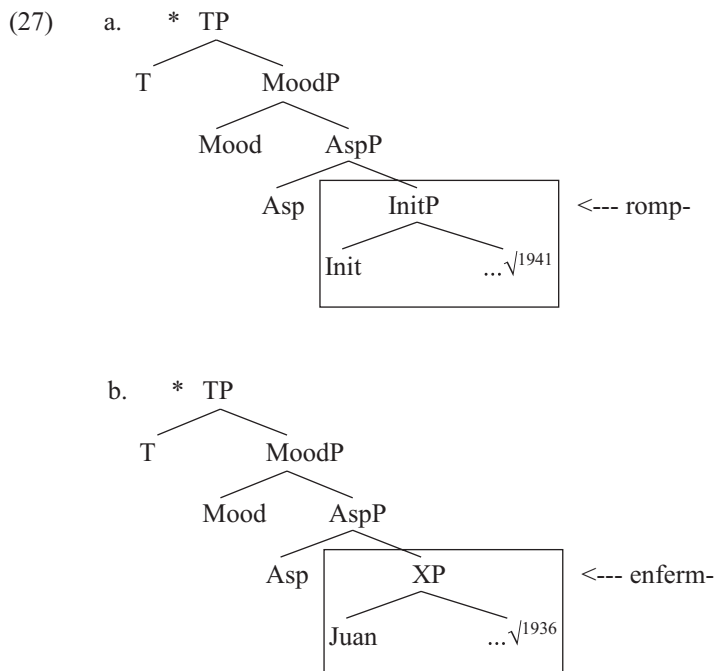
Let us now see what this theory means for how the labour is divided between the different heads and morphemes in building up a verb. Let us take again the verb *romper*, 'break'.

(28)   romp-e
       break-ThV

In our view, this has two components, the first of which is itself split: (a) an eventuality description, composed of some conceptual semantics – lexicalising some action or state of the external reality – and a description of the subphases of that eventuality, and its argument structure; (b) an event with time and world parameters, whose content is the previous description. In an underived verb like this, the base *romp-* performs the description, and the theme vowel builds the Davidsonian event from that description. Underlyingly, I take (28) to map to (29).

(29)
```
              EventP
             /      \
           DP        Event
                    /      \
                Event       InitP                        <--- romp-
                 -e-       /     \
                         Init     ProcP
                                 /     \
                               DP       Proc
                                       /     \
                                    Proc      ResP
                                             /     \
                                           DP       Res
                                                   /    \
                                                 Res    ...√¹⁹⁴¹
```
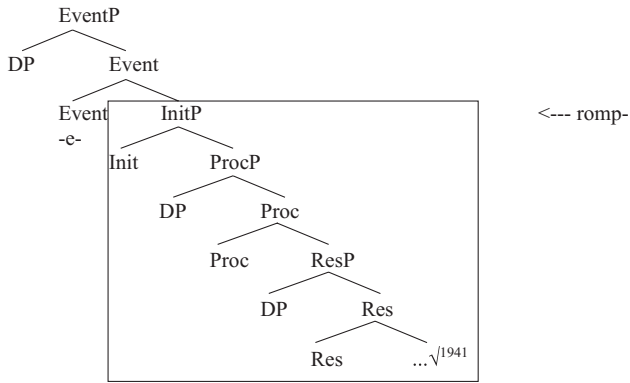
The base exponent spells out, by Phrasal Spell Out (cf. Chapter 1, §1.3.2), the syntactic constituent whose anchor is the root, containing the event descriptive heads. As I presented in §1.3.1, I take the root, like Acquaviva (2009) and Borer (2013), as a mere phonological index that points towards an entry in the lexical repertoire, and lacks conceptual semantics until it is embedded under lexical heads, in this case the Init-Proc-Res complex. Once in that context, it activates a particular conceptual description. The Init, Proc and Res heads define subphases for that description, a causing subevent, a process and a result of being separated into pieces. These subphases define participants, and Proc and Res, moreover, introduce syntactically the entities that – respectively – undergo the breaking event and are located in the broken state.

As for Event, its job is to pack that description within an event tagged with time and world, allowing the verbal domain to transition into the clausal domain; that is the job of the theme vowel in a language like Spanish.

Consider now a derived verb, like *clasificar* 'to classify', in order to see the job of the verbaliser (see chapter 8 for the structure I assume for *-ific-*).

(30) a.   clas-ific-a
            class-ify-ThV

      b.
```
              EventP
             /      \
           DP        Event
                    /      \
                Event       InitP                        <--- -ific-
                 -a        /     \
                         Init     ProcP
                                 /     \
                               DP       Proc
                                       /     \
                                    Proc      pP
                                             /    \
                                           D̶P̶      p
                                                  /  \
                                                 p    ... NP           <--- clas-
                                                         /   \
                                                        N     √¹⁹³⁹
```
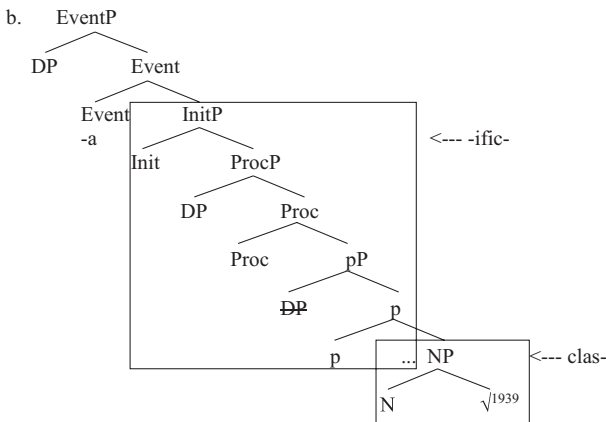
A derived verb simply assigns the two parts of the eventuality description to different exponents. The conceptual description is performed by the base, in this case a root *clas-* embedded under a nominal structure whose meaning is roughly 'category of things'. The verbaliser spells out, at a minimum, the heads that package that conceptual semantics into eventuality subphases and define the argument structure, integrating the entity, quality or relation expressed by the base into the description of an eventuality. As we will see in Chapters 4 and 5, the structure needed for this integration can be richer than the one depicted in (30b), but this is enough for our current purposes. The theme vowel spells out EventP, that packages that description into a Davidsonian event.

Note that this account, combined with the Nanosyntactic operation of Phrasal Spell Out, provides a straightforward explanation for languages that do not have a theme vowel. Remember that there are no typological implications of having or lacking a theme vowel for the syntax and semantics of verbs. In our view, this is because EventP is universally present in order to build events in the languages of the world. Having a theme vowel or not depends on whether that head spells out as a separate exponent (as in Spanish) or not (as in English).

(31)

Event P

Event   InitP

Init $...\sqrt{1944}$

<--- verbal exponent in English
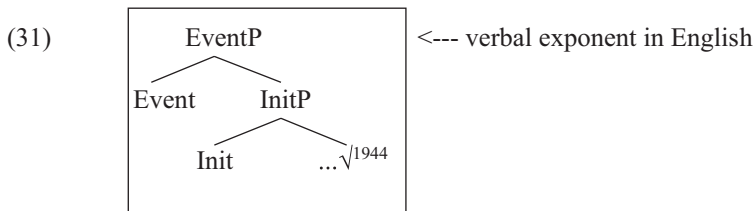
My proposal claims that the Spanish theme vowel is the spell out of Event, a head whose job is to add time and world parameters to the predicate to allow it to be integrated in a clause, and which provides syntactic space for the external argument. Given that this head is separated from the eventuality descriptive heads that give content to a verb, we are making the prediction that Event can be present in contexts where these heads are missing. This refers to two situations:

a) Cases where there is no eventuality description, but a clause is being built. These cases correspond, prototypically, to nominal predicates in combination with a copula.
b) Cases where there is no eventuality description, but where an external argument is required.

The first case corresponds to copulative sentences: we expect these structures to correspond to configurations without Init, Proc and Res, but with Event. In

other words, we expect the copula to spell out EventP (and possibly other heads), thus precluding the insertion of the theme vowel in Event. This will be examined in the next section, where we will show that copulative verbs in Spanish lack a theme vowel, and §2.4, where we will show that the approach also makes the right prediction for the auxiliary *haber* 'to have'.

The second case corresponds to nominalisations and adjectivalisations whose base is not verbal but where the derivational suffix needs an external argument. These will be cases where, even though there is no verb, there is a theme vowel that, we claim, spells out the EventP layer which was necessary to satisfy the requisite that an agent is syntactically present. This case will be examined in §2.5.

Let us proceed showing that the predictions of this account are correct.

2.3 Verb, but no theme vowel: copulative verbs

Copulas are grammatical objects that combine with non-verbal predicates in some languages, sometimes as an invariable particle, sometimes as a more complex syntactic object (Pustet 2003). In some languages, among them Spanish and English, the copula is materialised as a verb in all tenses, moods and aspectual values. For these languages, a traditional observation that has adopted many technical forms is that the copula is a mere device to license a non-verbal predicate within a clause, that is, a fake verb that provides a morphosyntactic locus so that the subject agreement, tense, aspect and mood affixes that the clausal construal requires can be licensed in the absence of a verbal predicate. The copula, then, is a support element, specifically verbal, the result of a last resort operation of sorts that introduces a dummy verbal element to support the clausal information (Halle & Marantz 1993; Schütze 1997; Cowper 2010; Bjorkman 2011, among many others).

The theory of EventP as a head that links a verb with the clause provides a new perspective for this traditional theory. Instead of proposing that the copula is a phonological or morphological support element for tense, aspect or mood affixes, the EventP theory allows for the stronger claim that the copula is the element that adds the time and world parameters to the non-verbal predicate that allow it to be integrated in a clause. We will make this claim for Spanish, without necessarily implying that the same analysis should be adopted for all copulas or event all languages where the copula seems verbal (in fact, see Arche et al. 2018; Welch 2018; O'Neill 2018 for strong evidence that verbal copulas can correspond to different layers of the verbal structure). This leads us to the following representation, where the predicate is non-verbal, defined as such with a Predication Phrase (Bowers 1993, 2000; Baker 2002) that takes the adjective, noun, preposition or adverb in its complement, and the copula spells out Event, to tag the predicate with time and world.

(32)

```
              EventP
            /        \
         DP          Event
                   /        \
              Event          PredP
             COPULA        /       \
                        D̶P̶          Pred
                                  /        \
                              Pred          AP / NP...
                            /        \
                        A/N...        ...√
```
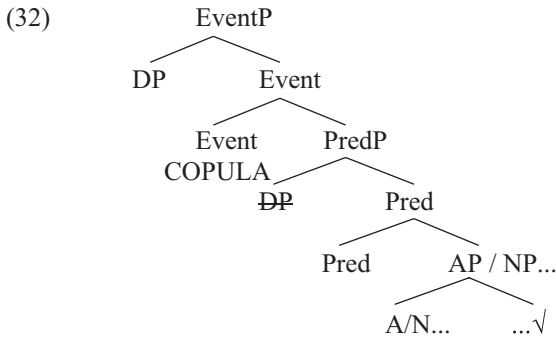
We assume that the copula is introduced, instead of a theme vowel, in Event when the predicate description does not include the lexical verb heads Init, Proc or Res. This configuration straightforwardly predicts that a copulative verb will not contain a theme vowel.

The proposal that the copulative verbs are placed in EventP can be supported, moreover, by their distribution to express diathesis. As we have already explained (§1.2.3), EventP covers some of the functions of VoiceP in other approaches. Our claim that copulative verbs in Spanish express Event means, ultimately, that they are also associated to voice and diathesis. This is what explains, in this approach, that they are precisely the two verbs used in Spanish to express, respectively, eventive and stative passives:

(33)   a.   El libro fue escrito.
            the book was[ser] written
       b.   El libro está escrito.
            the book was[estar] written

Traditional grammar in Spanish identifies two verbs as copulative: *ser* and *estar*. Their distribution is typically described in aspectual terms (Fernández Leborans 1999; Brucart 2012; Camacho 2012), and it roughly corresponds to a distinction between Individual Level and Stage Level predicates. The distribution of *ser* allows for a broader set of contexts (Marín 2010) than the one for *estar*, which specifically selects contexts with a stative interpretation that defines a result state, a perfective situation bounded in time, or a description linked with an external situation, depending on the specific theory.

Let us examine the two verbs, starting from *ser*, to show the absence of a theme vowel. Importantly, in this examination we will concentrate on the present indicative form. The reason for this methodological choice is that, as Oltra-Massuet (1999) shows, the Spanish verb can add more than one theme vowel.

Table 2.1 The three theme vowels in a conditional form

Root	v		Mood		Tense		Agreement 2sg
	v exponent	ThV	Mood exponent	ThV	Tense exponent	ThV	
cant-	ø	-a	r	í	ø	a	s

In her view – which we will partially adopt – the rest of the functional heads in the clausal structure (aspect, mood, tense, etc.) get split at the morphological component to accommodate for additional theme vowels. In consequence, an inflected verb will have up to three theme vowels. The following table shows the decomposition of a conditional form *cantarías* 'you would sing', according to Oltra-Massuet (1999).

As can be seen previously, the exponent for the syntactically present head is often zero, and the visible segment is a dissociated morpheme. Our proposal is not concerned, and does not make predictions, about the presence of theme vowels in the higher inflectional domain: we are only concerned about the lowest theme vowel, which we associate to Event. That is why we want to avoid forms with marked values for tense, aspect or mood. In Oltra-Massuet's (1999) proposal, an unmarked value of these heads implies removing the position at the morphological component and, therefore, no theme vowel is introduced for those. That is why we will focus on the present indicative form.

(34) presents its present indicative form, the one where (according to Oltra-Massuet 1999) the only theme vowel present in a verb is the one corresponding to the verb itself:

(34) a.   soy   1sg   (cf. cant-o, 'I sing')
     b.   eres   2sg   (cf. cant-a-s, 'you sing')
     c.   es   3sg   (cf. cant-a, 'he sings')
     d.   somos   1pl   (cf. cant-a-mos, 'we sing')
     e.   sois   2pl   (cf. cant-á-is, 'you sing')
     f.   son   3pl   (cf. cant-a-n, 'they sing')

The comparison with a regular verb shows that the base *so-* can be segmented in the plural form, as follows (35). None of the theme vowels is present in this form.

(35)   so-mos, so-is, so-n

The 1sg form could be decomposed as *so-* and *-y* for the 1sg, or, perhaps better, as *so-* and *-oy*, with reduction of the sequence of /o/ vowels, where *-oy* can be taken to be an allomorph of the 1sg agreement marker *-o*. The 3sg form, *es*,

seems to be undecomposable, while in *eres* one identifies the *-s* marker of 2sg otherwise, isolating a base *ere-* where one could perhaps argue that there is a final theme vowel; however, if *-e* was a theme vowel corresponding to either the 2nd or the 3rd conjugation, the imperfective form should be **ería* (36), when it is in fact *era*, without /i/.

(36)   a.   com-e   com-í-a
            eat-ThV   eat-ThV-impf
       b.   viv-i   viv-í-a
            live-ThV   live-ThV-impf
       c.   er-e-(s)   *er-í-a

It is clear, then, that the verb *ser* lacks any theme vowel in the present, as our theory predicts. Let us now look at *estar*.

(37)   a.   estoy /estói/   1sg   (cf. /kánto/)
       b.   estás   2sg   (cf. /kántas/)
       c.   está   3sg   (cf. /kánta/)
       d.   estamos   1pl
       e.   estáis   2pl
       f.   están   3pl   (cf. /kántan/)

In principle one could go for a segmentation where there is an *-a* theme vowel in this form, but we will now show that this would be wrong. Consider, first, the stress pattern of this verb, which would be exceptional if *-a* is a theme vowel, as the comparison with a regular verb shows in (37), as the stress falls on the last syllable in the singular forms and the third plural. For regular verbs such as *cantar*, Oltra-Massuet and Arregi (2005) explain the stress pattern in the present tense, where the relevant forms carry stress on the syllable preceding the theme vowel, as follows:

(i) In the general case, Spanish projects the right boundary of a metrical foot to the left of the tense morpheme, which in the present tense is a zero exponent.

(38)   x   x   )
       cant -a   -ø$_T$ -mos

(ii) Starting from this boundary, a iambic structure is projected, which in a 1pl or 2pl form has the effect of having the stress fall into the theme vowel.

(39)   x
       x   x   )
       cant -a   -ø$_T$ -mos

(iii) However, in the case of the singular forms and the 3pl in the present, the prosodic unit corresponding to the theme vowel gets erased, in a way that the stress ends up in the previous syllable.

(40)
```
     x                        -->      x
  x    x    )                       x      .      )
  cant  -a    -ø_T    -s             cant    -a    -ø_T    -s
```

Let's go back to the verb *estar* with this in mind: the stress in the relevant forms falls on the final -*a*. If this segment corresponded to the theme vowel, this would go against the rule in (40). However, if the -*a* does not correspond to a theme vowel, but is simply the last segment of the verbal base, the right stressed forms are generated for the six forms of *estar* in the present.

(41)
```
  x
     x         x    )
  esta    -ø_T    -s      (/estás/)
```

A second argument that the final /a/ in this verb is not a theme vowel comes from the perfective forms. If the verb belonged to the 1st conjugation, as expected if the -*a* is a theme vowel, we would expect the form in (42).

(42) *esta-ste   2sg   (cf. cant-a-ste)

The standard form of the perfective of estar is *estuviste*, where one can identify a theme vowel -*i* associated to the aspectual meaning but not to the verbal stem. Admittedly, there is at least one verb of the first conjugation that takes this type of perfective form in the standard variety: *andar* 'to walk'.

(43)   anduv-i-ste

However, this form is very often replaced by speakers with the regular and-a-ste, to such an extent that normative grammars insist on condemning it. This regularisation is, in fact, expected if the verb carries an -*a* theme vowel. Crucially for our purposes, in contrast to *andaste* ~ *anduviste*, the form **estaste* in (42) is unattested. No normative grammar has condemned its use simply because no speaker has ever tried to regularise *estuviste* to the normal pattern of inflection for 1st conjugation perfectives. In my proposal, nobody has ever tried to regularise estuviste to **estaste* because the verb does not belong to the 1st conjugation, lacking a theme vowel in the present.

Then, both copulative verbs lack theme vowels in the present, as expected by the proposal where both copulative verbs and theme vowels spell the same position, EventP. We set aside the question of how the two copulative verbs should be differentiated, although our analysis implies that one of the two verbs should be

syntactically more complex and involve at least a second head (cf. Brucart 2012; Camacho 2012).

2.4 The auxiliary verb *haber* as the theme vowel

In our discussion of Kayne (2019) in §2.2.2. above we pointed out that, lacking a principled definition of light verb, his proposal was difficult to test. Here, given the difficulty of proposing a definition of light verb, we will adopt the opposite strategy: we will examine another verb whose properties clearly indicate that it lacks any event descriptive content, and see how it behaves with respect to the theme vowel.

That verb is *haber*. In contemporary varieties, this verb has lost its connection with possession – expressed with *tener* – and lacks any conceptual meaning, being used either as an auxiliary verb (43a) or, in combination with an *-y* increment, as a presentational impersonal verb (43b).

(43) a. Juan ha comido.
          Juan has eaten
      b. Ha-y muchas cosas.
          have-loc many things
          'There are many things'

If we concentrate on the first use, which is the only one that inflects in person and number, we obtain the following pattern:

(44) a. he   /e/   1sg
      b. ha-s   /as/   2sg
      c. ha   /a/   3sg
      d. he-mos   /emos/   1pl
      e. hab-é-is   2pl
      f. ha-n   /an/   3pl

Given that the <h> grapheme here does not represent a sound, we can see that – once the agreement marking is removed – the verbal material left is either *-a* or *-e*, which correspond – I will claim, not by accident – to theme vowels in Spanish. The exception is the 2pl form *habéis*, but two observations must be made about it. First, the geographical distribution of this form is quite limited, as it is only used in European varieties; American varieties use *han* also for the 2pl form. Secondly, historically Spanish also had the form *heis*, phonologically /eis/, for the 2pl, where the verbal material corresponds to *-e*, now lost but active until the Golden Age.

With the only exception of the 2pl form in some varieties, then, we can see that the verbal material corresponding to the auxiliary *haber* is, in fact, identical to a theme vowel. From this perspective this is the only case of an auxiliary where one can argue that the theme vowel has, in fact, precluded the insertion of

a verb. If we examine the use of *haber* as an auxiliary, we see that it has several properties in common with the copulas: its complement corresponds to a verbal form, but one that appears in an invariable, non-agreeing form, the participle. The participle in Spanish is, in fact, used typically as an adjectival or nominal form, as in (45).

(45)   a.   un libro escrito
            a   book written
       b.   un escrito
            a   written, 'a text'

Thus, the participle should be considered a non-verbal category. One can speculate, then, that the role of this auxiliary is essentially the same as the copula, to allow a defective verbal form to be integrated within the clause by adding to it time and world parameters (46).

(46)

```
              EventP
             /      \
          DP          Event
                     /     \
                 Event       PredP
                 HABER      /     \
                         DP         Pred
```
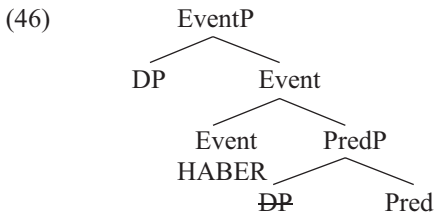
It is interesting to note, in this sense, that the traditional description of *haber* as a perfect auxiliary is misleading. As repeatedly noted in the literature (Xiquès 2015; Brucart & Xiquès 2018), even if the aspectual form built with *haber* is labeled 'perfect', the combination of this auxiliary with the participle is underspecified in its aspectual value. Some forms are indeed perfect, in the sense that they situate in the viewpoint perspective a state following the termination of the event, as in (47); the adverb *ya* 'already' selects this value.

(47)   Juan ya ha venido.
       Juan already has come
       'Juan has already come'

However, other uses are perfective – they express completed events – particularly in European Spanish, as in (48), where it is used for events recently completed.

(48)   Juan ha dormido mal esta noche.
       Juan has slept badly this night
       'Juan slept badly tonight'

Imperfective values are also possible, in the so-called universal or continuous perfect, where the eventuality is presented as ongoing.

(49) Juan ha trabajado aquí desde 2005.
      Juan has worked here since 2005

This flexibility is an argument to propose that this auxiliary is located in EventP, where instead of defining a particular aspectual value it adapts a participle to be further modified by aspect.

To summarise this first part of the argument that theme vowels are spelling out Event, here is what we have said:

a) Copulas spell out EventP and no material below it, and they lack theme vowels
b) The verb *haber* spells out EventP, and no material below it, and its manifestation corresponds to the theme vowel.
c) The other prototypical empty verb in Spanish, *haber*, in fact spells out as a theme vowel.

2.5 Theme vowels without verbs

Let us now move to the second part of the argument: theme vowels should be present in non-verbal contexts where there is a syntactic need to project an external argument. This would correspond, like copulative verbs, to configurations where EventP does not dominate projections that describe an eventuality; unlike copulative verbs, these contexts involve situations where EventP is necessary to introduce an external argument, not to add time and world parameters to the predicate.

As we will see, what these cases have in common is that they are adjectivalisations or nominalisations which require an external causer, in some cases defined as a prototypical agent, with a base which does not provide the descriptive notions necessary to define this participant (InitP, in the system assumed here, or an agentive little v in Harley 1995, Rothstein 2001 and others). There are two systematic cases of this, involving the agentive nominaliser *-dor* '-er' and the adjectivaliser *-ble*, which triggers a reading where a passive situation that is externally caused is created.

Beyond these two more systematic cases, I am aware of only one more example, the participle in (50).

(50) intención-a-do
      intention-ThV-ed
      'made willingly'
(51) a. un fuego intencionado
          a firewillingly-caused
          'a fire that has been caused willingly by someone'
      b. lesiones intencionadas
          lesions willingly-caused
          'lesions that have been caused willingly by someone'

This word can be exhaustively segmented in a nominal base, a theme vowel and a participial marking. The important property that this formation has is that the verb *intencion-a* does not exist: it is a case of theme vowel without a verbal base. The semantic meaning of this word, however, clearly has the semantics of an externally caused situation, specifically by a volitional and conscious agent. The base noun introduces this notion conceptually, but – as any other noun – lacks the syntactic capacity to provide a structural position for the agent. In my proposal, this position is provided by Event, which in turn gets spelled out as the theme vowel:

(52)

```
          PartP
         /     \
      Part      EventP
      -do       /    \
            PRO       Event
                     /     \
                 Event      NP
                  -a       /   \
                         N      √1944
                        -ción   inten-
```
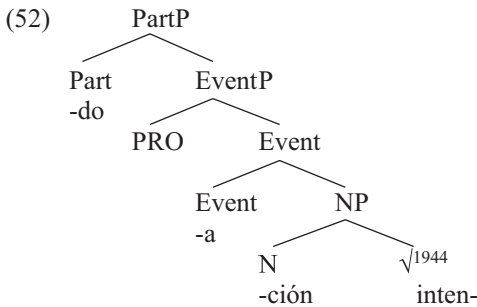
Given that there is no verbal descriptor, it is not surprising that the theme vowel that gets introduced in this context is the unmarked one, for the first conjugation.

2.5.1 Theme vowels with denominal -dor

A frequently mentioned fact about the agentive nominaliser *-dor* in Spanish is that, even though it is productive with verbs, it can also form agentive nouns from nominal bases where there is no corresponding verb.

(53) a. leñ-a-dor   *leñ-a
          wood-ThV-er   wood-ThV, 'to (chop) wood'
          'lumberjack'
      b. viñ-a-dor   *viñ-a
          vineyard-ThV-er   vineyard-ThV, 'to (work on the) vineyard'
          'wine grower'
      c. pros-a-dor   *pros-a
          prose-ThV-er   prose-ThV, 'to (write) prose'
          'prose writer'
      d. histori-a-dor   ??histori-a
          history-ThV-er   history-ThV, 'to (study) history'
          'historian'

e. agu-a-dor   #agu-a
  water-ThV-er   water-ThV, 'to (sell) water'
 'water seller'

Like in the case of *intencionado*, the theme vowel that can be identified here is the unmarked one, *-a*. Our analysis of these cases is that the suffix *-dor* and its equivalents in other languages (cf., among many others, Alexiadou & Schäfer 2010; Fábregas 2012, pace Lieber 2004; Lieber & Booij 2004) can only combine with bases which provide an agent argument – different approaches express this differently, but this is orthogonal to our purposes. The nominal bases of the formations in (53) are not eventuality descriptors which introduce causation components, so the agentive formations would not be licensed with just the noun on the base. Introduction of EventP, however, solves the problem: Event provides a syntactic position for an external argument; once that position is provided by Event – which in turn is spelled out as the theme vowel – the noun on the base is interpreted as related to some type of agentive activity performed by someone.

(54)

```
              NP
            /    \
           N     EventP
          -dor   /    \
              PRO    Event
                    /    \
                 Event    NP
                  -a     /   \
                        N    √1937
                        -ø    leñ-
```
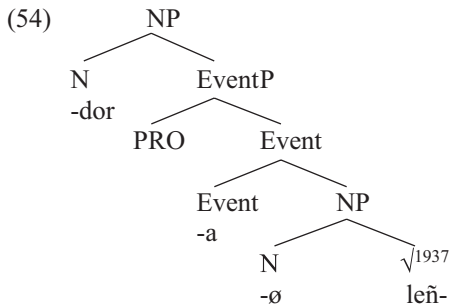
The conceptual semantics of the base exponent would then determine what type of event is the most appropriate one for that agentive action – cutting, reading, writing, selling – but the presence of EventP imposes the agentive interpretation on that inferred event, satisfying the conditions for *-dor* nominalisations.

2.5.2 *Theme vowels with denominal* **-ble**

The suffix *-ble* is among the most studied ones in derivational morphology; see, among others Val Álvaro (1981), Heinz (1982), Oltra-Massuet (2014: 24–127) for Spanish. The suffix is productive with verbs, but in Spanish it also produces a number of denominal formations which, again, contain theme vowels without a verbal base.

(55) alcald-a-ble 'major-A-BLE, that can become a major', ministr-a-ble 'minister-A-BLE, that can become a minister', obisp-a-ble 'bishop-A-BLE, that can become a bishop', pap-a-ble 'Pope-A-BLE, that can become the

Pope', presidenci-a-ble 'president-A-BLE, that can become the president', presidi-a-ble 'jail-A-BLE, that should be put in prison', rector-a-ble 'rector-A-BLE, that can become rector', campeon-a-ble 'champion-A-BLE, that can become a champion', profesor-a-ble 'teacher-A-BLE, that can become a teacher'

Overwhelmingly, the theme vowel is always *-a*, as in the previous case. These denominal formations always have the same meaning: '[an entity] that can or must undergo an event related to N', where the most typical reading is that where the base expresses a particular social status, and the adjective therefore expresses a passive change of state.

However, this is subject to a very clear constraint: that change of state cannot be internally caused, as for instance in aging, getting fat, growing and so on, but must be externally caused by an agent that gives that social status to the entity. Formations with an intended meaning where the change of state is triggered by the internal properties of the individual are impossible, as in (56), where we try to form a denominal adjective meaning 'that can become an adult', applied to some animate entity that is still a baby.

(56)   *adult-a-ble
       adult-ThV-ble

Thus, the relation with the notion of external causer is clear for these formations, in the change of state cases. There is one change of location case, *presidi-a-ble* 'jail-ThV-ble, that should be put in jail', and again this one presupposes an externally caused event where the person is put in jail by an external entity, and does not end in prison by itself, willingly or not, by going there.

Here, as before, the need of having an external causer of the eventuality is what, in our view, forces the introduction of EventP in the structure and hence the presence of the theme vowel. In (57) we represent the structure for this formations, where the adjectival projection is summarised as AP – see Chapter 1, §1.4.3 and Fábregas (2020) for the decomposition of adjectives that we assume in this monograph.

(57)
```
              AP
             /  \
            A    EventP
          -ble   /    \
              PRO      Event
                      /     \
                  Event      NP
                   -a       /   \
                         N      √1934
                        -ø      alcald-
```
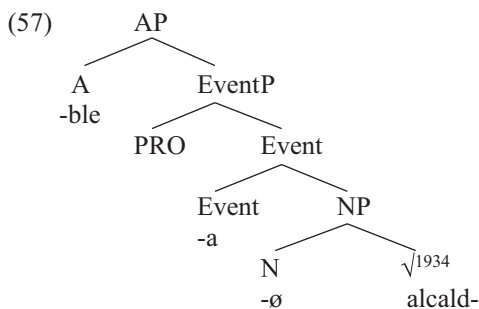
Consequently, in this section we have shown that theme vowels can appear also in non-verbal contexts where there is a need to syntactically define an external argument interpreted as the agent. This constitutes an argument to divide the projection where external arguments are introduced from the verbal descriptors, as the external argument is present without a verb, and also an argument that the theme vowel corresponds to the projection where the external argument is projected, which is EventP.

Thus, I believe that the evidence that associates Spanish ThVs to Event, the head responsible for defining the diathesis of the verb and for associating to it the time and world parameters is quite strong. I finish, therefore, here this chapter and we move to the next, whose topic will be the analysis of parasynthesis as a general process in Spanish verbal formations.

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3 The internal syntactic structure of parasynthesis

3.1 Overview of the chapter

Now that we have presented our analysis of the morphosyntactic location of theme vowels, this chapter will analyse the location of parasynthetic prefixes, introducing in doing so a general analysis of parasynthesis in Spanish that will be applied to specific verbalisation patterns in the rest of this monograph. Remember that parasynthesis is the situation where category-change involves the simultaneous addition of one affix to the left of the base, and another affix to the right of the base (see among others Val Álvaro 1994; Serrano Dolader 1995, 1999; Mateu 2002, 2021; Pujol Payet 2014a, 2014b; Gibert-Sotelo & Pujol Payet 2015; Acedo-Matellán 2016; Gibert-Sotelo 2017).

(1) a. en-carcel-a
     b. en-flaqu-ec-e
     c. a-terr-iz-a
     d. a-clar-a

As we noted before, parasynthesis in Spanish can appear when the base is a noun (1a, 1c) or an adjective (1b, 1d). It always involves a prefix to the left of the base, but in the case of suffixes, some involve only a theme vowel (1a, 1d) while others include an additional morpheme that has traditionally been called 'verbaliser' (1b, 1c).

In a nutshell, our analysis is that parasynthesis is the spell out of the situation where the integration of the base in the verbal structure is performed through syntactic means, that is, through specific heads. These heads specify – and therefore restrict – what role the base will perform inside the verbal structure. My claim is that such syntactic definition of the relation between the verb and the base is performed in Romance languages through relational heads – for lack of a better term, 'prepositions'. In (2), Y represents the relational structure that the prefix spells out, and X represents the verbal structure that suffixes spell out.

(2)

EvtP
├── Evt
└── XP
    ├── X
    │   *verbaliser*
    └── YP
        ├── Y
        │   *prefix*
        └── ZP   <---> base
            ├── Z
            └── √
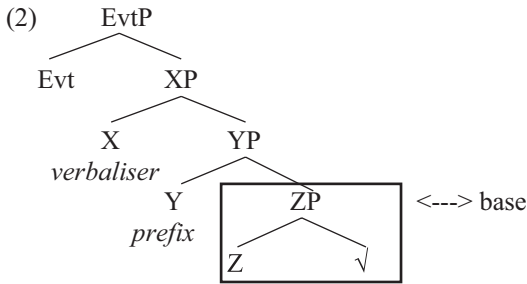
Parasynthesis, then, is the surface effect of a particularly complex structural configuration where the verbalisation uses more syntactic layers to introduce the base than both nouns and adjectives can spell out. Leaving the details that will be presented in this chapter aside, the structure is similar to the one proposed in Mateu (2002), Acedo-Matellán (2016) and Gibert-Sotelo (2017). Lack of parasynthesis in a verbalisation, on the other hand, signals that the specific integration between the base and the verb is not determined syntactically, but through conceptual semantic means.

This proposal implies that parasynthesis can only happen in cases where the category change involved would involve a situation where the base has to be introduced within the argument structure of the output category, that is, when a noun base becomes an adjective or when a noun or adjective become a verb. This claim connects with independent findings about the internal structure of lexical categories and their respective syntactic sizes (Hale & Keyser 1993, 2002; Baker 2002, 2008; Ramchand 2008, 2018; Fábregas 2020): verbs are structurally more complex than both adjectives and nouns, and adjectives are more complex than nouns, as we advanced in Chapter 1, §1.4.4, adjectival exponents spell out more material than nouns, something that will explain a number of asymmetries between adjectives and nouns that will be revised in this chapter: parasynthetic prefixes emerge more often with noun bases than with adjective bases because nouns leave more relational material left for a prefix to spell out. As we will see, this view explains a number of empirical properties of parasynthesis, including the fact that parasynthesis never appears in nominalisations.

In order to present this proposal, first we will motivate that syntactically the natural combination of lexical categories is V > A > N (§3.2), meaning that A and N have to be integrated in the structures defined by V. Then we will show that category changing processes follow the same hierarchy. A and N need to be integrated in the argument and aspectual structure of V, and this can be performed syntactically or not (§3.3). When performed syntactically, parasynthesis might emerge to spell out the extra heads used in the derivation.

3.2 A natural syntactic hierarchy for lexical categories

The tradition in morphology is to treat all types of category change between the three major lexical categories V, A and N in the same way: in its basic form a base categorised as one of these three categories undergoes some type of operation that produces as output a new form carrying a different category label. Since the early stages of generative morphology (cf. Williams 1981, for instance), the basic structural representation of morphological category change has been a configuration where the base is taken as complement by a head which projects its label to the whole structure. (3) illustrates it for a deverbal nominalisation and (4), for a denominal verbalisation.

(3)   N
       /‾‾‾‾\
    N   V
  -ation   explan-

(4)   V
       /‾‾‾‾\
    V   N
   -ify   clar-
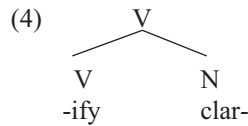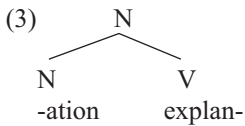
This contrasts with what we know from syntax, specifically what we know of the label that gets projected when we combine the functional expansion of the lexical categories with each other. In syntax, the evidence that we get is that there is a natural functional expansion hierarchy where the verb projects its structure above nouns and adjectives, and adjectives project their structure above the noun.

3.2.1 The hierarchy in (prototypical) syntax

Take the combination of verbs with adjectival or nominal phrases (5).

(5) a.   {VP, NP}
     b.   {VP, AP}

The natural result of combining the functional expansion of an NP – Determiner Phrase, Quantifier Phrase, Number Phrase, depending on approaches – with a verbal phrase is clearly that the verb projects its label. To illustrate it with a particular example, combining *cook* with *an apple, the apple, apples* or any other expansion of the lexical noun produces a projection of the lexical verb (6), not a projection of the noun or its functional expansion.

(6)   VP
       /‾‾‾‾\
    V   DP
   cook   /‾‾‾‾\
         D   N
        the apple
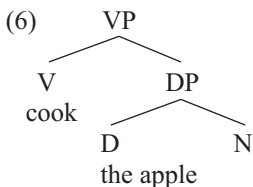
If we want to combine a noun (or its functional expansion) with a verb (or its functional expansion) and let the nominal complex project its label, it is known that we need to build a different type of structure that is traditionally known as 'subordination'.

(7) apples to cook, apples that I cooked

(8)
```
        NP
       /  \
      N    XP
   apple   / \
          X   ...VP
              cook
```
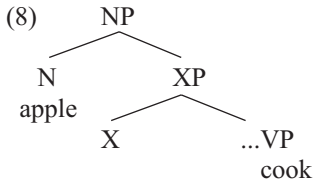
This is so because noun constituents are integrated within verbal phrases as arguments of those verbs. Verbs – at least lexical verbs – are predicates whose syntactic expansion provides positions to host arguments. Lexical nouns and their functional expansions have as their role to act as those arguments, defining participants in the eventualities described by verbs. This gives us a hierarchy V > N in terms of syntactic complexity, meaning that the syntactic space occupied by a verb is higher than the one occupied by a noun when the two are combined together – pace the subordination structures mentioned before.

A similar situation emerges when we combine adjectives with verbs. Again, in the absence of overt subordinators, the verb will project its label to the whole. This is visible in particular in the case of adjectives used as depictive modifiers of arguments of the verb, selected as small clauses (9) or not (10).

(9) to consider (someone) stupid
(10) a. John drove to the house drunk.
     b. Mary hammered the metal flat.

Depending on the cases and analyses adopted these can be treated as adjuncts to the verb (cf. Williams 1981; Stowell 1981), adjuncts to the DP expressing the participant or as part of the argumental structure (cf. Washio's 1997; Ramchand's 2008 analysis of resultative modifiers). However, in all these analyses the label that projects in the structure is invariably one related to the verb, and the depictive modifier is integrated within the verbal structure as a predicate.

This gives us a natural ordering V > A, essentially meaning that when an adjectival structure and a verbal structure are combined together, the verbal structure occupies a higher syntactic space than the adjectival structure. As it was the case with the combination of N and V, combining V and A in syntax

and obtaining a projection of AP is not impossible, but it would be an instance of subordination.

(11)   difficult to read

How about the relation between adjectives and nouns in syntax? Here the analysis is much more debated than the one involving the combination between verbs and adjectives or nouns – specifically with respect of whether N, A or a third head project its label, but all analyses end up placing adjectives in a structural position that is higher than the chunk of nominal structure that it modifies. For adjectives in a predicate position (12), the evidence points out to the conclusion that syntactically a predicational structure is build to introduce the subject of predication of the adjective, in an endocentric small clause structure of sorts (Bowers 1993, 2001; Baker 2002, 2008).

(12)   John is tall.

The proposal is that the adjective projects functional structure that integrates the noun under its label, just in the same way as verbs integrate nouns as arguments. The minimal difference is that the projections that introduce the arguments in the verb are generally viewed as part of the lexical verb, while the projection that introduces the subject in the case of the adjective is external to its lexical layers: a relational head, labelled as Predication Phrase (Bowers 1993). This relational head turns the complement into a predicate with an open argument position, and introduces in the specifier the constituent that satisfies that argument position. Thus, when the adjective and the noun combine in the syntactic structure, the noun is integrated inside the adjectival structure.

(13)   PredP
        ╱   ╲
     DP   Pred
              ╱   ╲
           Pred   ...AP
            │   ╱   ╲
            A   ...
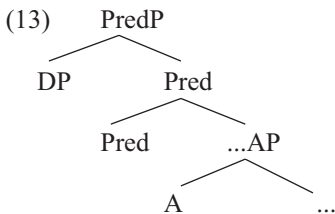
The parallelism with the V > N situation is very clear. In the same way that nouns perform the role of filling argument positions in the verbal structure, they fill the argument position in the adjectival predicational structure, which is more restricted. We direct the reader to Cinque (2010) for the analysis of attributive adjectives, which concludes that in any case the adjective dominates the nominal structure.

In consequence, it seems that the syntactic picture we end up is the following: a combination between VP and either AP or NP integrates the latter within the projection of the former. A combination of AP and NP, at least in predicative structures, integrates the NP also within the structure of the former, and in attributive adjective cases, AP is syntactically higher than NP. Consequently, the natural combination of the three major lexical classes follows a hierarchy of sorts of increased syntactic complexity such as that both VP and AP project above NP, and VP projects above AP.

(14)   VP > AP > NP

3.2.2   *The hierarchy applied to category change: structure extension vs. subordination*

With this background in mind, let us go back to the problem of category change. Syntax tells us that the natural combination of V, A and N follows a hierarchy where verbs project above both adjectives and nouns, and adjectives project above nouns. The reverse cases – verbs projecting below adjectives or nouns – are cases of subordination.

In traditional morphology, however, the projection of a verb above a noun counts as the same type of operation as the projection of a noun above a verb. Why is that? Two answers suggest themselves. The first one is that the traditional picture is correct and this is another instance of the asymmetries between morphology and syntax that support lexicalist approaches, where morphology is an autonomous linguistic component: even if syntax prefers to order the lexical categories in a particular way, morphology does not care about that ordering and allows nouns to project above verbs or vice versa without any recognisable effects. The second answer to this puzzle is that the traditional morphology idea is wrong and indeed, like in syntax, it is not the same to build a verb from a noun than to build a noun from a verb.

Choosing between these two options, like in many other cases, requires examining in detail the empirical situation. Specifically, are there systematic asymmetries between the processes of category change that comply with the syntactic hierarchy V > A > N and those that reverse it? In this section we will argue that such asymmetries exist, and they point to the conclusion that category change that complies with this hierarchy simply extends the formal structure, while the opposite is more marked and involves subordination. We will see that there are three main asymmetries:

a)   In the category change compliant with the syntactic hierarchy (denominal and deadjectival verbs, denominal adjectives) the suffix imposes a particular type of semantics, while in non-compliant category change (nominalisations, deverbal adjectives) the word behaves like a transposition where the base imposes its properties to the whole word.

b)   Only in the compliant category change operations, the base gets integrated in the semantics of the word category, as an argument or as a predicate.

3.2.2.1 Comparing V > N with N > V

Category-change operations that comply with the V > A > N hierarchy differ from those that oppose this hierarchy, first, in the source of the semantic interpretation of the derived word. In compliant category change, the base is integrated within the semantic structure of the resulting word, in a way that the output category defines the semantics of the whole. In the case of non-compliant category change, the typical situation is one where the base imposes its meaning to the whole word, frequently falling in what Beard (1995) describes as a transposition where only category change has taken place, without affecting the semantics.

Let us see this through a comparison of compliant and non-compliant derivations, starting with the comparison of the compliant denominal verbalisations with the non-compliant deverbal nominalisations. As already advanced in §1.2.1, the verbalisations from nominal bases fall into two groups with connections between them: argument-verbalisations, where the nominal base is interpreted as a participant inside the event, and predicate-verbalisations, where the base contributes a set of properties that are used to evaluate a change of state.

Among those that have a participant interpretation, Clark and Clark (1979) highlight a bread variety of classes, including locatio verbs, where the base is interpreted as the location that another argument comes to occupy (*botella* 'bottle' > *embotellar* 'to bottle'), instrument verbs, where the base defines an object that is used to perform an action (*martillo* 'hammer' > *amartillar* 'to hammer') or result objects, where the base corresponds to the entity that is produced when the verb culminates (*grupo* 'group' > *agrupar* 'to group'). Note that nothing in the semantics of the base preconditions in a clear way the type of verbalisation that it will provide. 'Bottle' is as good an instrument as 'hammer', and yet the derived verb with the first is interpreted as a location, and the second is interpreted as an instrument. What determines the type of verbalisation – partially, as we will see in §5.3.4.1, but significantly – is the verbal structure, recognisable on the surface as the exponents used: a parasynthetic scheme *en-* . . . *-a* for the locatio verb and rather one *a-* . . . *-a* for the instrumental (see Chapter 5, §5.5).

The base is not conditioning the type of verb that is produced – although of course there has to be some semantic coherence in the result, much in the same way as an argument does not determine the type of predicate that will be built. Note that given a nominal constituent like *a hammer* we cannot anticipate whether the predicate will be *use a hammer, build a hammer, put a hammer somewhere*, among other options. Conceptual semantics – our world knowledge about the typical situations involving specific entities in the real world – will make us not expect something like *eat a hammer* or *feed a hammer*, but this does not mean that these predicates will not be able to select that argument. The predicate determines the interpretation of the argument, and the same goes for verbalisations coming from nominal bases: also in them the base is integrated within the verbal structure that gets built.

Contrast this with deverbal nominalisations. The typical division is bi-partite (leaving aside so-called simple event nouns, which are normally not derived from

verbs; Grimshaw 1990). Some deverbal nominalisations denote eventualities – events (15a) or states (15b; Fábregas & Marín 2012) – and other nominalisations denote participants – agents, result objects, places, times, etc. (16).

(15) a. the destruction of Rome
       b. John's worry about her sister
(16) a. a stone construction
       b. a smoker

   Again, there are more fine-grained classifications of deverbal nominalisations, but we want to focus here on two aspects. First of all, there is general agreement that the distinction between eventuality-denoting and participant-denoting nominalisations (also known as 'complex event' and 'result' nominalisation, Grimshaw 1990, or Argument-structure nominalisation and Non-argument-structure nominalisation, Borer 2013) depends on the amount of verbal structure that the base projects, with aspect-denoting heads and a (nearly) full-fledged argument structure projected in the first but not the second (see, among many others, Alexiadou 2001; Marvin 2002; Borer 2012, 2013). Second, the set of notions that the nominalisation can denote is always defined by the information independently contained on the verbal base – something that Fábregas and Marín (2012) state as the principle 'nothing is in the noun unless it was already in the verb'. The nominalisations that denote a state, result or otherwise, are always a subset of those derived from verbs that independently have a stative component; those that denote events are invariably coming from verbs that also have an eventive meaning – more trivially, as this has always been implicitly assumed in the literature. Even when they denote participants, the set of participants that they can denote are always a subset of those that the verbal base already introduced: no non-agentive verb produces an agentive nominalisation, to give the best studied example.

   The consequence of this is that deverbal nominalisations have their meaning defined by the properties of the base, not by those of the nominalisation process, which is – in all known-analysis – the trivially simple procedure of merging a lexical noun head above whatever structure the verbal base has introduced.[1]

3.2.2.2 Comparing A > N with N > A

A similar asymmetry takes place between the compliant denominal adjectivalisation and the non-compliant deadjectival nominalisations. Adjectives derived from nouns, again, impose particular interpretations to the nouns on the base. There are four main classes of denominal adjectives (Rainer 1999; Fábregas 2020):

a) Possessive adjectivalisations, where the base noun is interpreted as the entity whose possession defines the predicational properties of the adjective ('the subject has X': *arena* 'sand' > *arenoso* 'sandy')

b)   Similitudinal adjectivalisations, where the adjective defines the property of
    being similar in some sense to the properties denoted by the noun ('the sub-
    ject is like X: *caballo* 'horse' > *caballuno* 'horse-like')
c)   Dispositional adjectivalisations, where the base noun denotes an entity which
    the subject has a tendency to engage with ('the subject loves X: *chocolate*
    'chocolate' > *chocolatero* 'chocolate-lover')
d)   Causative adjectivalisation, where the adjective denotes the property of pro-
    ducing or triggering the notion denoted by the base noun ('the subject causes
    X: *cáncer* 'cancer' > *canceroso* 'cancerigenous')

The same two points as in the previous section deserve highlighting: the base
noun is integrated in the predicate that the adjetive builds, specifically as an argu-
ment ('to be like X', 'to cause X', 'to have X', 'to love X'), and the meaning of the
base noun does not determine the type of semantics that the whole adjective has.
Contrasting this with deadjectival nominalisation, we see that, again, the structure
projected by the base adjective determines the meaning of the nominalisation.
The available classifications of deadjectival nominalisations include the follow-
ing (Martin 2012; Fábregas 2016):

a)   Quality nominalisations, where the base adjective provides a set of properties
    that are predicated from an entity (*bello* 'beautiful' > *belleza* 'beauty'), as in
    la belleza de María 'Mary's beauty', which entails that Mary is beautiful.
b)   Scale nominalisations, where the noun denotes a dimension with scalar val-
    ues, provided by the base adjective, as in *alto* 'tall' > *altura* 'height' (*la altura
    de la casa* 'the house's height', which does not entail that the house is tall but
    rather introduces the value of height that the house has within the scale)
c)   State nominalisations, where the base adjective provides a set of properties
    that characterise the stage at which an entity is found (*desnudo* 'naked' >
    desnudez 'nakedness')
d)   Event nominalisations, where the base adjective provides a set of properties
    that describe an eventuality (*infiel* 'unfaithful' > *infidelidad* 'unfaithfulness,
    as in *María cometió una infidelidad* 'María was unfaithful')
e)   Participant nominalisation, where the base adjective describes the property of
    an entity denoted by the nominalisation (*rojo* 'red' > *rojez* 'redness', as in *las
    rojeces de tu cara* 'the redness of your face, the red spots on your face')

As in the case of deverbal nouns, the differences between these classes are deter-
mined by the properties of the base, sometimes in trivial ways. State nominalisa-
tions like *desnudez* 'nakedness' differ from quality nominalisations like *belleza*
'beauty', trivially, in that the first come from adjectives that denote stage level
properties, such as *desnudo* 'naked', *borracho* 'drunk', which not by chance are
historically related to result participles. Event nominalisations are only restricted
to those formed from dispositional evaluative adjectives (Stowell 1991), which
allow for event-like readings already as adjectival predicates (cf. the availability
of the progressive periphrasis in *Juan está siendo infiel* 'Juan is being unfaithful').

As for the distinction between quality, scale and participant nominalisation, the analysis – as in deverbal nominalisations – is that the crucial factor is how much functional structure the base adjective projects, so that it denotes only a scale, a positive degree property, or a predication from a subject.

Note, finally, that the preponderance of the base in defining the properties of the nominalisation is also reflected in the inherently relational nature of these nominalisations – unless they denote a participant, they need to be predicated from an entity, like the adjectives that they are built on, which is expressed in the nominalisation as a prepositional complement.

Thus, we have the same asymmetry in the relation between N and A as we had in the relation between V and N: the category change that complies with the syntactic hierarchy (A > N) integrates the base within the structure projected by the output, while the one that contradicts it (N > A) fails to define a new semantic structure different from the one contained on the base: the properties of the base reflect on the whole word.

3.2.2.3 Comparing V > A with A > V

Consider now deadjectival verbalisations in opposition to deverbal adjectives. The compliant V > A derivations are characterised by the same two properties as denominal verbalisations and adjectivalisations: (i) the base is semantically integrated within the structure of the output category and (ii) the base does not determine the semantic role that it adopts within that structure. Let us start examining the set of deadjectival verbalisations; all of them have in common that the adjective is interpreted as part of the predicational properties, providing a description of a state or event that has particular aspectual properties, depending on the verbal structure. As we mentioned in §1.2.2, the following classes can be distinguished:

a) Change of state verbalisation, where the adjectival base defines the set of properties used to evaluate the change undergone by an argument (*claro* 'clear' > *aclarar* 'to make clear')

b) Activity property verbalisation, where the adjective defines a set of properties exhibited by an argument when performing an event (*holgazán* 'lazy' > *holgazanear* 'to act lazily')

c) Stative property verbalisation, where the adjective defines the properties exhibited by an argument, and not subject to change or transformation (*transparente* 'transparent' > *transparentar* 'to be transparent')

This division is entirely based on aspectual properties: whether the verb is stative or eventive, and in this second case whether the properties defined by the base hold as a result of the event or as the event progresses through time. Like in the case of denominal verbalisations, there does not seem to be any property of the types of adjectives used as a base that conditions whether the property will be interpreted as stative, resultative or related to an activity. It is entirely the verbal structure – now, the aspectual properties of the verbal structure – that decide

whether the adjectival properties are interpreted in one or the other way. In other words, the adjectival base is integrated with the temporoaspectual structure of the verb, which determines at which point in the event structure those properties hold.

In fact, there are adjectival bases that, depending on the verbal properties, will be interpreted as stative or change of state. One relevant case is *amargar*, 'to be bitter' (17) or 'to make bitter' (18). This, in fact, is against the claim (Hay et al. 1999) that the aspectual properties of deadjectival verbs directly reflect the scalar structure of the base. As we will see in further chapters, this is not always the case, as the verb embeds and integrates the adjectival base in its syntactic structure.

(17) El pepino amarga.
      the cucumber is.bitter
      'The cucumber tastes bitter'
(18) Juan me amarga la tarde.
      Juan me makes.bitter the afternoon
      'Juan makes my afternoon bitter'

Contrast this with deverbal adjectives, that are non-compliant with the hierarchy. In this group we have, significantly, adjectival participles (19). Adjectival participles are, not by chance, yet another case of transposition (Beard 1995) where the main semantic and structural properties of the whole adjective are defined by the base. Among the properties of participles that are defined by the base aspectual information and argument structure are the two main ones (see McIntyre 2013; Bosque 2014, among others).

(19) a.   un hombre muy conocido
           a man very known
      b.   un hombre bien viajado
           a man well traveled
      'a well-travelled man'

Beyond participles, four main classes of deverbal adjectives are distinguished (Rainer 1999; Oltra-Massuet 2014; Fábregas 2020); for reasons of space we will not discuss them here in detail, but we want to note that non-participial deverbal adjectives are always non-episodic – they denote habits, dispositions or modalised situations, and their semantic properties are determined by those of the base verb. Deontic adjectives expressing a rule that has to be followed (e.g., *pagadero* 'that has to be payed'), as noted by Oltra-Massuet (2014), tend to be formed from bases that denote events related to the notions of punishment and obligation already; that is, the adjectival structure does not define a grammatical distinction between possibility and obligation – for instance through two different modal operators – and it is the semantics of the base that determines whether the modal meaning is more informative in a deontic or a potential version. The only grammatically relevant difference in this domain, then, would be the one between episodic and non-episodic deverbal adjectives, which entirely depends on the amount of functional structure projected by the base.

3.3 Parasynthesis as syntactic specification

As we have seen in §3.2, in verbalisations the noun and the adjective must be integrated in the structure of the verb, as a predicate or as a participant. I claim that the presence of parasynthesis reflects a situation where the integration is performed syntactically by projecting a more or less complex relational structure between the base and the event descriptive heads (20a); absence of parasynthesis means that the integration is not defined in the syntax – unless the verbalising suffix also spells out the relational heads, as will be the case with -*ifica* (§7.2), and the conceptual semantics of the base is used to determine what role the base has on the resulting verbalisation (20b).

(20) a.

b.
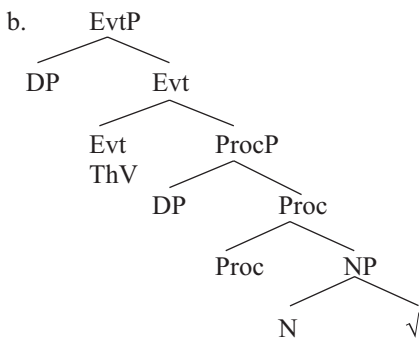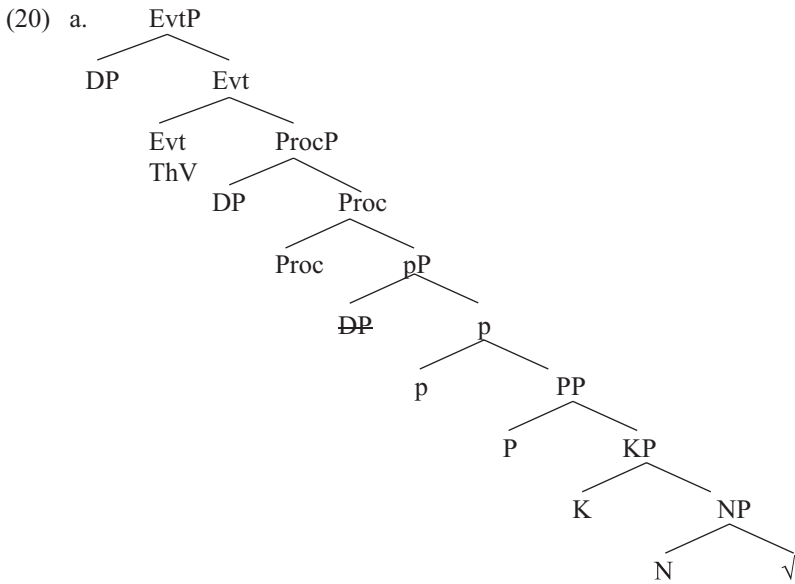
In (20a) the relational labels p, P and K are meant to stand for the general relational structure presented in §1.4.2, which is also contained in the structure of adjectives.

The intuition is that languages that use parasynthesis have the option of determining how the base should be interpreted within the verb by merging relational heads that specify this relation in the syntax, and therefore impose particular restrictions to the semantic interpretation. The role of the functional pP layer will be to force the interpretation that the figure or the subject of predication of the relation defined over the noun or the adjective must become the internal argument of the resulting verbalisation, and indirectly imposes the need that ProcP is present and therefore that the verb defined is eventive. The role of P will be to determine the conceptual type of relation that the base establishes with the verb – locative, transfer, others – and so on.

In the case of nominal bases, the relational structure present is manifested as p, P and K, as represented in (20a), and the base spells out only up to NP. In the case of adjectival bases, I propose that the same syntactic relational elements are involved, only that with the labels Pred, Scale – as an equivalent to Path – P and K. My claim, in correlation with the claim that adjectives spell out non-relational heads combined with relational heads, is that adjectives spell out a bigger chunk of material, leaving PredP left to be spelled out as a prefix.

(21)
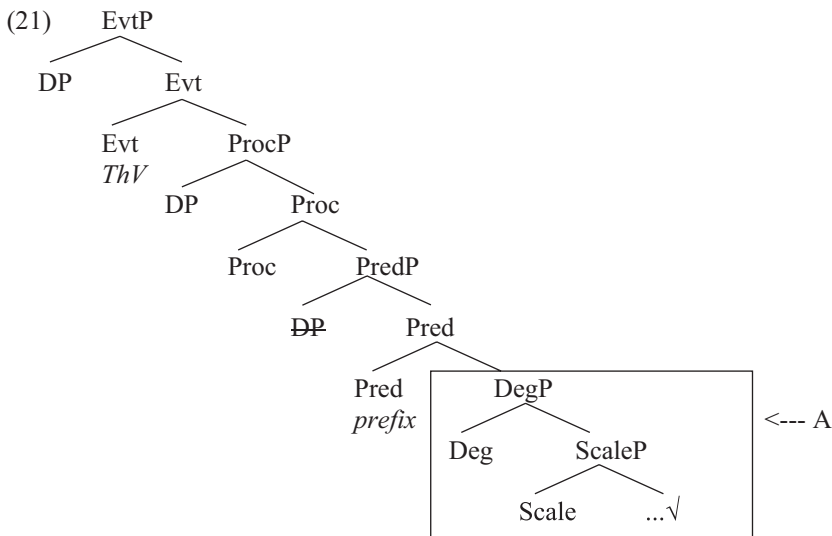
The structure in (21) contains an adjectival base which introduces, through PredP, a subject of predication. Above the adjectival structure, a lexical verb is built through (at least) the heads Proc and Evt.

From the perspective of exponency, there is one exponent that materialises the adjectival structure – on the surface, the adjectival base. As in other cases, this specific exponent leaves Pred outside from the spell out. The exponent *en-*, otherwise a preposition, is introduced to spell this one out. A verbaliser, *-ec-*, spells out in this case the event descriptor head Proc, and as argued in the previous chapter, the theme vowel is introduced in Evt, allomorphically conditioned by the material that Evt selects.

Of course, this claim crucially presupposes that Pred can be spelled out as a preposition under certain conditions; preliminarily, remember that we argued (§1.4.2) that Pred can be seen to correspond to a functional preposition, but see §4.3.4 for a more detailed argumentation about the relation between Pred and prepositions, and why the prepositional spell out only emerges when the adjective is used as a base for a verbal formation. For the time being, however, let me present how this general framework works, and I will develop the details talking about specific verbal classes in the chapters to come.

3.3.1 What parasynthesis does, in action

The best way of showing what I mean when I say that parasynthesis is the spell out of additional heads whose function is to define syntactically how the base should be integrated in the verbalisation is through an example. Let us take the case of deadjectival verbs, which will be developed in detail in chapter 4.

The presence of Pred – spelled out as the parasynthetic prefix in a verb like *gordo* 'fat' > *en-gord-a* 'to get fat' – means that syntax is projecting a head that defines which entity is the subject of the base adjective *gordo*, and that information must be carried to semantics. Let us assume that that structure must be embedded under Proc (22), as we will argue in chapter 4.

(22)
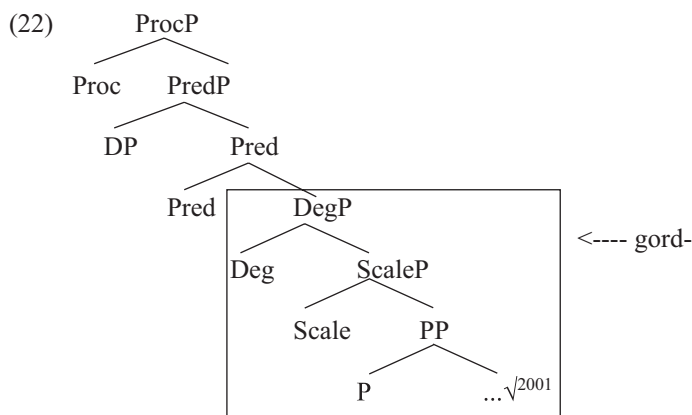
At this point, however, the DP in spec, PredP is only an argument of the adjective, not of the verb. In order to become an argument of the verb, DP moves to spec, ProcP, where it becomes a participant in whatever event is being described by the verb.

(23)   ProcP

```
        ProcP
       /     \
     DP       Proc
            /      \
        Proc        PredP
              /          \
           DP             Pred
                        /      \
                    Pred        ┌──────────────────┐
                                │      DegP         │
                                │    /      \       │
                                │  Deg      ScaleP  │
                                │         /      \  │
                                │      Scale   ...√²⁰⁰¹│
                                └──────────────────┘
```
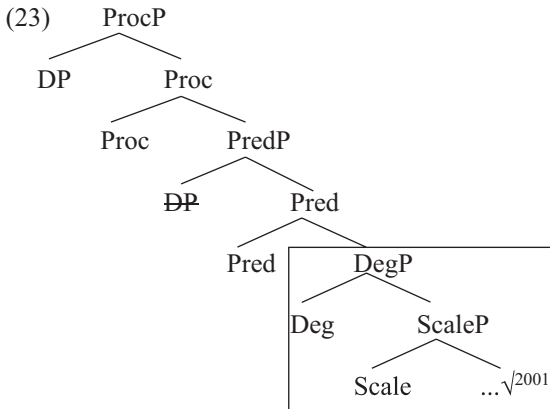
This movement adds the entailments of being an argument of Proc – specifically, an undergoer – to those that follow from being the subject of predication of whatever property the adjective on the base introduces and makes the subject of the adjectival base the internal argument of the event. Take (24) for an illustration.

(24)   Juan engordó a los cerdos.
       Juan in-fat-ed DOM the pigs

Importantly, that the argument that undergoes a change of state in (24) is the internal argument of the adjective is forced syntactically: Pred must be selected by Proc, and once in that position the syntax has no other option but to make the specifier of Pred move to become the specifier of Proc. As we will see in chapters 4 and 7 there are no deadjectival parasynthetic verbs which do not behave regularly like change of state predicates: the presence of PredP, reflected in the presence of the prefix, defines their behaviour in the syntax.

Crucially, and as we will see in detail in chapter 5, absence of parasynthesis with verbs that have a zero nominaliser implies absence of PredP. This means that the syntax is not defining the predicative relation between the base and the verbalisation, and that the structure in this case will be the one in (25), where the adjective directly combines with the verbal head.

(25)   ProcP
    ┌──────┴──────┐
   DP   Proc
            ┌─────┴─────┐
          Proc   DegP
                 ┌──────┴──────┐
               Deg   ScaleP
                        ┌──────┴──────┐
                      Scale   PP
                               ┌──────┴──────┐
                              P   KP
                                       ┌─────┴─────┐
                                      K   √
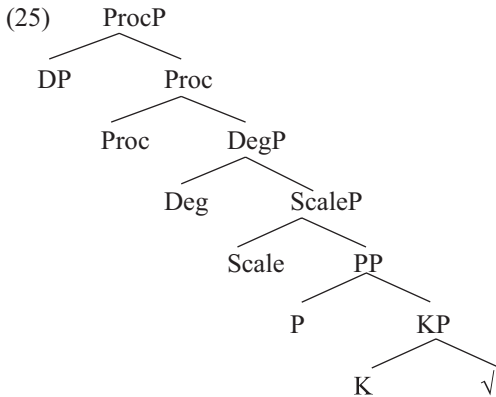
Nothing in the syntax forces that the internal argument will be the subject of the adjectival base, and this produces prefix-less verbs like *frecuentar* 'to go often to a place or to visit someone often'

(26)   Juan frecuenta este local.
       Juan frequent-ThV this place
       'Juan comes to this place often' (not *'Juan makes this place often')

Other options, discussed in detail in Chapter 5, emerge when the prefix is not present. The reason is that the more relational structure is missing in the syntax, the freer conceptual semantics is to define the role of the base within the verb in the absence of syntactic constraints, and more readings, verb types and subclasses emerge where one can do little more than to classify the bases according to world knowledge or conceptual semantics. With nominal bases (see particularly Chapter 6) the range of readings obtained without prefixes is particularly broad.

This is our core proposal, and the one that we will develop in the chapters to come: parasynthesis is the result of relational structure that integrates the base with the verb and consequently restricts the semantic and syntactic behaviour.

We hasten to add already at this point that the presence of additional relational heads does not in itself guarantee that the spell out will involve a prefix and therefore that parasynthesis will emerge. The cases we just presented involve zero verbalisations involving the theme vowel -*a*, which as we will see allow us to guarantee that the verbaliser does not spell out any part of the relational structure. However, we have adopted a Phrasal Spell Out approach (§1.3.2) where one exponent can spell out a complex syntactic configuration, covering two or more heads provided that they form a syntactic constituent. This means that some exponent for the verbaliser may spell out part or all of the relational structure. In such

case, the relational structure will be present in the syntax, and perform its role in restricting the type of verb, but in spell out there will not be any material left for the prefix and therefore parasynthesis will not be recognisable on the surface. I will argue in chapter 8 that this is, for instance, the case of *-ific-a* '-ify'.

(27) a. clas-ific-a
          class-ify-ThV
          'classify, to put in classes'

b.
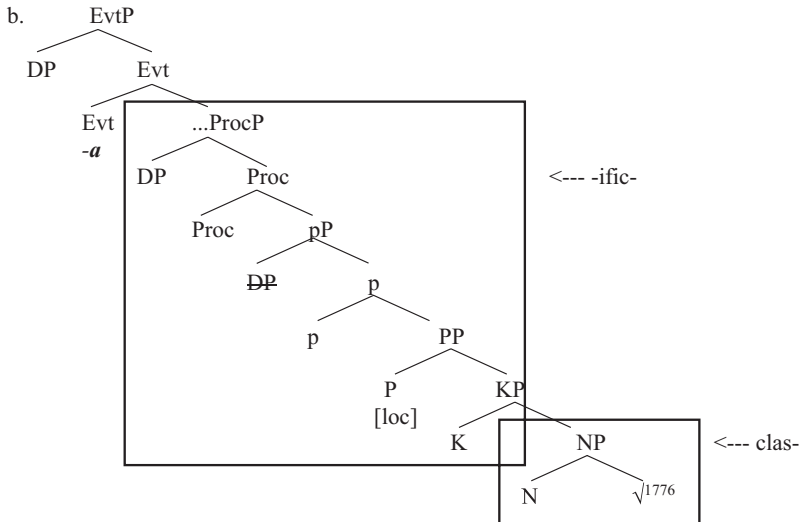
The structure underlying (27a) is syntactically parasynthetic, but the spell out is not. The outcome is that *ificar*-verbs will be as regular and systematic in their behaviour as parasynthetic verbs, but will never display on the surface parasynthesis – simply because the suffix itself spells out both Pred and the verbal heads. We will see that *-ific(a)* is not the only case of verbaliser that never creates parasynthesis because it eats up the full relational structure, with additional consequences that will be studied in chapter 8.

Thus, the hypothesis that we have just presented makes clear predictions and can be applied to a variety of verbalisers. Let us now explore additional arguments in favour of this approach.

3.3.2 *Parasynthesis is only attested in hierarchically compliant category-change*

If the presence of parasynthesis on the surface marks presence of relational heads whose role is to syntactically define how a base is integrated in another one, we expect that the category changing processes that may exhibit parasynthesis will

be only those where the base should be integrated in the internal structure of the output category, within its argument structure, as was discussed in §3.2 above, and never those that act as subordination structures.

Crucially for our purposes, parasynthesis is not documented in all types of category change. Overwhelmingly, parasynthesis is documented in verbalisations, both from nouns and from adjectives.

(28) a. en-carcel-a
          in-jail-ThV
       'imprison'
      b. em-blanqu-ec-e
          in-white-vbls-ThV
       'whiten'

These category change operations comply with the lexical category hierarchy in syntax: V > N and V > A. If we examine adjectivalisations (Fábregas 2020), parasynthesis is only documented in denominal adjectives, that again comply with the hierarchy (A > N). Note that the verbs *afortuna, *adinera are unattested in Spanish.

(29) a. a-fortun-ado
          a-fortune-ed
       'fortunate'
      b. a-diner-ado
          a-money-ed
       'well-off'

Deverbal adjectivalisations, which do not comply with the hierarchy, are never parasynthetic. Nominalisations are always non-compliant with the hierarchy, as nouns do not integrate either of the other two categories within its structure. Consistently, parasynthesis is totally unattested in nominalisations, be it deverbal or deadjectival, independently of their type.

Together with the observations that refer to the source of meaning within the word, this strongly supports a view where the extra morphology associated to parasynthesis actually reflects an increase in the syntactic complexity of the categories involved, and in particular one where the role that parasynthesis has is related to integrating the base in the resulting word, just as the approach presented in §3.3.1 proposes.

Parasynthesis is unattested in nominalisations and deverbal adjectives because these two operations, instead of extending the normal syntactic hierarchy that integrates arguments within predicates, involve the truncation of what would otherwise be the expansion of the base, subordinate it to a projection with a different lexical label. From our perspective, the absence of parasynthesis is the non-compliant category changes is simply due to the normal hierarchical relations between categories in syntax: verbs are not integrated in the argument

structure of adjectives or nouns, and nouns do not select adjectives as arguments; if parasynthesis is a syntactic way to mark the integration between the bigger category and the smaller category, it follows that parasynthesis is not an option in these cases.

3.3.3 *Asymmetries between denominal and deverbal parasynthesis*

Our approach also predicts several asymmetries between deadjectival and denominal parasynthesis with the same affixes, in essence because in our approach the adjectival base spells out more structure than the nominal exponent.

(30)

PredP

Pred   ScaleP   adjectival exponent space

Scale   PP

P   KP

K   NP   nominal exponent space

N   √
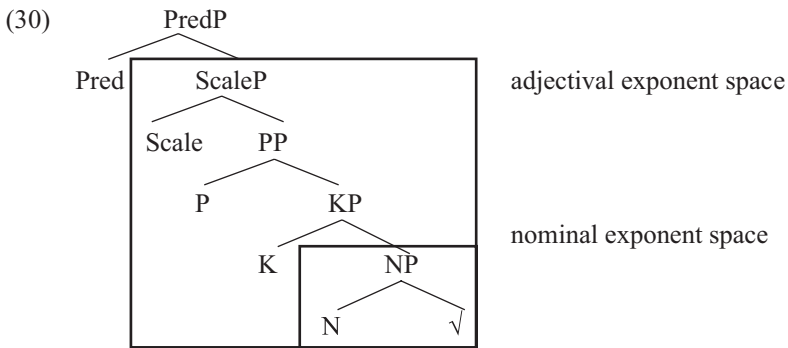
The consequence of this for our purposes is that, all things being equal, there is more material to spell out with the prefix when there is a nominal base than when there is an adjectival base. This has two immediate effects.

In my analysis, the lexical prepositional layer PP that has lexical content is spelled out as part of the adjectival base, but is left out from the nominal base. This means that, with the same verbaliser – so that we factor out the possibility that the PP layer is spelled out as part of the verbal suffix – prefixes with nominal bases will spell out PP and therefore carry more lexical content; in adjectival bases with the same verbaliser, the prefix with an adjectival base should lack lexical content because it only spells out Pred, the functional layer.

The expected surface result is that, with the same verbaliser, denominal parasynthesis should exhibit a broader range of prefixes than adjectival parasynthesis. With verbs in -*a*, Deadjectival parasynthesis is restricted to basically two prepositions, *en-* and *a-*, which lack any locative, transfer or instrumental semantics and whose distribution is largely arbitrary (cf. chapter 4).

(31) a.   a-clar-a
            A-clear-ThV
      b.   en-gord-a
            EN-fat-ThV

As expected if with an adjectival base the prefix spells out only the functional area in the deadjectival context, it is extremely difficult to track any meaning differences between these prefixes, or associate them to any conceptual content. This extends to the few cases where the prefix *re-* is used in parasynthesis with adjectival forms (32). The prefix *re-* can otherwise be used as an iterative prefix (33), but it lacks this meaning in deadjectival parasynthesis, that is, in (32) it is not possible to associate the prefix to any iteration involving the change of state.

(32)   fino 'fine' > re-fin-a 'to refine'
(33)   re-le-e
       RE-read-ThV
       'to read again'

Denominal parasynthesis exhibits a broader range of prefixes, and their meaning is more lexically determined, as we expect if the prefix spells out the PP layer in such cases. Serrano-Dolader (1995) finds at least the following:

(34)   a.   en-carcel-a
            in-prison-ThV
       'imprison'
       b.   a-grup-a
            A-group-ThV
       c.   des-tron-a
            DES-throne-ThV
       'dethrone'
       d.   re-cicl-a
            RE-cycle-ThV
       'recycle'
       e.   con-graci-a
            with-grace-ThV
       'ingratiate'
       f.   entre-vig-a
            between-beam-ThV
       'to fill the space between beams'
       g.   ex-carcel-a
            out-jail-ThV
       'to take out of jail'
       h.   per-noct-a
            through-night-ThV
       'to pass the night'

We will revise these cases in more detail in Chapters 4 and 6, but let me point out already that *re-* in (34d) can be associated to an iterative meaning ('go through the same cycle now as before') in the same way that *con-* 'with', *ex-* 'out',

entre- 'between' and *per-* 'through' contribute part of the meaning to the verb in the other cases. Our prediction is that the more material the prefix spells out, the stronger a semantic contribution it makes, and the more prepositions can be used. As we will see in the next chapters, this prediction is borne out.

Our second prediction coming from the proposal that adjectival bases leave less material for the prefix to spell out than nominal bases is that we expect in fact to find verbalising suffixes that participate in parasynthesis only with nominal bases. In order to do that, we only need a situation that is in between a suffix like *-ific-* (which spells out the whole relational structure) and a suffix like the zero verbaliser in *-a* verbs (which does not spell any relational head), where the suffix spells out the highest layer of the relational structure (Pred/p) but not the lexical layers.

(35)

```
        ProcP
       /    \
     DP      Proc
            /    \
         Proc     pP
                 /   \
               DP     p
                     /
                    p
```

<--- verbaliser
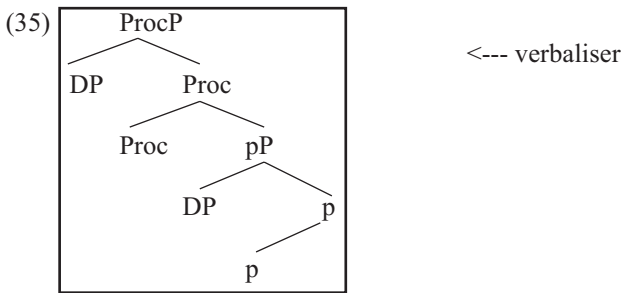
In this situation we predict that adjectival bases will never produce parasynthesis, because the rest of the relational structure is spelled out by the adjectival exponent. However, parasynthesis might emerge with nominal bases: if PP is projected, the nominal exponent will not cover it, the verbaliser will not cover it either and a prefix will have to be introduced.

This prediction is borne out. Spanish does not have any verbalisation process which can be parasynthetic with adjectives and not with nouns (36). It does have verbalisers that can be parasynthetic with nouns, but not with adjectives: *-e-a* and *-iz-a*.

(36)   *prefix-A-verbaliser, N-verbaliser
(37)   A-verbaliser, prefix-N-verbaliser
    a.   a-pal-e-a
        a-stick-e-ThV, 'to hit with a stick'
    b.   a-terr-iz-a
        a-land-ise-ThV, 'to land'
(36)   is what we expect if these suffixes, that are studied in chapters 9 and 10, correspond to configurations like (35).

Thus, I believe to have shown that the hypothesis about parasynthesis that I have put forth is internally consistent and makes some preliminary predictions

that are correct. In the next chapters, I will develop this hypothesis by applying it to the different types of verbalisations in Spanish, starting with *-a* verbs, which I will divide in three chapters, given how productive this process is.

Note

1 Unsurprisingly, eventuality nominalisations have been characterised as prime examples of transposition (Beard 1995). Transposition is defined as a morphological change that alters the shape and the category of an element without altering its semantic denotation. Eventuality denoting deverbal nominalisations are cases of transposition because, as nouns, they still denote the same events or states as their bases of derivation. Note that this is the absolute opposite of what we saw with denominal verbalisations, where the meaning of the base is incorporated into the semantic denotation of the verb, and at best only has to be conceptually coherent with it.

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4 Deadjectival verbs in -*a*, parasynthetic or not

4.1 Overview of the chapter

The goal of this chapter is to provide an analysis of deadjectival verbs whose only recognisable suffix is the theme vowel -*a*. This includes two types of formations: parasynthetic cases (1) and non-parasynthetic cases where the category change only reflects in the presence of a theme vowel (2).

(1) a.   en-suci-a
          in-dirty-ThV
     'to make something dirty'
     b.   a-barat-a
          A-cheap-ThV
     'to make something cheap'
(2) a.   dobl-a
          double-ThV
     'to make something double/to be double'
     b.   intim-a
          intimate-ThV
     'to become friendly'

Here is the core of our proposal. For parasynthetic cases (1), we argue that the introduction of the prefix at spell out reflects the presence of relational heads used to syntactically integrate the base within the semantic and syntactic structure of the verb. In the case of adjectival bases, where the adjective spells out part of that relational area, the prefix spells out PredP.

We argue that the verbaliser in these cases is spelled out as zero, so the only suffix visible is the ThV spelling out Evt, as shown in chapter 2. The presence of PredP, signalled by the prefix, has two main effects: (i) it defines syntactically the subject of predication of the adjectival base as the DP in spec, PredP, which later on becomes the specifier of ProcP, that is, the internal argument and (ii) as PredP is an instantiation of ιP (Wood & Marantz 2017) because it is a stative relational head, PredP cannot be selected by another stative head like InitP – that would produce a syntactic derivation with two heads that have the same stative semantics.

Consequently, ProcP – the eventive head within the verbal domain – must be the head that introduces PredP. The presence of PredP, then, forces that the verb is syntactically defined as a change of state verb, a dynamic event where the properties of the base are predicated of an internal argument.

(3)

```
        ProcP
       /     \
     Proc    PredP
      Ø      /    \
           DP     Pred
                  /    \
               Pred    DegP
              prefix   /    \
                     Deg    ScaleP          <--- Adjectival base
                      Ø     /    \
                        Scale    PP
                                /   \
                               P     KP
                                    /   \
                                   K     X
```
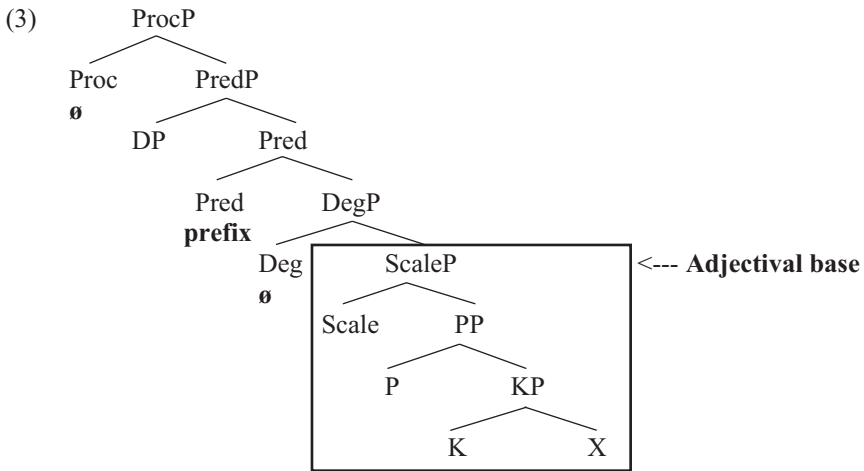
Non parasynthetic verbs in -*a*, in contrast, lack PredP. This means that syntax does not force them to denote change of state verbs. As there is no PredP, nothing in the syntactic structure forces the properties of the base to be predicated from the internal argument, and this opens the door for formations where the property is predicated from the external argument or some other component of the situation, as in (4), where what becomes intimate is the relation between Juan and María, not Juan or María.

(4) Juan intimó con María.
     Juan intimate-ed with María
     'Juan and María became friendly'

The absence of PredP also allows for structures where the base is directly selected by a stative verbal head like InitP (5), producing formations where there is no change of state: (5) is equivalent to the copulative predicate 'be transparent'.

(5) Este papel transparent-a.
     this paper transparent-ThV
     'This paper is transparent'

Change of state formations without parasynthesis in Spanish are possible, but here we argue that they are not defined as such by syntax, but by a default semantic interpretation of the adjectival base which is not forced by the syntactic structure.

The structure of this chapter is the following. In §4.2 I will present the main empirical properties of deadjectival parasynthetic verbs in -*a*, which have a very systematic syntactic behaviour: they are all dynamic change of state verbs where the change is predicated from the internal argument. In §4.3 I analyse this class of verbs, focusing on the presence of PredP and its consequences for the structure. In §4.4, I discuss non parasynthetic deadjectival verbs in -*a*, where I show that the absence of PredP allows these verbs to express changes predicated from external arguments or general situations, or to denote stative attributive predicartions.

4.2 Deadjectival parasynthetic verbs in -*a* are always change of state verbs

Let us start with parasynthetic formations. There are only three prefixes that can appear in parasynthetic deadjectival formations with -*a*. The following non-exhaustive list gives other examples of deadjectival verbs belonging to this class; (6) shows verbs that contain the prefix *a*-, (7) some verbs with *en*- and (8) some with *re*-.

(6) a-barat-a 'A-cheap-ThV, to make cheap', a-bob-a 'A-stupid-ThV, to make stupid', a-brevi-a 'A-brief-ThV, to shorten', a-chat-a 'A-flat-ThV, to make flat', a-civil-a 'A-civil-ThV, to civilise', a-clar-a 'A-clear-ThV, to clarify', a-cobard-a 'A-coward-ThV, to become a coward', a-cristian-a 'A-christian-ThV, to become Christian', a-dens-a 'A-dense-ThV, to become dense', a-fe-a 'A-ugly-ThV, to become ugly', a-floj-a 'A-loose-ThV, to loosen', a-gigant-a 'A-gigantic-ThV, to become gigantic', a-gilipoll-a 'A-idiot-ThV, to become an idiot', a-grand-a 'A-big-ThV, to make big', a-grav-a 'A-serious-ThV, to become serious', a-gris-a 'A-grey-ThV, to become grey', a-hond-a 'A-deep-ThV, to deepen', a-larg-a 'A-long-ThV, to make long', a-lel-a 'A-stupid-ThV, to become stupid', a-liger-a 'A-light-ThV, to make lighter', a-lis-a 'A-flat-ThV, to make flat', a-loc-a 'A-crazy-ThV, to become crazy', a-morat-a 'A-violet-ThV, to become violet', a-musti-a 'A-wilted-ThV, to become wilted', a-nul-a 'A-null-ThV, to annul', a-pront-a 'A-ready-ThV, to make ready', a-proxim-a 'A-near-ThV, to approach', a-silvestr-a 'A-wild-ThV, to become wild', a-tont-a 'A-stupid-ThV, to become stupid', a-viej-a 'A-old-ThV, to grow old'.

(7) en-calm-a 'in-calmed-ThV, to relax', en-canij-a 'in-small-ThV, to become small', en-corv-a 'in-bent-ThV, to bend', en-dulz-a 'in-sweet-ThV, to make sweet', en-fri-a 'in-cold-ThV, to cool down', en-gord-a 'in-fat-ThV, to become fat', en-grues-a 'in-fat-ThV, to become fat', en-guarr-a 'in-dirty-ThV, to make dirty', en-rubi-a 'in-blonde-ThV, to become blonde', ens-anch-a 'in-wide-ThV, to broaden', en-suci-a 'in-dirty-ThV, to make dirty', en-tibi-a 'in-lukewarm-ThV, to make lukewarm', en-turbi-a 'in-turbid-ThV, to make turbid', en-viud-a 'in-widow-ThV'

(8) re-baj-a 'RE-low-ThV, to make something lower', re-fin-a 'RE-fine-ThV, to polish', re-fresc-a 'RE-fresh-ThV, to freshen up', re-nov-a 'RE-new-ThV, to make new'

Note also that the base can appear in the morphological comparative form when the adjective has a special form for this degree:

(9)   peor 'worse' (empeorar 'to worsen'), menor 'smaller' (aminorar 'to reduce')

4.2.1 Change of state verbs as a natural class

All deadjectival parasynthetic verbs in -a are change of state verbs. Change of state verbs are those which express a dynamic process whereby an entity corresponding to the internal argument acquires a particular degree of a property denoted by the base adjective.   Let us go deeper into the components of a change of state verb and how the adjectival base is integrated within the verbalisation in these cases, as within this monograph this is the first discussion of the broad class of change of state deadjectival verbs. Rappaport-Hovav (2014) differentiates four components within a change of state verb:

(10)   a.   a scale with at least two degrees that are related by an ordering function
       b.   a dimension over which the scale operates
       c.   a directionality in the set of values
       d.   an implicit comparison between two states that exhibit different values
             within the scale and dimension

Take as an illustration a simple example such as (11).

(11)   John warms (up) the soup.

In (11), the dimension of change and the scale are the ones associated to the adjective corresponding to *warm*: a set of different values of warmth that in a language like English or Spanish can be conventionally measured with specific numerical values (37 degrees Celsius, 140 degrees Fahrenheit, etc.). This scale is open in the sense that there is, in principle, no maximal or minimal value of warmth (Kennedy & McNally 2005). We know that the scale is not bound in its upper end because of the rejection of the modifier *completely* (12a) and the absence of entailment that the second term of comparison in (12b) is not warm enough; we know that the lower end of the scale is not bound either because of the absence of the entailment that the first term of comparison in (12c) is warm.

(12)   a.   *completely warm
       b.   This soup is warmer than the water, (but the water is also warm).
       c.   The soup is warmer than the water, (but the soup is not warm).

The ordering function of the scale of an adjective like *warm* also has a directionality that is also provided by the adjective. In this case, as the adjective *warm* (vs. *cold*) is oriented towards the positive side of the temperature scale, this

directionality is increasing: a higher value of warmth entails a rise in the tempera-
ture. Let's represent this scale as (13).

(13)   temperature
                                  $\rightarrow$
    . . . V_n $V_{n'}$ $V_{n''}$ $V_{n'''}$ . . .

The verbalisation structure contributes the implicit comparison between two
values, mapping them into a temporal dimension. The change of state verb means
that, across time, the internal argument moves from having a value vn of the prop-
erty to a different value; if the scale is oriented positively, the different value is
higher at the end of the event than it was at the beginning of the event.

4.2.2 The aspectual properties of deadjectival change of state verbs

One of the main issues discussed with respect to deadjectival change of state verbs
is their Aktionsart properties. These verbs are degree achievements with a com-
plex aspectual behaviour. In this section we will do our best to summarise a very
complex empirical and theoretical situation regarding these predicates. As the
focus of this monograph is on the morphological manifestation of verbalisations,
instead of attempting to provide our own analysis about their aspectual behaviour,
we will limit ourselves to assume one of the theories about degree achievements
that we consider to capture best the empirical pattern in Spanish: Kearns (2007).
    The main property of degree achievement verbs is that they can be interpreted
as a telic (14a) or atelic change (14b).

(14)   a.   Juan engordó en dos meses.
            Juan en-fat-ed in two months
          'Juan got fat in two months'
       b.   Juan engordó durante dos meses.
            Juan en-fat-ed for two months
          'Juan got fatter and fatter for two months'

Since Dowty (1979) a shared intuition has been that the source of this ambi-
guity is related to whether the adjectival base is interpreted as a positive degree
adjective or as a comparative degree adjective, as the previous glosses show. In
this classic theory (see Abusch 1986; Levin & Rappaport 1991; Jackendoff 1996),
the positive degree base produces a telic predicate, and the comparative produces
an atelic predicate.

(15)   a.   BECOME A
       b.   BECOME A-er

Let us call this the degree-based explanation. It contrasts with the scale-based
explanation, presented in Hay et al. (1999; henceforth HKL 1999) (see also

Kennedy & Levin 2008), which argues that (a)telicity depends on the scalar properties of the base adjective, not on the degree associated to the base.

According to HKL's (1999) proposal, change of state verbs with open scale adjectives like 'warm' above produce by default atelic changes of state, because the adjective does not set any boundary to that change. Open scale adjectives reject proportional modifiers like *completely* or *partially*, which presuppose that the scalar space is bound.

(16) a.   *{completamente/parcialmente} gordo
          completely   partially   fat
      b.   Juan engordó durante un mes.
          Juan in-fat-ed for one month
    'Juan got fatter and fatter for one month'

Closed scale adjectives, with a minimal and/or a maximal value, in contrast, are bound scales and by default they set a limit to the change, producing telic events.

(17) a.   {completamente/parcialmente} borracho
          completely   partially   drunk
      b.   Juan se emborrachó en una hora.
          Juan SE in-drunk-ed in one hour
    'Juan got drunk in one hour'

Adjectives with closed scales contribute a completeness implication to the resulting verb. Because telicity is obtained when the change of state reaches the boundary, which is the standard value that determines whether the entity possesses a sufficient value of the property in context, the telic reading should entail that the internal argument is A. (17b) entails (18).

(18) Juan está borracho (ahora).
      Juan is drunk (now).

However, this does not mean that closed-scale adjective verbs always have a telic reading, or that open-scale adjectives must always be atelic. In HKL's (1999 proposal, in both cases there are additional devices that can produce the other reading. Closed scale adjectives can produce an atelic verb is the completeness entailment is cancelled, for instance, by adding a *for*-adverbial that coerces the predicate into an atelic event. Similarly, open scale adjectives can produce telic readings when a standard value is set in the context or by letting the internal argument set the standard value that counts for its class. Change of state verbs are forcefully telic only when it is impossible to ignore the boundary value in the scale, and they are forcefully atelic when they cannot define a standard value usable as a boundary for change.

Here we will not adopt Abusch's (1986) classic theory or HKL's (1999) scalar theory, but Kearns' (2007) proposal. This author criticises this scalar view because the scale does not turn out to be decisive to determine the telicity of the

predicate – empirically, both open and close scale adjectives can produce telic or atelic predicates, through contextual mechanisms. Moreover, she criticises both Abusch's classic degree theory and HKL's scalar theory because it makes the wrong prediction that the telic reading glossed as 'become A' always must entail 'be A'. In contrast to (17b) and (18), where the entailment works, the entailment fails in examples like (19).

(19)   Juan engordó en un mes, pero no estaba gordo todavía.
        Juan en-fat-ed in one month, but not was fat yet

    (19) should be glossed as 'Juan got fatter in a month, but he was not fat yet'. This means that the telic reading can also correspond to a comparative degree base, contra Abusch (1986). Kearns' (2007) proposal is more complex than Abusch (1986) in that it recognises two sources for the change of state, positive and comparative, but treats the comparative reading as telic. The comparative base produces a telic achievement reading, involving a minimal change between a value v and a value v+1; the comparative base produces a telic accomplishment reading where change traverses the scale of the adjective up to the standard value. The atelic reading involves iteration of the achievement comparative reading, coerced by a *for*-phrase. Therefore, in contrast with HKL (1999), the scalar structure is not crucial in determining telicity. The following table, adapted from Kearns (2007), summarises the three relevant readings.

    Let us show that Kearns' predictions are correct for Spanish. A verb that we know must be built over a comparative degree adjective is *aminorar* 'to reduce', from *menor* 'smaller', comparative of *pequeño* 'small'. In her theory, unless there is coercion by a *for*-phrase, the verb should behave as an achievement and not entail that at the end of the process the internal argument is 'small'. This is confirmed through the tests about achievements that we presented in §1.2.2: in this reading, *in*-phrases produce a delayed event reading (20a). As (20b) shows, there is no entailment that the speed was low.

(20)   a.   Juan aminoró la velocidad en una hora.   Delayed event reading
             Juan reduced the speed in an hour
        'It took Juan one hour to make the speed lower'

Table 4.1 Types of aspectual readings for deadjectival verbs according to Kearns (2007)

Base source	Telicity	Aspectual type	Tests
comparative *become A-er*	telic	achievement (single transition from *v* to *v+1*)	*in-phrase* interpreted as delayed event *for-phrase* as measuring result no entailment of 'X is A'
	atelic	activity (iteration of single transitions)	no entailment of 'X is A'
positive *become A*	telic	accomplishment (transition through the scale crossing standard value)	*in-phrase* interpreted as measuring whole event entailment of 'X is A'

b. Juan aminoró la velocidad, pero siguió siendo grande. No entailment
     of 'be A'
     Juan reduced the speed, but stayed being big
  'Juan made the speed lower, but the speed was still high'

Remember that, as Piñón (1997) and Filip (1999) note, the delayed event reading is characteristic of *in*-phrases in combination with achievements (21a). This reading is distinct from the one obtained with accomplishments, where the durative process is measured (21b).

(21) a. John arrived in one hour (= John arrived after one hour).
      b. John wrote the letter in one hour (≠John wrote the letter after one hour).

The achievement telic reading can become atelic if, instead of denoting one single punctual transition between a value v and a value v+1, the transition is iterated through coercion by a *for*-phrase. (22) has two interpretations; the relevant one is the first, the one we call 'activity reading', and the second is an instance where the for-phrase measures the result state of the change, that is, for how long the speed stayed lower after that change.

(22) Juan aminoró la velocidad durante media hora.
      Juan reduced the speed for half hour
      'John made the speed lower and lower for half an hour' (Process reading)
      'John made the speed low, and it stayed low for half an hour' (Result reading)

Let us now examine the telic reading that is obtained from a positive degree base. Kearns' (2007) proposal is that the only reading coming from the positive degree version is equivalent to 'become A'. In this reading, telicity is almost always necessary – with a few exceptions that will be pointed out subsequently: the verb denotes a change of state where the telos is the unique endstate of reaching the minimal value of the scale that counts, in context, as possession of a sufficient value of the property. A good example of a change of state verb that favours this reading is *abuenarse* 'to get healthy'. Note that *bueno* 'healthy' has a morphologically marked comparative *mejor*, so in this verb one can be reasonably sure that the base is in the positive degree, not the comparative. As can be seen in (23a), it forces the entailment that at the end of the process the internal argument is A. *For*-phrases with these verbs must have a result reading interpretation, not the iterative activity reading (23b), and the *in*-phrases do not have a delayed event interpretation (23c).

(23) a. Juan se en, #pero seguía estando enfermo.
          Juan SE a-good-ed, but stayed being sick
      'Juan got healthy (#but stayed sick)'
      b. Juan se abuenó durante una semana.
          Juan SE a-good-ed for one week
      'Juan got healthy and stayed healthy for one week'

   c.   Juan se abuenó en una semana.
        Juan SE a-good-ed in one week
   'Juan got healthy in one week'

For Kearns (2007), the only verbs derived from the positive degree that are not telic are those whose base adjective lacks a sufficiently salient value that can be taken as a reference to define the standard value, as in (24). (24a) disfavours the telic reading, but crucially its base adjective cannot be combined with degree modifiers that presuppose the presence of a salient reference value, like *casi* 'almost'.

(24) a.   ??La grieta se ensanchó en un minuto.
         the gap SE en-wide-ed in one minute
      Intended: 'The gap got wide in one minute' (not 'The gap got wider after one minute')
      b.   La habitación es (*casi) ancha.
      the room is almost wide

In our previous examination of *aminorar* and *abuenar* we have seen that Kearns' (2007) predictions about comparative and positive bases is borne out in Spanish, but another question remains. With most adjectival bases, morphologically there is no difference between the comparative and the positive degree. How do we know which one of the two degrees is involved in the corresponding verbs?

Most adjectives seem to be able to produce verbs of the two classes, choosing freely between the comparative and the positive degree. These are, as expected by Kearns' (2007) theory, adjectives which have a salient reference value in the positive degree but which are flexible enough that they allow for the iteration of a transition between a value v and a value v+1. Let us illustrate this with *barato* 'cheap'. (25) illustrate the pattern characteristic of achievements built over the comparative: no entailment of 'be A' associated to the delayed event reading of the *in*-phrase (25a), with the possibility of iterating that transition into an activity (25b).

(25) a.   Los precios se abarataron en un mes, pero seguían siendo caros.
         the prices SE became.cheaper in one month, but continued being expensive
      'After one month, the prices became cheaper, but they continued to be expensive'
      b.   Los precios se abarataron durante un mes.
         the prizes SE a-cheap-ed for one month
   'The prizes got cheaper and cheaper for one month'

However, this does not mean that the positive base is unavailable, as contradictory readings can also be produced. These readings are more salient in the causative construal of the verbs, although they are also available with the anticausative

construal. As expected, these contradictory readings are related to readings of the *in*-phrase where the duration of the transition is measured. Note that the presence of internal duration in the event is forced in these sentences by the addition of *poco a poco* 'little by little', which presupposes the existence of a process.

(26)   A: -¿Estaban baratos los precios entonces?
              were cheap the prizes then?
       'Were the prizes cheap at that moment?'
       B: a. -Sí, el gobierno los abarató poco a poco en cinco días.
                  yes, the government them a-cheap-ed little by little in five days
       'Yes, the government made them cheap in five days'
       b. -Sí, se abarataron poco a poco en cinco días.
                  yes, SE a-cheap-ed little by little in five days
       'Yes, they got cheap in five days'

Bases that seem to be restricted to the comparative reading are those that, like *ancho* 'wide' previously, lack a sufficiently salient reference value. Note that in (28) only the delayed event reading is available.

(27)   *casi {próximo/bajo}
       almost close/low

(28)   a.   #Juan se aproximó en un minuto.
                 Juan se a-close-ed in one minute
        'Juan got closer after one minute'
       b.   #Juan rebajó los precios en un minuto.
                 Juan re-low-ed the prizes in one minute
        'Juan lowered the prizes in one minute'

Finally, some bases are not flexible enough to allow iteration of the comparative transition, which forces them to be treated only as telic. This involves generally adjectives whose only reference value coincides with the upper or lower limit of the scale, and whose comparative degree therefore always involves reaching that limit. Relevant examples are adjectives like *curvo* 'bent' or *derecho* 'straight', which never get the activity reading with a *for*-phrase.

(29)   a.   Juan se encorvó durante un mes.
                 Juan SE bent for a month
        'Juan was bent down for a month'
       b.   El árbol se enderezó durante un mes.
                 the tree SE straightened for a month
        'The tree stayed straight for a month'

Now that we have examined the aspectual properties of change of state verbs, let us now move to their syntactic manifestation, with particular attention to their argument structure.

4.2.3 The causative-inchoative alternation and the internal argument

Change of state verbs typically allow the well-known causative-inchoative alternation (cf. Levin 1993; Levin & Rappaport 1995 for an overview). In the causative version (30a), the verb contains both an internal and an external argument, and in the inchoative version only the internal argument is preserved (30b).

(30) a.   Juan en-gord-a a los cerdos.
            Juan in-fat-ThV A the pigs
        'Juan is making the pigs become fat(ter)'
      b.   Los cerdos en-gord-a-n.
            the pigs in-fat-ThV-3pl
        'The pigs are getting fat(ter)'

For reasons of space we will not discuss the limits of this alternation, and will restrict ourselves to assuming with Levin and Rappaport (1995) that it depends on the conceptual semantics of the property associated to the change, and how compatible with our world knowledge it is to accept that a change can or must involve an external agent or may be triggered by the internal properties of the patient. We will not discuss either the extremely complex behaviour of the anticausative se clitic which marks some of the inchoative members of the pair (see Vivanco 2021; Fábregas 2021 for recent overviews).

What we want to concentrate here is that in parasynthetic deadjectival verbs it is always the case that the change of state is predicated from the internal argument. In the causative version (30a), the pigs and not Juan get fat; of course in (30b) it is also the pigs that get fat. In both cases that DP corresponds to the internal argument of the predicate. Hence, we can establish the following generalisation:

(31) In parasynthetic change of state verbs, the property denoted by the base is always predicated from the internal argument.

This generalisation has to be emphasised, as we will see that non-parasynthetic verbs in -a lack it (see §4.4 below).

4.2.4 Properties of the prefixes

There are only three prefixes that combine with deadjectival parasynthetic verbs in -a: a-, en- and re-. I have been unable to identify any generalisations with respect to the distribution of these three prefixes: the three are available in change of state verbs, including degree achievements, and there are no clear conceptual semantic preferences for adjectives of one or the other type.

At most, we could talk about semantic specialisation in some of the cases where the same adjective accepts more than one prefix, but without any systematic meaning difference that can be directly associated the different prefix used in each case. The adjective *fino* has two meanings, one where it refers to the physical property of being thin and one where it denotes the evaluative property of being pure or precise. (32a) selects the precision and thinness reading and (32b), the purity reading.

(32) a.   a-fin-a
         A-thin-ThV, 'to make something thinner or more precise'
     b.   re-fin-a
         RE-fine-ThV, 'to refine, to make something purer'

The essential reason for this, I propose, is that the prefixes in this context are functional elements without lexical content, so it is impossible to assign any systematic contribution of the prefix to the whole verb. This is precisely what my general analysis predicts, if the prefix in deadjectival verbs spells out PredP, a functional head, without any lexical relational head that could carry more content.

   Let us now move to the analysis.

4.3 Analysis: parasynthetic change of state verbs

In this section we present our analysis for the deadjectival verbs in -*a*, which in essence is an analysis of deadjectival change of state verbs. We will first present the structure of a change of state, as we propose it, and show how the properties of the verbs we saw previously are reflected in them. Next, we will provide our evidence in favour of PredP being manifested as a preposition in such cases (§4.3.4). We will finally discuss the problem of which affix is acting as a verbaliser.

   As we have seen, within a change of state the adjectival base contributes the degree, the scale, the dimension of the scale and its directionality. The verbal heads, in contrast, define a process that involves a change within that scale, according to the directionality defined by it.[1]

   Our proposal is that the adjective projects its structure up to PredP in this configuration, and the verbal structure projected involves only Proc, producing the inchoative reading.

(33)
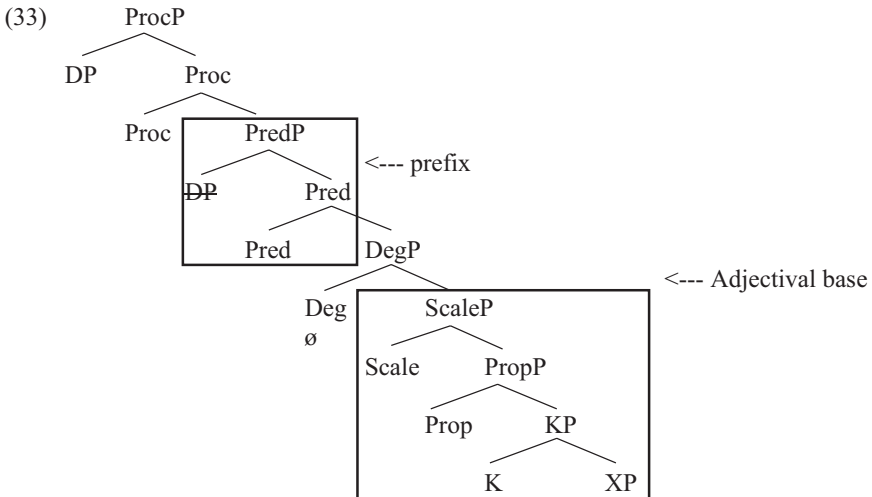
Let us examine the structure in detail, showing how it accounts for the properties of parasynthetic deadjectival verbalisations in -*a* that have been reviewed previously.

4.3.1 The material spelled out by the adjectival exponent

Starting from the lower constituent, the base, the adjective projects its full structure in this type of formation. The heads involved in its spell out material include the 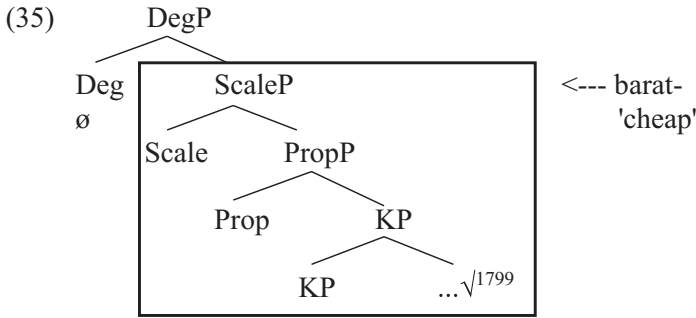head that defines a relation (KP) and the head that gives conceptual content to that relation, and therefore defines the dimension of the adjective (PropP). KP allows the base of the adjective, a root or a more complex form, to denote a relation between a set of properties and some type of external entity. Above it, Prop defines the conceptual content of that relation, is projected. We assume that this is the minimal structure that a non-derived qualifying adjective can spell out (see Fábregas 2020 and chapter 1, §1.4.4):

(34)

```
        PropP
       /    \
    Prop     KP        <--- tall, ugly, wild...
            /   \
           K     √
```
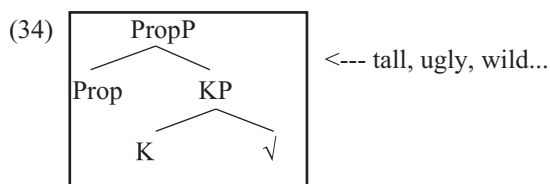
Above PropP, the scale related to the qualifying adjective is projected syntactically in Spanish as ScaleP – remember §1.4.3, and see also Fábregas and Marín (2018) and Fábregas (2020) for evidence about this. This head introduces the scale of the adjective, which will determine whether the adjective has a reference value that is not flexible, one that is flexible or lacks a reference value that is salient enough, following what we described in §4.2.2 above in our discussion about the aspectual properties of change of state verbs. ScaleP is also responsible, in this account, for introducing the specific directionality that the change of state will build over. Like this it will differentiate between adjectives that are oriented towards the positive end in the dimension and those oriented towards the negative end in the same dimension.

Above it, DegP is introduced, selecting different intervals over the scale defined by its complement. I assume with Bobaljik (2012) that there are two relevant heads for Deg in a language like Spanish, which correspond to those assumed in Kearns (2007): positive and comparative. Given that the positive and comparative degree morphology of the adjectival stem is identical in most adjectives in Spanish, I assume that degree normally receives a zero manifestation in Spanish, with overt adverbials like *muy* 'very' or *más* 'more' merged in specifier positions that are spelled out independently.

(35)

```
              DegP
            /      \
      Deg           ScaleP
       ø           /      \
              Scale        PropP
                          /      \
                      Prop        KP
                                 /    \
                             KP        ...√¹⁷⁹⁹
```

<--- barat-
     'cheap'

Other bases have a distinct adjectival stem form for the comparative, like the base for *empeorar* 'to worsen'. I assume that in these cases Deg is not zero, but spelled out as part of the adjectival stem.

(36)

```
              DegP
            /      \
      Deg           ScaleP
    [comp]         /      \
              Scale        PropP
                          /      \
                      Prop        KP
                                 /    \
                             KP        ...√¹⁸⁰⁴
```

<-- peor-
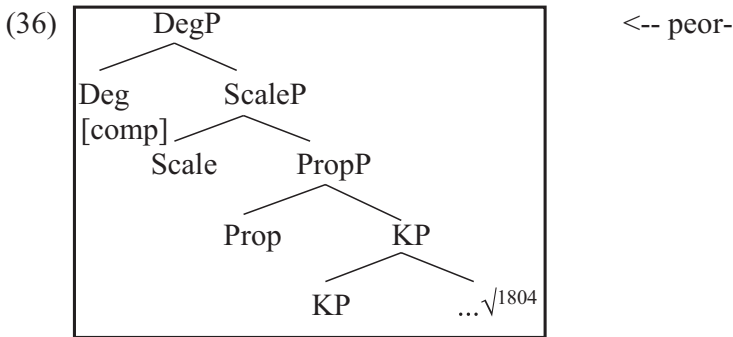
We also saw that in principle the base of deadjectival change of state verbs can project both comparative and positive degrees, provided that its scalar properties license the requisite of both. I assume with Kearns (2007) that degree structure defines the verb's aspectual properties.

4.3.2 The role of PredP and the integration between the adjective and the verbal structure

The degree phrase built over the base denotes a property that must be predicated from another entity, as it is defined as a relation through KP. PredP, merged above DegP, has the effect of defining syntactically the entity that holds the properties defined by the adjective – a certain degree of a property.

(37)
```
                PredP
           ┌──────┴──────┐
          DP            Pred
                   ┌──────┴──────┐
                 Pred          DegP
                          ┌──────┴──────┐
                        Deg          ScaleP
                                ┌──────┴──────┐
                              Scale         PropP
                                       ┌──────┴──────┐
                                     Prop           KP
                                               ┌─────┴─────┐
                                               K          √
```
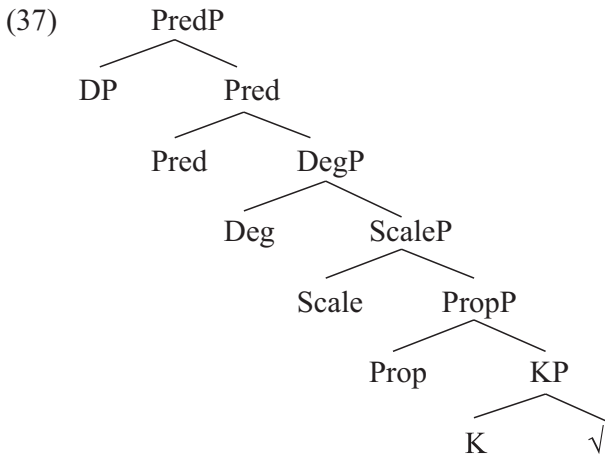
This step is the one that syntactically introduces an argument of the adjectival predication that, later on, will be interpreted as an internal argument of the verbalisation, specifically as the specifier of the Proc head. My claim is that in parasynthetic deadjectival verbs in -*a* the projection of the verbal structure starts at ProcP, without PathP or ResP.

(38)
```
            ProcP
       ┌──────┴──────┐
      DP           Proc
               ┌──────┴──────┐
             Proc          PredP
                      ┌──────┴──────┐
                     D̶P̶           Pred
                              ┌──────┴──────┐
                            Pred          DegP
                                     ┌──────┴──────┐
                                   Deg          ScaleP
                                           ┌──────┴──────┐
                                         Scale         PropP
                                                  ┌──────┴──────┐
                                                Prop           KP
                                                          ┌─────┴─────┐
                                                          K          XP
```
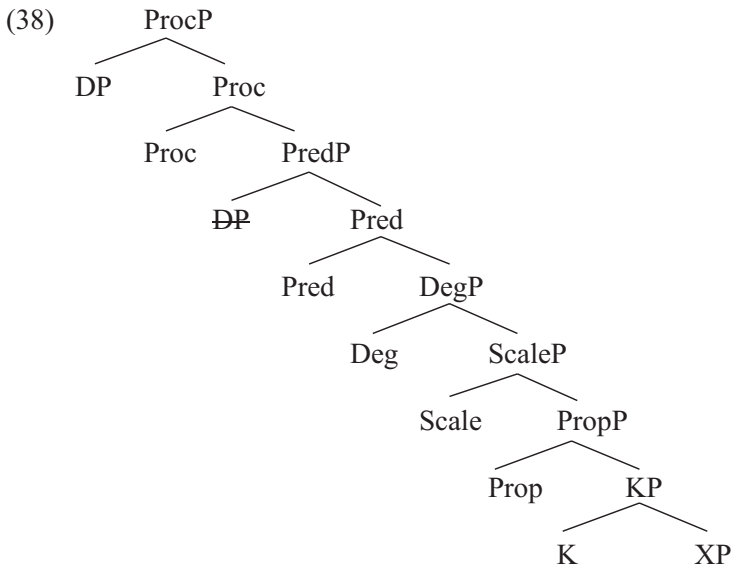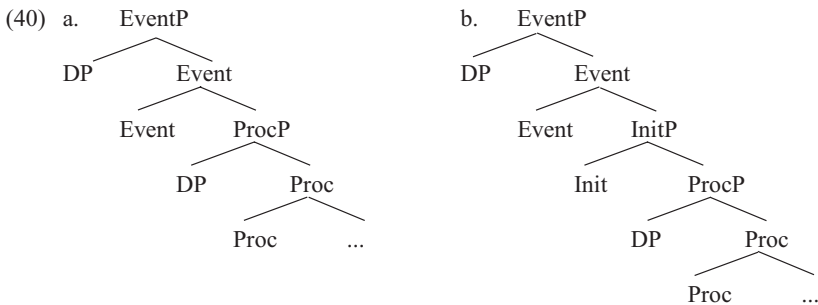
ProcP here performs two specific roles which account for two of the properties of these verbs. The first role is to define a dynamic process: parasynthetic deadjectival verbs in -*a* must be dynamic. Given the nature of its complement, that process is defined as moving along the degree interval that DegP, comparative or positive, define. Any change defined by Proc is therefore a change from one value in the scale of the property within the interval that DegP selects. There is, therefore, an isomorphism between the process that is defined by Proc and the degree interval defined by the adjectival base, in such a way that the process can be conceptualised as a movement across the path defined by the interval of the scale picked by Deg.

(39)   . . . v   v'   v''   v'''   . . .
       . . . t   t'   t''   t'''   . . .

Second, as can be seen in (38), the subject of PredP rises to spec, ProcP, where it becomes the undergoer of the event – specifically, the undergoer of a change of state. This movement operation forces, syntactically, the interpretation that is common to all our verbs of this class: the entity that undergoes the change of state is the same entity that holds the property defined by the scale. That is: all parasynthetic change of state verbs coming from adjectives receive the same reading – the internal argument experiences a change of value within a scale defined by the adjectival base – because in the case of a parasynthetic verb the prefix is a signal that there is a full relational structure, including up to PredP, which defines the subject of the adjective and forces it to be identical to the subject of Proc. We will see that in the case of -*a* verbs without parasynthesis this situation is not always found, specifically because they lack a PredP within their structure.

With respect to the causative-inchoative contrast, I simply assume that the inchoative structure does not project InitP, the head responsible for introducing causative semantics, as in (38). The causative reading minimally differs from (38) in that InitP dominates ProcP.

I assume with Ramchand (2018) that EventP (cf. chapter 1, §1.2.3) is the projection that ultimately hosts the subject of predication. In a derivation without InitP, the specifier of ProcP rises to spec, EventP, triggering the reading where the change of state has been produced by the internal properties of the internal argument (40a). When InitP is present, the argument merged in spec, EventP is semantically associated to Init, and is therefore interpreted as the external agent that sets in motion the change of state (40b).

(40)   a.   EventP   b.   EventP
         /   \   /   \
       DP   Event   DP   Event
              /   \   /   \
           Event   ProcP   Event   InitP
                   /   \   /   \
                 DP   Proc   Init   ProcP
                        /   \   /   \
                      Proc   ...   DP   Proc
                                                                    /   \
                                                                  Proc   ...
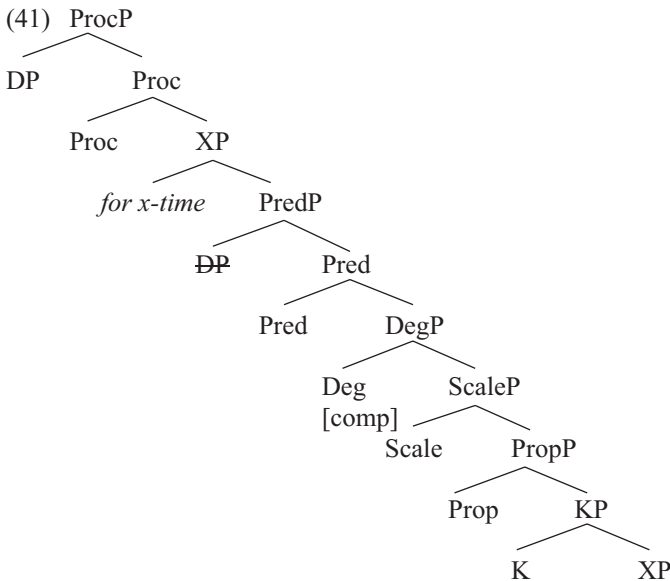
The head Proc establishes an isomorphism with the scalar interval defined in Deg, in a way that the change is defined as a movement within that portion of the scale associated to the adjective, that in this sense codefines the process expressed by Proc.
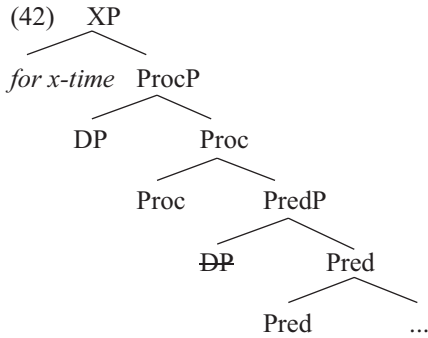
4.3.3 *The aspectual interpretations*

The isomorphism between Proc and the scalar interval picked by Deg explains the aspectual interpretations. When the comparative degree head is mapped to time by ProcP, the interpretation is that there is a minimal punctual transition between v and v+1.
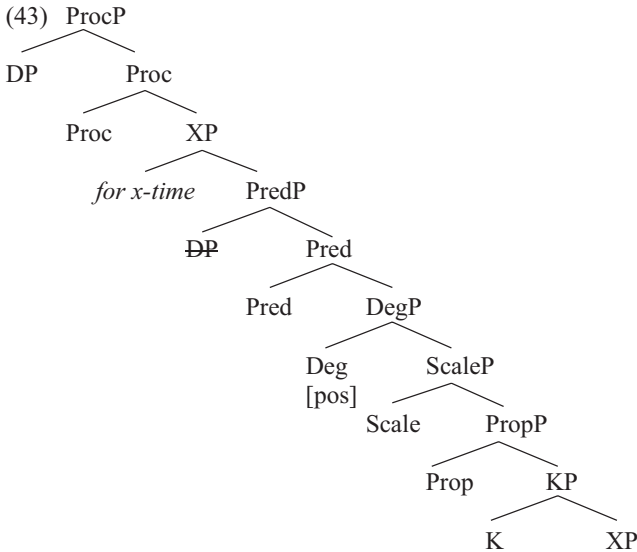
Crucially, configurationally PredP in the structure is interpreted as a result state. The reason is that PredP is a manifestation of Wood and Marantz' (2017) iotta phrase, a stative relational head. In the same way that PredP denotes a relation between a set of properties and its holder, Result Phrase (ResP, cf. §1.2.3) denotes the state that is held by an entity after undergoing an event. In a parasynthetic change of state verb, PredP is present and is always present as the complement of Proc. This means that Pred occupies, configurationally, the same position as ResP. As moreover both are manifestations of Iotta Phrase, I propose that in the complement of Proc, PredP is interpreted as the result state. Thus, (41) represents an achievement reading; a *for*-phrase can be added as an adjunct that measures the duration of the result state achieved (*The sky cleared for ten minutes* as 'The sky cleared and stayed clear for ten minutes'). As PredP corresponds to the result state, I propose that this reading is obtained when the for-phrase is adjoined to PredP.

(41) ProcP

```
(41)  ProcP
      /    \
    DP      Proc
           /    \
        Proc     XP
                /    \
          for x-time  PredP
                     /      \
                   DP̶        Pred
                            /    \
                          Pred    DegP
                                 /     \
                               Deg      ScaleP
                              [comp]   /     \
                                    Scale     PropP
                                             /    \
                                           Prop    KP
                                                  /   \
                                                 K     XP
```

If that punctual transition can be iterated because the adjective is flexible enough, the for-phrase can coerce the achievement into an activity. I propose that this happens when the *for*-phrase is adjoined to ProcP (*The sky cleared for ten minutes* as 'The sky became clearer and clearer for ten minutes').

(42)   XP
```
        XP
       /  \
for x-time  ProcP
           /    \
         DP      Proc
                /    \
             Proc    PredP
                    /    \
                  D̶P̶    Pred
                        /    \
                     Pred    ...
```

Finally, my proposed representation for the accomplishment reading involving the positive degree is (43). The result state in (43) corresponds to a PredP that contains a positive degree head. This head denotes that the standard value that is deemed contextually sufficient for the property has been reached, and as such the verbal structure necessarily entails that, after the change of state, the internal argument is in a state of 'being A'. This PredP corresponding to the result state can, as in (41), be modified by a for-phrase that measures how long the internal argument stayed as being AS.

(43) ProcP
```
         ProcP
        /     \
      DP       Proc
              /    \
           Proc     XP
                   /   \
             for x-time  PredP
                        /     \
                      D̶P̶      Pred
                             /    \
                          Pred     DegP
                                  /    \
                                Deg     ScaleP
                                [pos]  /      \
                                    Scale     PropP
                                             /     \
                                          Prop      KP
                                                   /   \
                                                  K     XP
```

Let us now move to the discussion of how the prefix is introduced in these structures.

4.3.4 PredP as a preposition: additional evidence

Our general claim in this book is that the presence of parasynthetic structure correlates with a richer functional structure between the base and the verbalising morphemes, in a way that the prefixes correspond to the relational heads. In the case of nominal bases, there is nothing particularly groundbreaking in this claim, because of two reasons. First of all, prepositions are typically used with nouns to integrate them into a broader syntactic context. Second, in the case of nouns used as bases of parasynthetic verbs, the set of prefixes can even be related partially to semantic generalisations that relate the use of the preposition with DP constituents with the use of the prefixes in parasynthesis, as we will see in some detail in the next chapter (§5.3.2.).

Our claim is that both nouns and adjectives, when used as bases of parasynthetic structures, share the same set of functional heads used to integrate them within the event defined by the verbal structure. Remember from chapter 1 (§1.4.3; see also Fábregas 2020, developing arguments originally from Hale & Keyser 1993; Mateu 2002) that our claim is that the heads Pred, Scale, Prop and K – as denoting a relation – which are used in adjectival parasynthetic bases, are recycled from the set of prepositional heads p, Path, Place and K – for case. The difference between a noun and an adjective is that the constituent that we traditionally call 'noun' spells out a smaller chunk of structure, which crucially leaves out the relational heads p, Path and Place, which are then spelled out as prepositions, while the constituent that we traditionally call 'adjective', spells out Path and Place, as Scale and Prop, respectively (44).

(44)

	p/Pred	path/Scale	place/Prop	K	N	Root
A		Adjective				
N	prepositional structure				Noun	

Thus, the only relational material that in our account is left with an adjectival base for the prefix to spell out is the one corresponding to p/Pred. This explains in our account that the set of prefixes used in parasynthesis with noun bases is broader and more semantically robust than the one used with adjectives. As we saw in §4.2.4 above, the prefixes used in deadjectival parasynthesis cannot be associated to any systematic meaning difference. Let me now motivate further the claim that Pred can correspond to a preposition, within the general proposal that Pred is a manifestation of Wood and Marantz' (2017) Iotta Phrase.

This point needs to be made because of the general impossibility in Spanish of having an inflected adjective that combines with a preposition.

(45)   a.   *una chica de alta
             a girl of tall
       Intended: 'a tall girl'
       b.   *unos chicos de gordos
             some boys of fat
       Intended: 'some fat boys'

The starting point of our presentation is that, with Klein (1994), Den Dikken (2006) and Wood and Marantz (2017), we are taking the notion of 'relational head' as a supercategory that, in different contexts, can be further specified both in its semantic contribution and its spell out. Pred is the only head out of the set of heads that compose a prepositional structure that is syntactically relational in that it introduces both a complement and a specifier and defines a syntactic relation of that specifier, as subject, with the complement, as predicate. Out of the set formed by {Pred, Scale, Prop, K}, then, we will take PredP to be the only head that properly is relational, even if the other members contribute different syntactic and semantic aspects to that relation, preparing the complement to be part of an appropriate relation, assigning conceptual content to the relation and setting the set of values that are associated to the conceptual content. Adopting the nomenclature of Wood and Marantz (2017), let us call this supercategory iotta (ι).

Wood and Marantz (2017) include in this class a broad variety of heads used to introduce arguments, such as the verbal head that introduces an agent, applicative heads and of course p, as the functional head that introduces the figure in the prepositional relation. These heads are syntactically indistinguishable from each other, all of them being ι, but the semantic and categorial nature of the complement, the configurational position in which they are located and other contextual properties define the specific type of relation that ι expresses.

Our account, from this perspective, is simply to extend PredP to the set of interpretations that ι can get, restricting it to contexts where (we will claim) the complement describes a set of properties describing entities or temporal slices of those entities, not eventualities. Thus, PredP should be syntactically represented as ι, just as p.
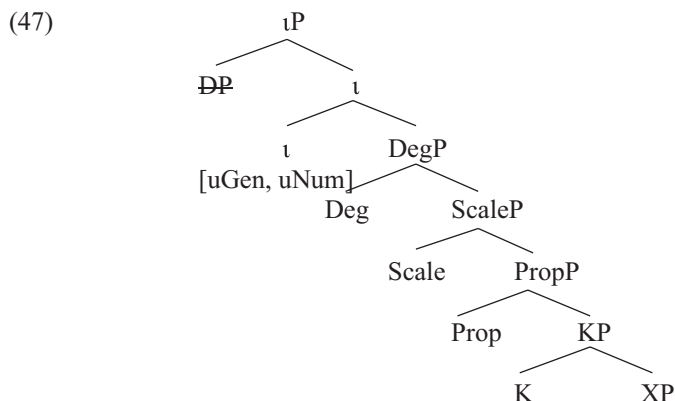
(46)   Pred $= \iota = $ p

Viewed like this, it is not surprising that Pred can be spelled out as a preposition. The question that now emerges is how and why Pred is spelled out as a preposition precisely in verbalisation contexts, but not when building adjectival predication otherwise (remember the fact in 45).

Our proposal is the following. A relevant property of adjectival predication in Spanish is that the adjective carries agreement in gender and number with the DP that acts as its subject. This property is exceptionless, to the point that agreement

can be used to disambiguate between two readings of the same sentence, as in (46), where masculine agreement is necessarily associated to predication of the subject and feminine agreement imposes predication of the object.

(46)   Luis persiguió a María, {agotado/agotada}.
       Luis ran.after A María, exhausted.m/exhausted.f
       'Luis, who was exhausted, ran after María' or 'Luis ran after María, who was exhausted'

In previous work (Fábregas 2007) I already took these facts as evidence that the predicational head is spelled out in Spanish through gender and number agreement. Here I slightly revise this claim. My proposal is that the Pred head contains, in the general case, phi features that must be assigned a value, in such a way that it can be viewed as a ɩ head that contains gender and number unvalued features.

(47)

```
                        ɩP
                    ╱        ╲
                 DP            ɩ
                            ╱    ╲
                          ɩ        DegP
                    [uGen, uNum]  ╱    ╲
                              Deg      ScaleP
                                     ╱      ╲
                                 Scale        PropP
                                            ╱      ╲
                                        Prop        KP
                                                  ╱    ╲
                                                K        XP
```

In terms of exponency, in a form like *gord-as* 'fat-f.pl', the adjectival stem spells out up to scale P, Deg is spelled out as a zero exponent and the gender and number agreement affixes are located in the Pred head, where they get their value assigned by the DP placed in its specifier, which is interpreted as the subject of predication.

What happens in the verbalisation context? My proposal is that in this context the agreement features cannot be projected, and the Pred head manifests then as a pure form of ɩ which is not defined by any nominal feature. This bare expression of Pred is then indistinguishable from the use of ɩ in other contexts where it is used to relate to entities and no event is defined in its complement. In other words, I propose that without the phi features Pred is indistinguishable from the use of ɩ in prepositional cases where it is merely used to express a relation between two constituents.

Of course, it is a well-known fact that within words the constituents introduced cannot carry agreement properties with them (Lapointe 1980), a fact that has sometimes been interpreted as a ban on word-internal structures carrying properties that would allow their internal constituents to establish separate syntactic relations with other elements external to the word constituent. The assumption, of course, is that the presence of uninterpretable features would force the head carrying them to establish an agreement relation with another constituent external to the word (pace Preminger 2014). For instance, it is well-known that within compounding adjectives cannot be inflected and must appear in their invariable gender and number defective form (48).

(48)   a.   unas chicas sord-as y mud-as
            some girls deaf-f.pl and mute-f.pl
       b.   unas chicas sord-o-mud-as
            some girls deaf-A-mute-f.pl
       c.   *unas chicas sord-as-mud-as
            some girls deaf-f.pl-mute-f.pl

The idea is that if the first adjective had gender and number agreement features within the word, the word-internal constituents headed by them would try to establish a relation with a word external element, splitting the word unit into two independent syntactic units, which in essence would reflect into defining two words and not only one.

Given this, the Pred head that is used within the verbalisation must lack the agreement features. My claim is that in the absence of such features, Pred is spelled out as a preposition. I therefore interpret the ungrammaticality of (45) as meaning that in Spanish a preposition and an agreement marker are in complementary distribution, in a way that the agreement marker spells out a ι head that carries unvalued phi features and the preposition spells out ι when those features are not present – and, as we said, the complement is not describing an eventuality.

In the case of adjectival bases, Pred is the only material spelled out by the preposition, which means that the preposition is spelling out functional material without any specific lexical content. My specific proposal is that the spell out of Pred in this context is idiosyncratically dependent on the base used, which selects the different allomorphic expressions of the head, and does not involve a differentiation based on syntactic or semantic features. The default expression of this head is, however, *a-*, which appears in the highest number of forms with adjectival bases, and which I therefore treat as the elsewhere case.

(49)   Pred --------> re-   / ——[fresc-, nuev-, fin- . . .]
                      en-   / – – – [suci-, guarr-, gord- . . .]
                      a-   / Elsewhere

Perhaps not by chance, with de, *a* is the preposition used in most functional contexts, being used to mark direct objects differentially (50) and to introduce indirect objects, without clear semantic contributions in both cases.

(50)   a.   ver a tu hermano
            see A your brother
        'to see your brother'
        b.   ver tu película
            see your movie
        'to see your movie'

This means that we do not identify any systematic contrast between the material that *a-* and *en-* spell out.[2]

4.3.5 *The linearisation of the prefix*

Before we move on, there is another question related to the prefix that needs to be addressed: its linearisation. As the reader must have noted, we cannot derive the linear order of the morphemes merely by head movement (Travis 1984). The reason is that applying that operation systematically would produce an order such as (51), because the ThV is the spell out of Evt, and the prefix spells out PredP, which is between the adjectival base and the theme vowel.

(51)   *gord-en-a (en-gord-a)
            fat-en-ThV

Let us present here our provisional solution to avoid the linearisation in (51). We start from the following assumptions, which we take as currently standard:

(i)   The operation described as head movement is not syntactic, but morphophonological (see also Fábregas & Putnam 2020): after insertion of exponents in syntactic constituents, these exponents are linearised.
(ii) In order to linearise two exponents, the exponent corresponding to the complement incorporates to the exponent corresponding to the head, creating a morphophonological constituent.
(ii) The default linear manifestation of the creation of that morphophonological constituent is to produce the mirror image of the head-complement relation as it was syntactically defined.

Unless otherwise lexically stipulated, given two exponents A and B, the first of which spells out material that includes a head x that takes the material spelled out by B as its complement, the linear order will be B-A. Therefore, without any lexical stipulation the linearisation described in (51) should result. The way out that I adopt provisionally, lacking a broader analysis of prefixation in general that

allows me to find a stronger principle, is that the exponent that corresponds to the preposition or prefix comes with a lexical stipulation that only activates its right edge for linearisation. We can represent this by marking the exponent with the sign ^ in its right edge:

(52)   a^
       en^
       re^

   The effect of this lexical diacritic is that, when the base incorporates to this exponent and creates a morphophonological constituent with it, the default lin-earisation that reverses the order cannot be applied to it. Thus, when *gord-* incor-porates to *en-*, we obtain the constituent in (53).

(53)   Incorporation (gord, en^)= [en-gord]

   Given that the constituent thus created, [en-gord], is not lexically listed because it has been created through incorporation, it cannot contain lexical stipulations about its linearisation when combined with the next exponent, the theme vowel. Thus, as in the default case, (53) linearises as a whole to the left of the theme vowel.

(54)   Incorporation (a, [en-gord]) = [[en-gord]-a]

   As we say, this is just a preliminary proposal, and we will get back to this in the last chapter of this monograph.

4.3.6 *Where is the verbaliser? On the nature of verbal formations with* -a *and a* **prefix**

Before we wrap up the discussion about parasynthetic deadjectival verbs in -*a*, we must address one issue that is relevant not only for these verbs, but also for the verbs that will be treated in the next chapter. Where is the verbaliser?
   Our analysis in chapter 2 places theme vowels in the Event head, which – remember – defines the eventuality description as a complete event with time and world parameters. This head, however, cannot by itself define the Aktionsart of the predicate or its argument structure, so it cannot be taken to be the verbaliser that performs the role of integrating the adjectival base within the syntactic and semantic structure of the verb.
   However, we know that in -*a* derived verbs we must have a syntactic verbaliser present, and this so for several reasons beyond the one just mentioned. This class of verbs – change of state verbs – must be dynamic, and must have an internal argument that is interpreted as the entity that undergoes a change of state, so a verbalising structure must be syntactically present that defines dynamicity and a space for the internal argument. In our account, these are the heads Proc and

Init, the first of which is compulsorily present in the change of state verb, and the second of which is present only in the causative construal.

Given that we need verbalising structure, but the only suffix that is visible on the surface is -*a*, corresponding to the theme vowel located in EventP, our conclusion is necessarily that the verbalising structure is associated in these cases with a zero morpheme. We specifically propose that following entry for the zero morpheme that appears in these formations.

(55)   InitP   <----> ø
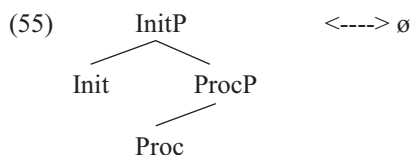
     Init   ProcP

          Proc

By the Superset Principle (remember §1.3.4), this zero exponent can be used in anticausative structures, where InitP is not projected, but Proc is present, as this constitutes the anchor of the entry for the exponent. In the causative version of the verb, on the other hand, the zero exponent is a perfect match for the verbalising structure.

Proposing a zero exponent is always a delicate matter in a Neo-Constructionist approach, so we must show independent evidence that it is present in the structure. The first piece of evidence has to do with the morphological properties of the adjectives (or nouns) that can be used to build verbs in -*a*, without overt verbalisers. Borer (2013) provides us with criteria to determine when a zero morpheme involved in category change is needed. She claims that in English (or Spanish) there is no zero nominaliser, and the reason is that it is impossible to build nouns from verbs that are morphologically marked as such without any overt nominaliser.

(56)   a.   una compr-a
             a buy-NM 'a purchase'
       b.   *una clas-ific-a
             a class-ify-NM
       Intended: 'a classification'
       c.   una clas-ific-a-ción
             a class-ific-a-tion
       d.   *un aterr-iz-o
             a land-IZ-NM
       Intended: 'a landing'
       e.   un aterr-iz-aje
             a land-IZ-nom
       'a landing'
       f.   *un humed-ez-o
             a wet-EC-NM
       Intended: 'a wetting'

g.   un humed-ec-i-miento
      a wet-EC-ThV-ment
'a wetting'

Her point is that if there was a zero nominaliser, the formations in (56b, d, f)
should be grammatical, just like the formation in (56a). They are not, which means
that we cannot use a zero nominaliser in Spanish.

Her proposal is that in (56a), the base is not categorially defined as a verb: it is
an acategorial root, and as such it can combine with any functional structure, in
this case the structure of a nominal that allows it to be contextually interpreted as
a noun.

In contrast, in the ungrammatical examples (56b, d, f), there is an overt ver-
baliser in the structure – that is, the base is syntactically defined as a verb – that
shows us that the base is not an acategorial root lacking a grammatical category.
Being a verb already, it cannot combine with the functional head that provides it
with gender, because verbs in Spanish (or English) do not combine with gender.
If we add the overt nominaliser, however, the nominalisation is possible, because
the morphemes *-aje*, *-miento* or *-ción* are lexical heads that can change the gram-
matical category from verb to noun.

If we had a zero nominaliser whose syntactic status was identical to *-ción* and
only differed from it in its phonological manifestation, then it should be equally
possible to build a noun from a root or from a morphologically complex base
defined as verb. As this is systematically impossible in English or Spanish, the
conclusion is that these languages lack an exponent ø for the head N, that defines
the nominalisation.

The same argument, however, shows us that there is a zero verbaliser in Span-
ish. The formations in *-a* without an overt verbaliser can indeed take as base adjec-
tives or nouns that are morphologically derived. The presence of the nominalisers
or adjectivalisers in the base that is further derived as a verb with plain *-a* shows
us that we are not deriving these verbs from a root (as in the nominalisation in
56a), but from categorially defined bases that are not verbs (as in the nominalisa-
tions in 56b, d, f).

(57)   a.   a-silv-estr-a
             A-forest-ESTR-ThV
       b.   esta-cion-a
             st-ation-ThV
       'to park'
       c.   influ-enci-a
             influ-ence-ThV
       'to influence'
       d.   colec-cion-a
             collect-tion-ThV
       'to put in a collection'

This means that we must have a zero verbaliser in Spanish. Without a verbaliser, these formations should be ungrammatical: they would be nouns or adjectives that attempt to combine with EvtP without being categorised as verbs. The puzzle dissolves if we posit a zero verbaliser that appears between the base and the theme vowel.

The presence of the zero verbaliser can be further supported by the distribution of the theme vowels in these formations. As we have seen, and will continue to see in this chapter and the next, the theme vowel -*a* is the only one that can appear in a derived verb, in the absence of an overt verbaliser. There are verbs in -*a* that are parasynthetic from nominal or adjectival bases, and also plenty of non-parasynthetic verbs in -*a* from nominal or adjectival bases. The theme vowel -*e* is only used in verbalisations when the overt verbaliser -*ec*- is present, as in *humed-ec-e* 'to make wet', and the theme vowel -*i* is never used. There are, then, no 'bare verbalisations' without explicit verbaliser that adopt the form N-e, N-i, A-e or A-i.[3]

Our proposal where these verbalisations in plain -*a* contain a zero verbaliser explains why the resulting verbs must fall within the unmarked conjugation, which is -*a* in Spanish (remember §2.2.1), and none of the others. A zero exponent is nothing but an exponent whose morphophonological properties are empty. In the same way that the exponent lacks any content in terms of its segmental properties, we expect that it should also lack information that selects marked allomorphs of another exponent. If the -*a* exponent that defines the first conjugation is the unmarked or default version of the theme vowel, the lack of information to select marked exponents involves, necessarily, that the verbs that use the zero verbaliser will adopt the unmarked theme vowel. In other words: the N-e, N-i, A-e or A-i patterns do not exist because they would involve zero verbalisers that, being morphophonologically empty, cannot involve diacritic features to select the marked conjugations in -*e* or -*i*.

4.4 Prefix-less deadjectival verbs with plain -*a*

Let us now move to deadjectival verbs which are derived with -*a* and lack any prefix. In my analysis, these verbs contrast with parasynthetic deadjectival formations of the same type in that PredP is not part of the structure. Their behaviour, therefore, provides an event clearer understanding of what the role of PredP is within deadjectival parasynthetic verbs. The absence of PredP in these structures means that the adjective is not integrated in the verbal structure through syntactic means, and this has two immediate consequences:

a) There are no syntactic devices that define the internal argument as the participant that is compulsorily taken as the entity that the change of state is predicate from.

b) PredP is a stative relational constituent that, when present, forces the introduction of Proc because it cannot be selected by another stative head like Init

or Res. When PredP is absent, then, it is possible to have verbal formations where the base is directly selected by Init, without Proc, which results in stative deadjectival verbs.

We will examine these two cases, that constitute strong evidence for our analysis of deadjectival parasynthesis, in §4.4.2 and §4.4.3, respectively. That said, it is fair to admit that the most common interpretation of non parasynthetic deadjectival verbs in -*a* is still a dynamic change of state predicated from the internal argument, so before we address these additional cases we will dedicate a section to these 'well-behaved' change of state verbs in §4.4.1.

4.4.1 *Non parasynthetic deadjectival change of state verbs in* -a

Among the deadjectival verbs that fall in this class we have verbs like the ones in (58), denoting physical or psychological properties.

(58)   ausente 'absent' > ausentar, azul 'blue' > azular, caduco 'outmoded' > caducar, caliente 'warm' > calentar, ciego 'blind' > cegar, desnudo 'naked' > desnudar, disperso 'disperse' > dispersar, espeso 'thick' > espesar, junto 'together' > juntar, maduro 'ripe, mature' > madurar, sujeto 'fixed' > sujetar, tenso 'tense' > tensar, curvo 'bent' > curvar, limpio 'clean' > limpiar, lleno 'full' > llenar, presente 'present' > presentar, seco 'dry' > secar, vacío 'empty' > vaciar, alegre 'happy' > alegrar, conforme 'satisfied' > conformar, activo 'active' > activar, sereno 'calm' > serenar, enfermo 'sick' > enfermar, legítimo 'legitimate' > legitimar, lícito 'licit' > licitar, mejor 'better' > mejorar, óptimo 'optimal' > optimar, próspero 'prosperous' > prosperar, sano 'healthy' > sanar, válido 'valid' > validar, vario 'varied' > variar, transitivo 'transitive' > transitivar, completo 'complete' > completar, doméstico 'domestic, tame' > domesticar, enemigo 'unfriendly' > enemistar, hermano 'brotherly' > hermanar, híbrido 'hybrid' > hibridar, profano 'profane' > profanar, cristiano 'Christian' > cristianar, libre 'free' > liberar, concreto 'concrete' > concretar, igual 'equal' > igualar, íntegro 'integral' > integrar, preciso 'precise' > precisar, público 'public' > publicar 'to publish, to make public', oculto 'hidden' > ocultar, yermo 'barren' > yermar

Deadjectival verbs which use -*a* without parasynthesis and still denote a change of state form a smaller group than the parasynthetic verbs with their same properties. I propose for them the following structure, which is identical to the one proposed for the corresponding change of state verbs with parasynthesis, except that PredP is missing. As in the other cases, I assume that InitP makes the causative
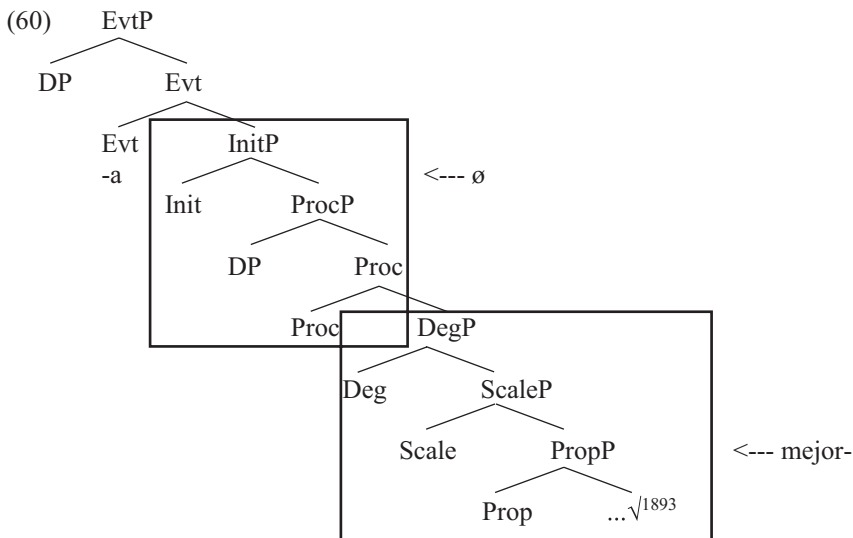
version, and I represent in (59) the inchoative version. I illustrate the structure with the verb *mejorar* 'to get better'.

(59) a. mejor-a

　　　better-ThV

　　b. EvtP

```
          EvtP
         /    \
       DP      Evt
              /    \
            Evt    ...ProcP
            -a     /      \
                (DP)       Proc
                          /     \
                       Proc      DegP
                        ø       /    \
                              Deg     ScaleP
                                     /      \
                                  Scale      PropP
                                            /     \
                                         Prop      KP
                                                  /    \
                                                KP    ...√1893
```
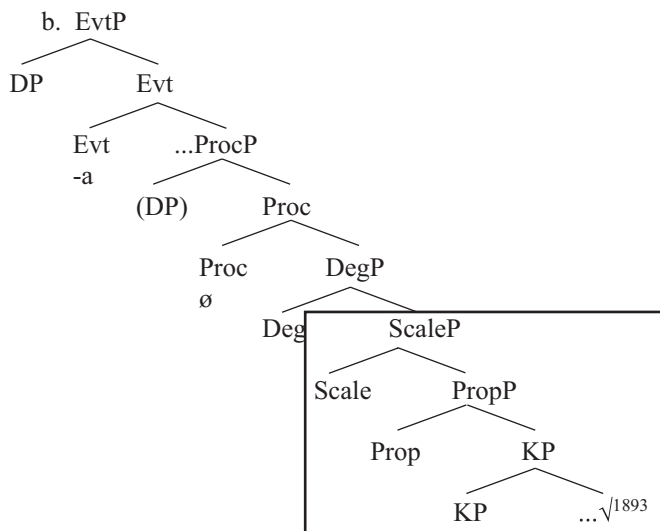
In my view, in this verb the syntax does not define which argument is the one taken as undergoing a change of state, but that interpretation is obtained, so to say, by the default semantic interpretation of the relation between the base and the verbal structure. Note that the adjectival base is defined as denoting a relation (KP is present) and therefore its semantics has to be interpreted as referring to some entity. In this syntactic configuration, ProcP is present, and with it an internal argument (DP) merged in its specifier. A natural interpretation of this structure – not one imposed by the syntax, but still one that is compatible with the syntactic structure present – is that the participant that is claimed to undergo the change of state is the one that appears closer to the adjectival base denoting that property, that is, the internal argument.

This might explain, in fact, why even in the absence of PredP the interpretation of these structures is frequently a dynamic change of state predicated from the internal argument. In (60), where we represent the causative version of the same verb, we can see that the external argument is further away from the base than the internal one, which makes it unsurprising that this interpretation is easily obtained.

(60)   EvtP

```
(60)        EvtP
         ┌─────┴─────┐
        DP          Evt
              ┌──────┴──────┐
             Evt          InitP
             -a        ┌────┴────┐      <--- ø
                      Init     ProcP
                           ┌─────┴─────┐
                          DP          Proc
                                ┌──────┴──────┐
                              Proc          DegP
                                       ┌──────┴──────┐
                                      Deg          ScaleP
                                              ┌──────┴──────┐
                                            Scale         PropP       <--- mejor-
                                                     ┌──────┴──────┐
                                                    Prop      ...√^{1893}
```

Predicating the change from the external argument implies ignoring the internal argument that appears closer to the adjective that denotes the property. I argue that unless something in the adjectival semantics tells the speaker that the internal argument is not a valid subject for that change, this interpretation will be the one that emerges.

Let us now briefly explore the aspectual properties of this class of verbs in order to show that their aspectual behaviour, being conditioned by the presence of Deg in its comparative or positive version, is not affected by the lack of a PredP layer. In fact, in (59)-(60), Proc directly selects Deg, which makes the isomorphism between the values of the scale and the dynamic event even more expected.

Let us start with *mejorar*, whose base is unequivocally comparative. the only base in our group of verbs that is unequivocally comparative (61a), which we will compare, for good measure, with (61b), an equivalent comparative base but in a parasynthetic construal. Remember that we predict that there should be no aspectual difference between the two, as the two bases minimally differ in the presence or absence of PredP.

(61) a.   mejor-a
            better-ThV
        'to make better'
      b.   em-peor-a
            in-worse-ThV
        'to make worse'

Let us start with the parasynthetic one. These are the two readings allowed by the comparative base: a telic achievement one (62a) and an atelic process one

obtained by iteration of the telic reading (62b) – with the additional reading where the *for*-phrase measures the result, which we ignore here. None of the two entails that, at the end of the change of state, the subject is in a bad state. The *in*-phrase in (62a) involves a delayed event reading, as expected from the verb being an achievement.

(62) a. La salud de Juan empeoró en una semana, (pero seguía siendo buena).
          the health of Juan worsened in a week, but continued being good
      'Juan's health got worse after a week, but his health was still good'
      b. La salud de Juan empeoró durante una semana (pero seguía siendo buena).
          the health of Juan worsened for a week, but it continued being good
      'Juan's health got worse and worse during one week, but was still good'

Compare now with *mejorar*. Exactly the same readings are produced: the telic achievement one with an *in*-phrase in a delayed event reading (63a) and the atelic reading obtained by iterations (63b).

(63) a. La salud de Juan mejoró en una semana, (pero seguía siendo mala).
          the health of Juan better-ed in a week, but continued being bad
      'Juan's health got better after a week, but his health was still bad'
      b. La salud de Juan mejoró durante una semana (pero seguía siendo mala).
          the health of Juan better-ed for a week, but it continued being bad
      'Juan's health got better and better during one week, but was still bad'

The parallelism extends to the other adjectival classes. Like *ancho* 'wide' (see §4.2.2. above) *amplio* 'broad' lacks a sufficiently defined reference value in the positive degree to license the telic accomplishment reading (64).

(64) ??casi{amplio/ancho}
      almost big/wide

In correlation to this the telic accomplishment reading is odd in their derived verbs, both the parasynthetic *ensanchar* 'to widen' and the non parasynthetic *ampliar* 'to broaden' (65). In contrast, the achievement reading and the atelic activity reading are fine with both of them (66).

(65) a. ??La abertura se ensanchó del todo en diez minutos.
          the opening SE widened completely in ten minutes
      'The opening got as wide as possible in ten minutes'
      b. ??La abertura se amplió del todo en diez minutos.
          the opening SE extended completely in ten minutes
      'The opening got as big as possible in ten minutes'
(66) a. La abertura se amplió {en diez minutos/tras diez minutos}
          the opening SE extended in ten minutes/after ten minutes
      'The opening got bigger after ten minutes'   Telic achievement

b.   La abertura se amplió durante diez minutos.
          the opening SE extended for ten minutes
     'The opening got bigger and bigger for ten minutes'   Atelic activity
c.   La abertura se ensanchó {en diez minutos/tras diez minutos}
          the opening SE widened in ten minutes/after ten minutes
     'The opening got wider after ten minutes'   Telic achievement
d.   La abertura se ensanchó durante diez minutos.
          the opening SE widened for ten minutes
     'The opening got wider and wider for ten minutes'   Atelic activity

Thus, open scale adjectives whose reference value is too vague face the same difficulties when producing telic positive readings in parasynthetic and non parasynthetic construals. We also saw in §4.2.2 that some closed scale adjectives, those that do not have flexible upper boundaries, have difficulties in producing atelic readings because they cannot iterate the change of state – as they only have one value that can be taken as reference. One example of such type of adjective is *curvo* 'bent', which has a minimal boundary value – a small amount of bentness counts as being bent. This base produces a parasynthetic verb (67a) and a non parasynthetic one (67b), and in both cases the reading of a *for*-phrase reading measures the result state, and does not coerce the adjective into an activity.

(67) a.   La rama se encorvó {#durante un mes/en un mes}.
            The branch SE bent for a month/in a month
       '#The branch was bent down for a month'/'The branch got bent in a month'
      a.   La rama se curvó {#durante un mes/en un mes}.
            The branch SE bent for a month/in a month
       '#The branch was bent down for a month'/'The branch got bent in a month'

   I will not get into more details about this class of verbs, given that their properties referring to the adjectival base are not different from the parasynthetic class. Let us now move to the two classes of non parasynthetic deadjectival verbs in -*a* which in fact show the extra options that emerge when PredP is not present.

4.4.2 Deadjectival verbs in -a *involving change of state not predicated from an internal argument*

There are a number of change of state verbs coming from adjectives that express a change in properties that is predicated from an entity different from the internal argument. To the best of our knowledge, this class has previously been unnoticed. Similarly, it has been unnoticed until now that these verbs systematically share the same morphological shape: they are never parasynthetic and they always contain the ThV -*a* as the only suffixal material.

(68) contrario 'opposed' > contrariar 'to become opposed to someone', frecuente 'frequent' > frecuentar 'to do something frequently', íntimo 'intimate' > intimar 'to get intimate with someone', pródigo 'generous' > prodigar

'to get generous with something', subjetivo 'subjective' > subjetivar 'to become subjective about something', último 'last' > ultimar 'to perform the last stages of something', violento 'violent' > violentar 'to get violent with something'

Note that in (69a) one does not claim that María became violent with Juan, in the same way that (69b) does not mean that the door acted violently: the person that gets violent is the external argument, not the internal one.

(69) a. Juan violentó a María.
          Juan violent-ed DOM María
      'Juan got violent with María'
      b. Juan violentó la puerta.
          Juan violent-ed the door
      'Juan got violent with the door'

Another case in point is *contrariar* 'to get opposed to someone'. As in (69), from (70a) we cannot conclude that (70b) follows; in fact, the gloss is closer to (70c), where the external argument is the one that becomes contrary to something or someone.

In other cases, the interpretation is clearly that what becomes A is the event itself, or the relation between the entities, and none of the entities – the internal or the external argument – can be glossed as undergoing the change. In (71), what one states is that Juan goes often to a place, the one designated by the internal argument. Note that one cannot claim that the internal or the external argument is frequent.

(71) a. Juan frecuent-a este local.
          Juan frequent-ThV this place
      'Juan comes often to this place'
      b. *Juan es frecuente.
          Juan is frequent
      c. *Este local es frecuente.
          this place is frequent

In (72), one does not interpret that either of the two arguments becomes intimate; it is rather their relation what becomes intimate, or in other words, necessarily both of them reciprocally must become intimate with each other within the same relation.

(72) a. Juan intimó con María.
          Juan intimate-ed with María
      b. *Juan es íntimo.
          Juan is intimate
      c. *María es íntima.
          María is intimate

In (73) we have a quite interesting case where the property expressed in the adjective must refer to part of the event: one claims that Juan is performing the

phase of the event that can be considered to be last, or in other words, that Juan is concluding the proposal. Again, neither Juan nor the proposal can be last.

(73)   a.   Juan ultimó la propuesta.
            Juan last-ed the proposal
       'Juan developed the last phases of the proposal'
       b.   #Juan es último.
            Juan is last
       c.   #La propuesta es última.
            the proposal is last

Other cases show some vagueness with respect to what entity is the one that undergoes the change of state, but where clearly a gloss using the internal argument is not appropriate. Consider (74): clearly, (74b) is not a right gloss for this verb, and in any case (74c) might be closer to its normal interpretation.

(74)   a.   Juan contrarió a Pedro.
            Juan contrary-ed DOM Pedro
       'Juan did something that was against Pedro'
       b.   #Pedro es contrario a Juan.
            Pedro is opposed to Juan
       c.   Juan es contrario a Pedro.
            Juan is opposed to Pedro

In this verb, derived from the adjective *contrario* 'opposed' the entity that gets to be 'opposed' is not the internal argument of the verb. One could alternatively imagine that Juan creates a situation that is against Pedro, but Pedro, the internal argument, is clearly not the entity that changes properties. In (75) we find another instance of this vagueness where one can discuss whether the change affects the external argument or some implicit situation, but the internal argument does not change properties.

(75)   a.   El narrador subjetivó la realidad.
            the narrator subjective-ed the reality
       'The narrator become subjective about reality'
       b.   #La realidad es subjetiva.
            the reality is subjective

(75a) does not imply that the reality changed at all in its properties; at best, what changes is some representation of the reality, but that is an effect of the narrator becoming subjective with respect to it, or alternatively the event that the narrator performs being subjective. In either case, (75b) is not an entailment of (75a) as (16a) does not make reality be subjective, only be represented as subjective by the narrator.

(76) represents the same type of reading where the properties can be predicated from the subject or from the event, but not of the internal argument. The adjective *pródigo* 'generous' can be applied to human entities or to personified entities (77), but we cannot use it as in (76b) to say that something appears in a high quantity. Therefore,

(76a) might mean that Juan was generous with his kisses, or that the event was gener-
ous in producing a lot of kisses, but it cannot mean that the kisses were generous.

(76) a.   Juan prodig-ó besos a todos.
           Juan generous-ed kisses to everybody
           'Juan was generous with his kisses for everybody'
      b.   *Los besos fueron pródigos.
            the kisses were generous
(77) a.   Juan es pródigo en regalos.
           Juan is generous in presents
      b.   La naturaleza es pródiga en frutos.
           the nature is generous in fruits

At this point the reader might be wondering whether one could not just claim
that all the previous cases are simply instances of demotivated meanings, where
the base adjective simply does not mean what it usually means. However, a demo-
tivation account is too strong, simply, because the adjectival base means exactly
what the adjective means in other cases. The event that we call *violentar* 'to vio-
lent' involves the set of properties that we refer to as *violento* 'violent', and the
event that we call *frecuentar* involves exactly the same type of notion that we call
frecuente 'frequent'. If we claimed that these verbs are simply lexicalised or demo-
tivated verbs that have lost the connection with the corresponding base adjectives
we would simply lose that connection that is necessary to express what they mean.

Thus, demotivation of meaning is not at play in the cases revised previously.
In my account, what is at play is that we are missing the the PredP layer, which
defines in the syntax the predication relation between the base and an argument
that configurationally must end up being the specifier of ProcP – see (78), where
I illustrate the structure for *frecuentar* 'to do something often'. The spell out effect
of the absence of PredP is that there is no material left for the prefix to spell out,
and hence parasynthesis is impossible.

(78)   EvtP
       DP   Evt
         Evt   InitP
         -a   <--- ø
           Init   ProcP
             (DP)   Proc
               Proc   DegP
                 Deg   ScaleP
                 ø   <--- frecuent-
                   Scale   PropP
                     Prop   KP
                       K   √1885
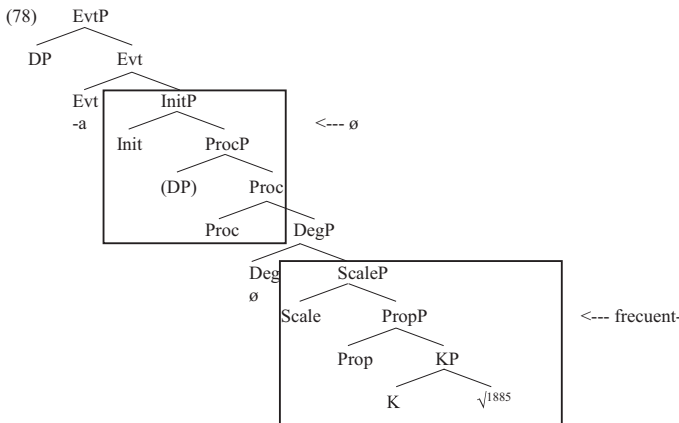
Let us now move to deadjectival verbs denoting stative properties.

4.4.3 *Deadjectival verbs in* -a: *stative property*

The lack of a PredP layer that our analysis predicts for non parasynthetic -*a* verbs has also effects for their aspectual properties. In particular, lacking a PredP layer has the effect that, beyond the configurations involving ProcP previously, the stative configuration in (79) should also be possible.

(79)

```
        EvtP
       /    \
     DP      Evt
            /    \
          Evt    InitP
          -a    /    \
             Init     DegP
              ø      /    \
                  Deg    ScaleP          <--- transparent-
                   ø    /      \
                     Scale      PP
                            /      \
                           P     ...√1898
```
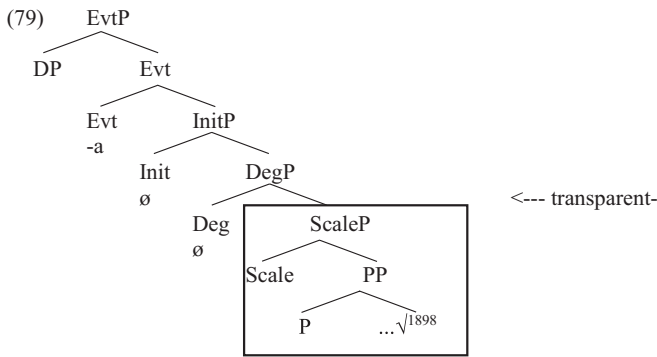
In (79) previously we have a structure where the event properties are obtained through the only presence of Init and Evt, without any ProcP head. Remember that InitP is a stative head that is only differentiated from ResP configurationally, depending on whether it is the stative relation temporally preceding the process or following it (§1.2.3).

My claim is that this option exists only when PredP is not present because InitP cannot directly select PredP. The reason, I claim, is semantic: Init selecting Pred would produce a sequence of two heads with the same semantic meaning, a state. Like PredP, Init is stative, and does not involve any progression. (79) is a possible structure because the only stative structure that is interpreted in the structure is the one related to Init. In contrast, I claim, (80) would be ungrammatical because both Init and its complement, Pred, denote a state.

(80)

```
         *EvtP
        /     \
      DP       Evt
             /     \
           Evt     InitP
           -a     /     \
               Init      PredP
                        /     \
                      D̶P̶     PredP
                             /     \
                           Pred     DegP
                                   /     \
                                 Deg     ScaleP
                                        /      \
                                     Scale      PP
                                             /      \
                                            P     ...√
```
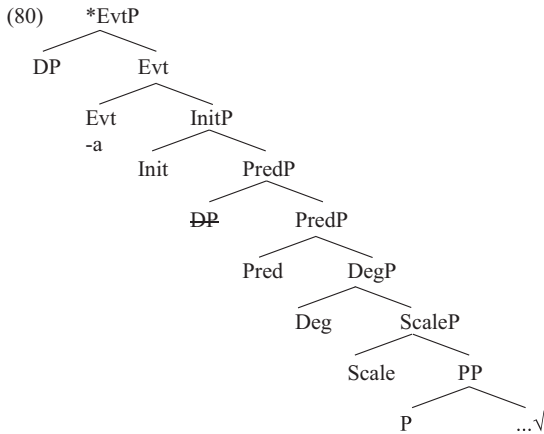
The structure in (80) would result in deadjectival parasynthetic verbs that are stative, a class that is unattested, as we saw in the previous chapter. I claim that there are no deadjectival parasynthetic verbs that are stative because parasynthesis signals a structure like (80) and in (80) there are two adjacent syntactic heads, one the complement of the other, that receive the same interpretation: a stative predicate that is ultimately linked to a subject. I take this to be an instance of Vacuous Projection where grammar cannot interpret each step in the derivation in a significant way: one of the two adjacent heads is redundant with respect to the information that the other one triggers.

Going back now to (79), note that its interpretation is expected to be similar to the one produced by an adjectival predicate in addition to a copula (§2.3): there is no dynamic part of the event, and the predicate is reduced to the set of properties expressed by the adjectival base. The consequence should be that the verbs corresponding to the structure in (79) would have a meaning similar to 'be A'.

There are several verbs that produce this meaning, and they always share the property that they are non parasynthetic. Consider (81), to begin with.

(81)   Este vestido (se) transparent-a.
       this dress SE transparent-ThV
       'This dress is transparent'

(81) cannot mean that the dress becomes transparent or more transparent; it simply states the same as (82), that is, that the subject has a relevant degree of the property.

(82)   Este vestido es transparente.
       this dress is transparent

Another relevant case is (83), which again does not mean that the person becomes cross-eyed, but that the person is cross-eyed – contrast these verbs to atelic dynamic verbs in *-ear*, which are not stative (cf. §8.2.2).

(83)   a.   bizc-a
            cross.eyed-ThV
       b.   El perro bizca.
            the dog cross.eyed-ThV
       'The dog is cross-eyed'

Similarly, in (84) it is clear that the subject does not become *propicio* 'conducive', but rather that it is conducive to something.

(84)   La dieta propici-a la pérdida de peso.
       the diet conducive-ThV the loss of weight
       'The diet is conductive to weight loss'

We also have verbs in this class that allow the change of state meaning and the stative meaning, alternatively. One such example is (85), where the stative meaning is in (85a) and the change of state meaning is (85b).

(85) a. Su peso dobl-a el peso de Juan.
              his weight double-ThV the weight of Juan
        'His weight is two times the weight of Juan'
      b. El precio se dobló.
              the price SE double-ed
        'The price became double'.

Another verb that has both a change of state and a stative interpretation is the one in (86).

(86) a. El pepino amarg-a.
              the cucumber bitter-ThV
        'The cucumber is bitter'
      b. El pepino amargó la sopa.
              the cucumber bitter-ed the soup
        'The cucumber made the soup bitter'

From my perspective, the crucial observation is that these verbs only emerge when there is no prefix. I take this to be strong support for my claim that the prefix, with adjectival bases, corresponds to PredP, and its absence removes a layer that, being stative, must be selected by Proc.

4.5 Conclusions

Let us conclude this chapter. Here we have argued that the presence of the prefix in the parasynthetic formations that come from adjectives reflects the presence of a Pred head whose syntactic role is to define the predication relation between one entity that later on becomes an internal argument of the verb and the adjectival structure present as a base for the verbalisation. On the proposal that adjectives are the spell out of a head equivalent to lexical P, the K head and a noun, Pred is the only head within the relational structure of the base that is left for the prefix to spell out, resulting in the fact that parasynthesis with adjectival bases only uses functional prepositions with very little or no lexical content, where which specific preposition is used for each case is idiosyncratically selected.

Through the properties of the configuration defined, by force that argument has to become an internal argument. The PredP constituent, configurationally, is interpreted as equivalent to the result of change, and therefore its presence or absence of a degree structure is what determines whether the result state involves acquisition of the property through a significant movement across the path defined by the adjective's scale that crosses the relevant boundary, or a movement across the part of the scale that is defined as the path interval relevant for the degree value

adopted in DegP, in which case there is no entailment that a sufficient value of the property has been acquired through the change of state.

In contrast to this, absence of parasynthesis with a deadjectival verb that only has the ThV -*a* as suffixal material means that PredP is absent, and therefore that syntax does not restrict the behaviour of the verb so strongly. This is reflected in the emergence of a broader set of verb classes, including changes of state that are not predicated from the internal argument and stative attributive predicates.

Notes

1   We would like to note for completeness the existence of four parasynthetic forma-
    tions collected in Gibert-Sotelo (2017: 70) which express a decreasing change of state,
    where the prefix is *des*-. The effect of the prefix seems to be to reverse the directionality
    of the scale, going from a higher to a lower degree.
    (i)   acerbo 'acerbic' > des-acerb-a 'to make less acerbic', basto 'rough' > des-bast-a
           'to rough down', bravo 'wild' > des-brav-a 'to tame', cabal 'logical, ordered' >
           des-cabal-a 'to make less ordered'
       See §5.3.4.2 for my take on this prefix. I would like to point out that forms like those
    in (i) do not have a productive underlying scheme, and are formed from base adjectives
    that are either rarely used or used in meanings that do not exactly reflect the change of
    state involved in the verb. I would like to suggest, in any case, that these formations
    involve a prefix that spells out Pred, but this time with a reversative head as its comple-
    ment, reversing the directionality of the scalar change, as in (ii).
    (ii)   [PredP   [RevP   [DegP . . .]]]
       Like this, des- would be the spell out of a functional relational head – Pred or little
    p – combined with a reversative element, and the other prefixes analysed in this chapter
    lack the reversative head.
2   This claim goes against authors like Martínez Vera (2016), who claim that *a*- and *en*-
    are differentiated in deadjectival parasynthesis by their meaning contribution. Specifi-
    cally, Martínez Vera (2016) argues that both *en*- and *a*- can express result states, but
    the result state of a verb with *a*- is more specific than one with *en*-. This, according to
    Martínez Vera (2016), reflects in close scale adjectives combining only with *a*-, and
    verbs with *a*- resisting conventionalised meanings because their endstate is specifically
    related to the adjective. Both claims can be shown to be false. The adjective derecho
    'straight' is a close scale adjective that, as such can be used with *en*- and verbs like
    ahondar 'deepen' can get idiomatic meanings, as in (ib), where the physical dimension
    reading of the base *hondo* 'deep' is ignored.
    (i)   a. María enderezó su espalda durante diez minutos.
    María straightened her back for ten minutes
    'María made her back straight and kept it like that for ten minutes'
    b.   Los alumnos ahondaron {en el tema / *en el pozo}
    the students deepened into the topic / into the well
    'Students went deeper into the topic /*into the well'
3   To be very precise, there is one single verb where one could argue for an N-e structure,
    tos-e 'to cough', from *tos* 'cough', but even in that case one could argue for Latin
    inheritance (*tussire*) and propose a regressive reanalysis of the noun.

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5 Denominal verbs in -*a*, parasynthetic or not

5.1 Overview of the chapter

The goal of this chapter is to describe and analyse denominal verbs in -*a*, both those that are parasynthetic (1) and those that are non-parasynthetic (2).

(1)   a.   en-galan-a
               in-heartthrob-ThV, 'to make someone a heartthrob, to dress up'
        b.   a-bizcoch-a
               to-sponge.cake-ThV, 'to get the consistency of a sponge cake'
        c.   em-botell-a
               in-bottle-ThV, 'to bottle'
        d.   a-boton-a
               to-button-ThV 'to button up'
(2)   a.   mendig-a
               beggar-ThV, 'to act like a beggar'
        b.   deposit-a
               storage.unit-ThV, 'to put something in a storage unit'

We will see that, in contrast with deadjectival verbs following the same morphological patterns (see Chapters 4 and 5), the range of readings that nominal bases can adopt in parasynthetic and non-parasynthetic formations is broader. Sometimes, in parallel with deadjectival verbs, the base is interpreted as a predicate that describes the properties of an argument of the verb within a change of state structure (1a, 1b) or in other types of formations (2a). However, next to being predicates, nouns can also describe participants in an event, as arguments of the predicate (1c, 1d, 2b), an option that adjectival bases do not have. This participant reading of the nominal bases produces three additional broad classes of parasynthetic formations that are unattested with adjectival bases, and a higher number of options with the non parasynthetic formations.

In analytical terms, we will propose that change of state denominal parasynthetic verbs have a structure like (3), which is parallel to the one for adjectives with the difference that DegP and ScaleP are not layers within the predicative

structure – a property that directly reflects in the aspectual interpretation of these verbs – PP and KP is missing from the structure of nouns as well. Note that this means that denominal verbs expressing change of state, even when they are parasynthetic, have an impoverished relational structure where the equivalent of the PathP, PlaceP and KP are missing; this is reflected in the choice of prefixes found with formations like (1a, 1b), which are restricted to the same set of prefixes as deadjectival bases because in them the prefix spells out PredP.

(3)

```
            ProcP
           /     \
        Proc      PredP
                 /      \
               DP        Pred
                        /     \
                     Pred   ┌─ NP ──────┐   <--- galán-
                     en-    │  /    \    │
                            │ N   √1847  │
                            └────────────┘
```
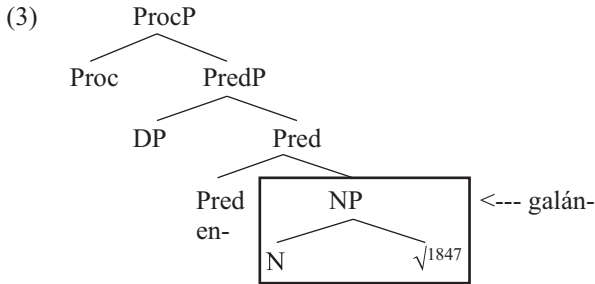
With respect to denominal parasynthetic formations where the base expresses a participant in the event, there are more options, as pP, PathP, PP and KP – equivalent to PredP, ScaleP, PP and KP in deadjectival structures – may be present depending on the interpretation of the base with respect to the verb. As the relational structure can be fully present and the nominal base does not spell out any part of it, this has the effect that the range of prefixes involved is broader. (4) represents a locative parasynthetic verb.

(4)

```
            ProcP
           /     \
        Proc ┌── pP ─────────────────────┐
             │  /   \                     │   <--- en-
             │ DP    p                    │
             │      /  \                  │
             │     p    PathP             │
             │         /     \            │
             │      Path      PP          │
             │              /    \        │
             │             P      KP      │
             │                   /   \    │
             │                  K  ┌─ NP ─┐   <--- -botell-
             │                     │ /  \ │
             │                     │N √1867│
             └─────────────────────┴──────┘
```
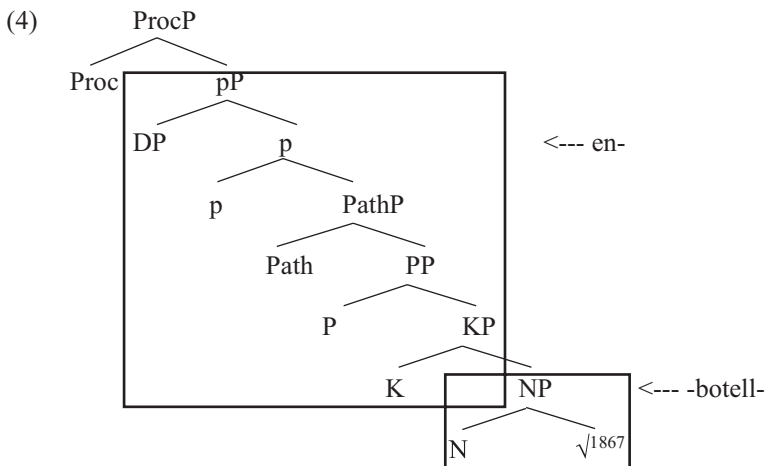
The diversity of argument-like relations allowed with nominal bases depends on the different values of P that are introduced in the structure in (4), and which is partially reflected in the richer set of prefixes that denominal parasynthetic verbs in -*a* allow.

Finally, with respect to the non-parasynthetic formations in (2), we propose that for nominal bases the absence of a prefix in pure -*a* formations reflects a radical truncation of the relational structure, as in (5). In formations like (2), the relational structure is completely missing; in the absence of the heads P and p, there is no syntactic space to spell out a prefix. Lacking syntactic information about the lexical nature of the relation, conceptual semantics – which I formalise as qualia structure (Pustejovsky 1995) – determines the meaning of the verb.

(5)

ProcP

Proc   NP

N $\sqrt{1922}$

<-- mendig-, deposit-
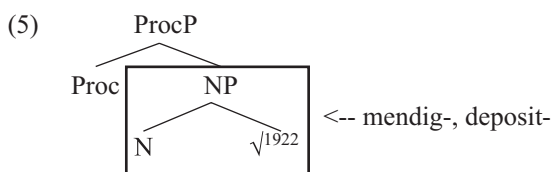
The rest of this chapter is structured as follows: in each one of the following sections, we will discuss one type of denominal formation in -*a*, and compare within it the parasynthetic cases with the non parasynthetic structures. §5.2 analyses the cases where the nominal base is interpreted as a predicate, which for parasynthetic formations involves change of state verbs. §5.3 analyses the class of locative verbs, §5.4 the case of transfer verbs, §5.5 the class of instrumental verbs and §5.6 the class of creation verbs, attested only in non-parasynthetic formations.

5.2 Denominal verbs in -*a*: change of state verbs and other predicate relations

Let us start with the class of denominal verbs in -*a* that are built from nominal bases where the base is interpreted as a predicate from any of the arguments. We will divide the discussion in two classes: those verbalisations that have the change of state semantics that has already been presented in Chapter 4, and the predicate interpretation without parasynthesis.

5.2.1 *Parasynthetic denominal formations*

The following list provides some of the parasynthetic formations with nominal base that have a change of state verb. This reading can be obtained with bases denoting animate (6) or inanimate entities (7). The meaning of the change of state

implies acquiring some of the behavioural or physical properties of the noun base, with the first class being clearly more frequent.

(6) cabrito 'kid' > en-cabrit-a 'to become as agressive as a kid', cabrón 'asshole' > en-cabron-a 'to make someone angry', demonio 'demon' > en-demoni-a 'to make someone as angry as a demon', dios 'god' > en-dios-a 'to make someone as conceited as a god', golfo 'rasgal' > en-golf-a 'to become a rascal', valentón 'boastful' > en-valenton-a 'to become boastful', barragán 'concubine' > abarraganarse 'to become someone's concubine', canalla 'scumbag' > a-canall-a 'to become a scumbag', chulo 'cocky' > a-chul-a 'to become cocky', hidalgo 'nobleman' > a-hidalg-a 'to become a nobleman', hijo 'son' > a-hij-a 'to adopt', juglar 'minstrel' > a-juglar-a 'to get properties of a minstrel'

(7) campana 'bell' > en-campan-a 'to become loud about something', gallo 'cock' > en-gall-a 'to become boastful as a cock', besugo 'red sea brem, idiot' > a-besug-a 'to become as stupid as a red sea brem', borrego 'lamb' > a-borreg-a 'to become someone that follows the flock', 'motley' > a-botarg-a 'to become swollen as a motley', caramelo 'candy' > a-caramel-a 'to become sweet [in the emotional sense]', mariposa 'butterfly' > a-maripos-a 'to become mannered', milano 'kite' > a-milan-a 'to become someone as timid as a kite', tocino 'pork fat' > a-tocin-a 'to become as thick and stupid as a piece of meat'

When the change of state refers to physical properties, the physical properties of the base that become relevant for the change of state are subject to contextual information, but the meaning of the base noun – what type of entity it denotes, and what are their most significant or salient properties – play a role that is relevant enough for us to propose some partial classifications. The verbs in (8) are typically interpreted as 'acquiring the consistency of N'; those in (9) denote acquiring the shape of N; other options, such as colour or flavour, are attested in (10).

(8) garrote 'club' > a-garrot-a 'to become rigid as a club', sopa 'soup' > en-sop-a 'to adopt the consistency of soup', quiste 'cyst' > en-quist-a 'to become as fixated as a cyst', vara 'stick' > en-var-a 'to become as rigid and straight as a stick', bizcocho 'sponge cake' > a-bizcoch-a 'to get the consistency of a sponge cake', cartón 'cardboard' > a-carton-a 'to become as dry as cardboard', cecina 'cured meat' > a-cecin-a 'to become as dry as cured meat', merengue 'meringue' > a-mereng-a 'to adopt the consistency of meringue', mojama 'dry meat' > a-mojam-a 'to become dry as dry meat', terciopelo 'velvet' > a-terciopel-a 'to become soft as velvet'

(9) arco 'arch' > en-arc-a 'to become in the shape of an arch', caballo 'horse' > en-caball-a 'to adopt the position of horses', sortija 'ring' > en-sortij-a 'to adopt the shape of a ring', red 'net' > en-red-a 'to become with the structure of a net', barquillo 'cone' > a-barquill-a 'to give the shape of a cone to something', blusa 'blouse' > a-blus-a 'to get the shape of a blouse', bocina 'horn' > a-bocin-a 'to give the shape of a horn to something', bolsa 'bag' > a-bols-a

'to adopt the round shape of a bag', bomba 'bubble' > a-bomb-a 'to buckle outward', bóveda 'bóveda' > a-boved-a 'to make something have the shape of a vault', canal 'channel' > a-canal-a 'to give something the shape of long lines', caracol 'snail' > a-caracol-a 'to have the shape of the snail's shell'

(10) borrasca 'storm' > a-borrasc-a 'to adopt the colour or feeling of a storm', damasco 'damask' > a-damasc-a 'to adopt the colour or feel of damask', melocotón 'peach' > a-melocoton-a 'to adopt the shape, colour or flavour of peaches', melón 'melon' > a-melon-a 'to adopt the size, flavour or colour of melon', membrillo 'quince' > a-membrill-a 'to adopt the flavour, colour or consistency of quince', champán 'champagne' > a-champan-a 'to adopt the flavour, colour or bubbles of champagne', chocolate 'chocolate' > a-chocolat-a 'to adopt the flavour or colour of chocolate', miel 'honey' > a-miel-a 'to adopt the flavour, colour or consistency of honey'

However, in some other cases the change of state involves adopting the general properties of the noun, without specific information about which dimension is involved, where the change of state involves the internal argument becoming N entirely. For instance, *encarroñar* (from *carroña* 'carrion') means 'to become corrupt, to become carrion'.

(11) gurruño 'wrinkled up ball' > en-gurruñ-a 'to become a wrinkled up ball', barroco' baroque' > a-barroc-a 'to become something baroque', chatarra 'scrap' > a-chatarr-a 'to turn something into useless pieces', dehesa 'meadow' > a-dehes-a 'to turn some terrain into a meadow', pantano 'swamp' > a-pantan-a 'to turn something into a swamp', plasta 'lump' > a-plast-a 'to smash something until it becomes a lump', buruja 'wrinkled up ball' > re-buruj-a 'to turn something into a wrinkled up ball'

Like parasynthetic change of state verbs coming from adjectives, denominal verbs in this class can take part in the causative-inchoative alternation, again with a predominance of verbs that take the clitic *se* to mark the inchoative form. When the verb allows the alternation, the properties denoted by the base are predicated from the internal argument, invariably. As in the case of deadjectival formations, we assume with Levin and Rappaport (1995) that conceptual semantic notions independent of the syntactic structure determine whether a verb can have a causative version, an inchoative one, or both.

(12) a. El éxito endiosó a Pedro.
          the success en-god-ed DOM Pedro
      'His success made Pedro become conceited'
      b. Pedro se endiosó.
          Pedro SE en-god-ed
      'Pedro became conceited'

Denominal and deadjectival parasynthetic verbs denoting change of state allow the same range of prefixes. In chapter 4, §4.2.4, we saw that there are only three

prefixes that can appear with deadjectival parasynthetic verbs expressing change of state: *a-*, *en-* and *re-*, the last without any implication of repetition or iteration of the event.

(13)   a.   a-bizcoch-a
             a-sponge.cake-ThV
       'to make something become as a spongecake'
       b.   en-cabron-a
             in-asshole-ThV
       'to make someone be as angry as an asshole'
       c.   re-buruj-a
             re-wrinckled.ball-ThV
       'to make something become a wrinckled ball'

In §4.2.4, footnote 2, we saw that Gibert-Sotelo identifies the prefix *des-* in a number of parasynthetic formations of decreasing degree, coming from adjectival bases. There is also one case of *des-* with a nominal base, from *asno* 'donkey', where the relevant property is stupidity.

(14)   des-asn-a
       des-donkey-ThV
       'to make someone less stupid'

As in the case of deadjectival verbs, we claim that the choice between the prefixes in (13) is idiosyncratic and does not reflect any systematic syntactic or semantic difference for this class of verbs. In the case of (14), we propose that the reversative meaning is obtained by the presence of a negative head selected by Pred; more on this will be presented in §5.3.4.2 below.

Thus, there are no differences between the two groups of verbs with respect to their prefixes. We take this to mean that in parasynthetic denominal structures the prefix, like in the case of deadjectival verbs, only spells out the functional prepositional layer PredP. As in nouns the nominal exponent does not spell out any part of the prepositional structure, in fact, this means that the rest of the relational structure – PathP as ScaleP, PP and KP – is missing from the syntactic structure, making (15) correspond to the structure of a denominal change of state verb.

(15)

```
              ProcP
             /     \
          Proc     PredP
                  /     \
                DP       Pred
                        /    \
                    Pred    ┌─────────────┐
                    PREFIX  │     NP      │  <--- BASE NOUN
                            │    /  \     │
                            │  N      √   │
                            └─────────────┘
```
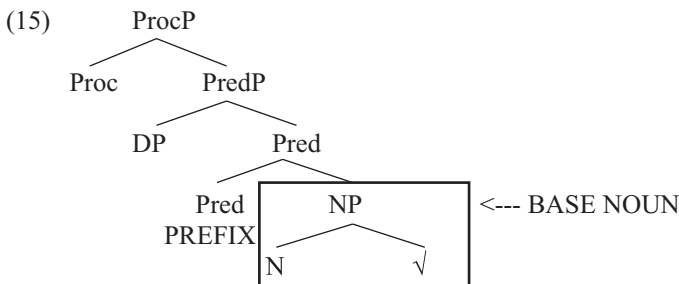
Let us now move to their aspectual properties. The most crucial difference between change of state with adjectival bases and change of state with nominal bases is that nouns lack ScaleP. Nouns do not express vague predicates (Kamp 1975) because they are not associated to scales of values where one needs to set one of the values as the reference point. The absence of ScaleP involves, necessarily, that DegP cannot be present in the structure either, again in a totally natural conclusion from the perspective of the difference between nouns and adjectives, as nouns cannot be syntactically graded – there is nothing like a noun in the positive degree or a noun in the comparative degree in Spanish. This lack of Deg and Scale has immediate consequences for their aspectual behaviour.

Following Kearns (2007), the presence of a scale allows for a telic accomplishment reading where the change traverses the scale of the adjective up to the reference value, and for an atelic activity reading where the comparative punctual transition is iterated through coercion by a *for*-phrase. In the absence of a scale, the atelic reading should be absent from the denominal verbs because it involves having more than two values that can be used as a reference value. The accomplishment reading should also be excluded, because it requires an extended set of values and nouns, being sharp predicates (Kamp 1975), express properties of the 'yes or no' kind which do not contain scales. Consequently one expects to find only a telic achievement reading where the duration of the process cannot be measured because it simply involves to move from a state where the internal argument does not have the relevant property to a state where the relevant property has been acquired. Thus, all denominal change of state verbs should behave like achievements. In order to show that this is correct, let us present the behaviour of *endiosarse* 'to get conceited' as an example of this class; to the best of my knowledge, all other verbs in the class display the same behaviour.

(16)   a.   Juan se endiosó durante diez minutos.
            Juan SE en-god-ed for ten minutes
        'Juan got conceited, and stayed conceited for ten minutes'
        *'Juan got more and more conceited for ten minutes'
        b.   Juan se endiosó en una semana.
            Juan SE en-god-ed in one week
        'Juan got conceited after one week'
(17)   a.   Juan se envalentonó durante diez minutos.
            Juan SE en-boastful-ed for ten minutes
        'Juan got boastful, and stayed boastful for ten minutes'
        *'Juan got more and more boastful for ten minutes'
        b.   Juan se envalentonó en una semana.
            Juan SE en-boastful-ed in one week
        'Juan got boastful after one week'

In both cases we have the landmarks of the structure that Kearns (2007) associates with the achievement interpretation: the *for*-phrase measures the extension of a result state, not the progression of change, and the *in*-phrase gets a delayed event

reading. If one wants to obtain the atelic reading, one needs to combine the verb
with a progressive periphrasis.

(18)   Juan se fue endiosando durante diez minutos.
       Juan SE went en-god-ing for ten minutes
       'Juan got more and more conceited for ten minutes'

   We therefore conclude that the structure in (19) is enough to express the prop-
erties of denominal parasynthetic verbs where the base noun is a predicate. The
presence of Init differentiates the inchoative from the causative version.

(19)
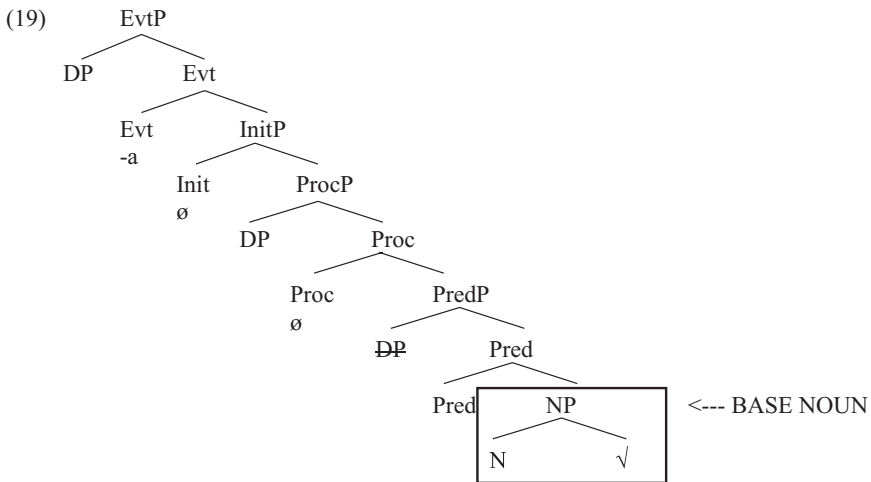
   The base noun spells out the NP structure, which is interpreted as a predicate
because of the presence of Pred, which takes it as a complement. As N does not
project ScaleP or DegP, the aspectual properties of these formations produce telic
events. This means that the relational structure is here reduced to PredP, meaning
that the prefixes found with nouns in this type of formations are the same ones
that are identified with adjectival bases, despite the differences in the material that
N-exponents and A-exponents spell out.
   The specifier of PredP introduces the subject of predication, which them moves
to the specifer of ProcP, explaining why the properties are always predicated from
the internal argument, just as in the case of deadjectival parasynthetic verbs.
   Let us now move to non parasynthetic verbs in -*a* where the noun base is inter-
preted as a predicate, in order to compare them with these formations.

5.2.2 Non parasynthetic verbs in -a

In Chapter 4, §4.4, we saw that when PredP is not present in a structure where
the base is a predicate, the syntactic configuration specifies less information. This

opens up for several possibilities, including that the properties of the base are predicated from other entities and that the structure becomes stative. We will now show that this is also the case in denominal verbs, perhaps even to a bigger extent than in the case of adjectives.

Before doing so, we must briefly address a methodological note which refers to how we can determine, given a verb that carries no verbal morphology beyond the ThV and a noun that carries no nominal morphology beyond the gender marker, that indeed the verb is derived from the noun and not vice versa. That is: if we get the words in (20), how do we know whether the derivation relation is (20a) or (20b)?

(20)   parásit-o 'parasite-m', parasit-a 'to act as a parasite'
     a.   parásito 'parasite' > parasita 'to act as a parasite'
     b.   parasita 'to act as a parasite' > parásito 'parasite'

Without overt morphemes that verbalise or nominalise, morphology cannot determine the matter for us.

This question is very relevant for the claims that we will make in this chapter for non parasynthetic verbs, because for us it is crucial that the relevant examples that we will discuss involve derivations of verbs from nominal bases and not vice versa, so that we have a verbalisation.

The problem does not emerge with adjectives because in the case of verbs and adjectives Spanish doesn't have a productive rule of zero adjectivalisation that turns a verb into an adjective without an overt category-changing suffix. In contrast, for nouns, Spanish does have a productive rule of zero nominalisation (cf. RAE ASALE 2009: §5.6–7) where plenty of nouns are derived from verbs – particularly, -*a* verbs – without overt suffixes.

(21)   atac-a 'to attack' > ataqu-e 'attack'

How to determine which direction the morphological process takes? Here we will follow mainly Fábregas (2014), enriched with additional observations. These are the criteria that we have used in this chapter and in the rest to determine whether a noun is derived from a verb.

i)   Nouns derived from verbs without overt morphology keep the aspectual and argumental properties of the predicate. *Ataque* is a noun that denotes an event, as reflected in its combinatorial possibilities with aspectual modifiers; *parásito* does not contain aspectual structure.

(22)   el {ataque /*parásito} durante dos horas
     the attack   parasite   for two hours

ii)   There is no productive rule that forms participant nouns from verbs or adjectives in Spanish, because the base of derivation of a zero nominalisation is a verbal stem that denotes an eventuality. Therefore, an interpretation of an

entity that does not involve an event or a state related to an eventuality cannot be a zero nominalisation. An attack is an event, and a parasite is a particular type of individual.

iii) Nouns derived from verbs preserve part of the argument structure, something which is syntactically reflected in the availability of some functional prepositions that are not available with underived nouns, such as the functional *a* reflecting differential object marking and *por* 'by' used to introduce agents.

(23)   a.   el ataque {a los enemigos/por el ejército}
             the attack to the enemies/by the army
       b.   *el parásito {a Juan/por Luis}
             the parasite to Juan/by Luis

iv) Zero nominalisations in Spanish are defined by a regular phonological structure where stress falls on the penultimate syllable. The reason is that they involve creating a noun from a verb, that is, the noun is not a primitive structure there. They cannot, then, be listed in the lexicon, as they are produced by a rule that builds them adding gender markers. Therefore, they receive the default stress pattern for Spanish nouns, that places stress on the syllable that precedes the syllable that contains the gender marker (Oltra-Massuet & Arregi 2005). This is the case of *ataque* 'attack', but not the case of *parásito*, which is proparoxytone. For *parásito* to carry stress in an irregular position, it must be stored as a unit in the lexicon, not derived through rules.

These criteria place, among many others, nouns such as those in (24) as zero nominalisations coming from underived verbs, and those in (25) as basic nouns that are used as bases for verbs with zero verbalisers.

(24)   ayuda 'help'; charla 'chat'; entrega 'delivery'; firma 'signature'; quema 'burn'; siembra 'sowing'
(25)   baja 'sick leave, fall'; conserva 'preserve'; monda 'peel'; obra 'construction work'; tasa 'tax'; baile 'dance'; corte 'cut'

Now that we have clarified this methodological point, let us move to the actual patterns.

5.2.2.1 *Change of state readings*

As in their deadjectival equivalents, the absence of parasynthesis in these denominal verbs simply means that the syntactic configuration does not force a change of state semantics where the properties are predicated from the internal argument, but such verbs can exist. (26) presents some of these formations.

(26)   cecina 'dry meat' > cecin-a 'to become like dry meat', cemento 'concrete' > cement-a 'to become solid as concrete', cicatriz 'scar' > cicatriz-a 'to

become a scar', compadre 'buddy' > compadr-a 'to become someone's buddy', diferencia 'difference' > diferenci-a 'to make something different', diptongo 'dypthong' > diptong-a 'to become a dipthong', doctor 'PhD scholar' > doctor-a 'to become a PhD scholar', erizo 'hedgehog' > eriz-a 'to adopt the shape of the hedgehog's quills', escalón 'stair steps' > escalon-a 'to adopt the shape of the stair steps', escote 'cleavage' > escot-a 'to adopt the shape of a cleavage', esponja 'sponge' > esponj-a 'to adopt the consistency or size of a wet sponge', hilo 'thread' > hil-a 'to turn something into thread or to give it the structure of threads', historia 'story' > histori-a 'to turn something into a story', hojaldre 'puff pastry' > hojaldr-a 'to give the consistency of puff pastry to something', imán 'magnet' > imant-a 'to turn something into a mangnet'

These verbs behave aspectually as their parasynthetic equivalent, that is, as telic verbs. However, as in the case of deadjectival formations, nothing in the syntactic structure forces that the change is predicated from the internal argument. The verbs in (27) are examples of verbs with nominal bases where change is predicated from the external argument.

(27) parásito 'parasite' > parasit-a 'to become a parasite of someone', asesino 'murderer' > asesin-a 'to murder', líder 'leader' > lider-a 'to become the leader', chorizo 'small time crook' > chorizar 'to become a small-time crook with respect to something'

The following examples show that the entity that becomes a parasite, a murderer, etc., is the external argument.

(28) Juan parasitó a Luis.
       Juan parasite-ed DOM Luis
       'Juan became a parasite to Luis'
(29) Juan asesin-ó a Marta
       Juan assassin-ed DOM Marta
       'Juan murdered Marta'
(30) Tras la dimisión de Pedro, Juan lideró a su equipo.
       after the resignation of Pedro, Juan leader-ed DOM his team
       'Juan became the leader of his team after Pedro resigned'
(31) Juan chorizó un libro de la biblioteca.
       Juan small.time.crook-ed a book from the library
       'Juan became a small-time crook that stole a book from the library'

As in the case of deadjectival verbs in -*a*, sometimes the interpretation is not necessarily one where the external argument undergoes a change of state in those properties, but one where the event that the external argument performs is one where the relevant properties of the base noun can be temporarily perceived on

the external argument for the duration of the event. Among the verbs that have this reading we find the following:

(32)   árbitro 'referee' > arbitr-a 'to act as a referee', custodio 'custodian' > custodi-a 'to act as the custodian of something', espía 'spy' > espi-a 'to act as a spy', filósofo 'philosopher' > filosof-a 'to act as a philosopher', guía 'guide' > gui-a 'to guide', intérprete 'interpreter' > interpret-a 'to act as an inter-preter', mendigo 'beggar' > mendig-a 'to act as a beggar', perito 'expert' > perit-a 'to act as an expert', peregrino 'pilgrim' > peregrin-a 'to act as a pilgrim', piloto 'pilot' > pilot-a 'to pilot something', náufrago 'castaway' > naufragar 'to become shipwrecked'

As in the case of deadjectival verbs, I propose that the structure involves merging the base as a predicate without the intervention of any PredP, thus making the insertion of a prefix impossible. The cases glossed as 'act as N' tend to be atelic, and I propose for them the same structure as the equivalent deadjectival verbs, with Proc directly taking the base, thus not introducing the entailment that the event ends with a result state where someone has acquired the properties (33).

(33)

```
                EvtP
          ┌──────┴──────┐
        DP              Evt
                  ┌──────┴──────┐
                Evt            InitP
                -a        ┌─────┴──────┐
                        Init         ProcP
                         ø        ┌────┴─────┐
                                 DP          Proc
                                        ┌─────┴──────┐
                                      Proc     ┌──────────────────┐
                                       ø       │  NP              │  <-- parásit-
                                               │ ┌────┴────┐      │
                                               │ N      √¹⁹³¹     │
                                               └──────────────────┘
```
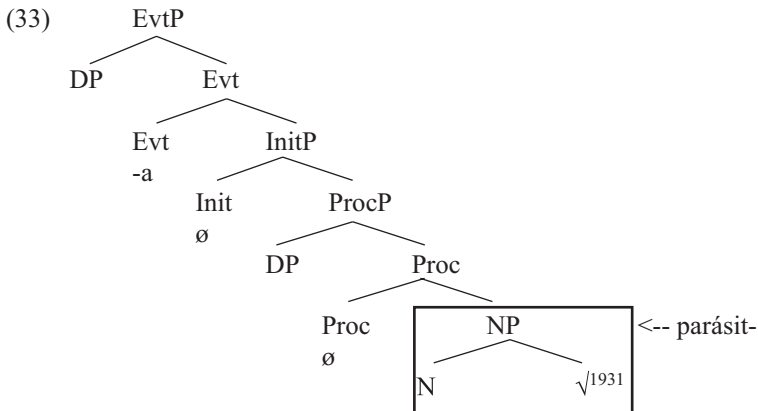
5.2.2.2 Stative verbs

We also expect to find verbs with a meaning close to 'be N', where there is no change of state involved.

(34)   comisario 'organiser of an exhibition' > comisari-a 'to be the organ-iser of an exhibition', contrapeso 'counterweight' > contrapes-a 'to be the counterweight to something', estorbo 'nuisance' > estorb-a 'to be

a nuisance', origen 'origin' > origin-a 'to be the origin of something', causa 'cause' > caus-a 'to cause', regente 'manager' > regent-a 'to be the manager of something', evidencia 'evidence' > evidenci-a 'to be evidence of something', complemento 'complement' > complement-a 'to be a complement',

(35) a.   Juan comisaria esta exposición.
           Juan organiser-ThV this exhibition
      'Juan is the organiser of this exhibition'
      b.   Las desventajas contrapes-an las ventajas.
           the disadvantages counterweight-ThV the advantages
      'The disadvantages are the counterweight of the disadvantages'
      c.   Juan estorb-a
           Juan nuisance-ThV
      'Juan is a nuisance'
      d.   Pedro regenta este local.
           Pedro manager-ThV this store
      'Pedro is the manager of this store'
      e.   Esto origina problemas.
           this origin-ThV problems
      'This is the origin of problems'

We propose the structure in (36) for these verbs, parallel to the one for the equivalent stative property verbs coming from adjectives.

(36)   EvtP
       /   \
     DP   Evt
            /   \
          Evt   InitP
          -a   /   \
              Init   ┌─────────────┐
               ø   │   NP   │   <--- origen-
                      │   /   \   │
                      │   N   √¹⁹⁴¹│
                      └─────────────┘
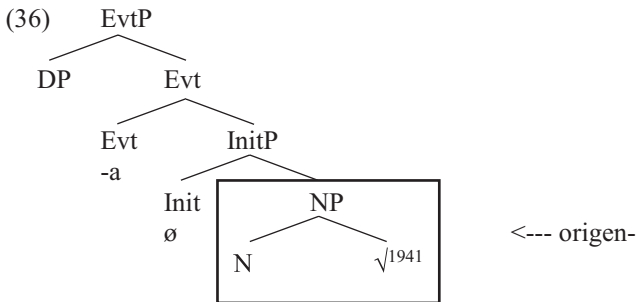
In conclusion, non parasynthetic denominal verbs where the noun is interpreted as a predicate may have change of state telic readings, but the absence of PredP is reflected in a set of properties that are already familiar from the previous chapter:

a)   The properties can be predicated from something other than the internal argument

b) Atelic readings, including stative predicates, because the absence of PredP makes ProcP not be compulsory and the base can directly combine with InitP.

5.3 Parasynthetic denominal verbs in -*a* with participant readings (1): locative verbs

The class of locative parasynthetic verbs includes two much discussed subclasses, the so-called locatio verbs (37a) and the so-called locatum verbs (37b) (see, among many others, Corbin 1987; Jackendoff 1990; Labelle 1992, 2000; Crocco-Galèas & Iacobini 1993; Serrano Dolader 1995, 1999; Schroten 1997; Hale & Keyser 1998; Iacobini 2004, 2010; Pujol Payet 2014; Acedo-Matellán & Real Puigdollers 2015; Batllori 2015; Martínez Vera 2016; Gibert-Sotelo 2017, 2018).

(37) a.   em-botell-a
            in-bottle-ThV
      b.   em-pedr-a
            in-stone-ThV

   The distinction between the two sets is of course that in (37a) the base noun is interpreted as the final location of the internal argument – something is put into bottles – and in (37b) the base noun is the entity that moves to some location, corresponding to the internal argument – stones are put to something.
   In the literature, it is traditional to treat these two verb classes in parallel, as they both express locative relations of sorts. However, it has also been claimed that they should be treated as significantly distinct in grammatical terms, as they involve different types of grammatical relations. There are three main analytical options in the market. Hale and Keyser (1998) propose that locatio verbs and locatum verbs are distinguished by the lexical value of the preposition involved in their structure. Locatio verbs contain a terminal coincidence preposition (Hale 1986), that is, a preposition that specifies that there is contact with the terminal point of a path associated to the figure and the location expressed by the ground (38a). Locatum verbs involve a central coincidence preposition without path semantics, that establishes a coincidence between the location of the figure and that of the ground (38b).

(38) a.   VP
              /\
           V   PP
                 /\
              DP   P
                    /\
                 P^{ter} N
                 en-   botell-

b.   VP

```
        VP
       /  \
      V    PP
          /  \
        DP    P
             /  \
          Pᶜᵉⁿ    N
          en-    pedr-
```
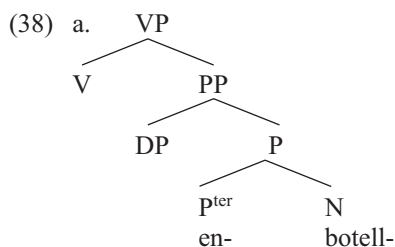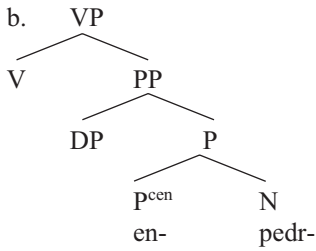
Mateu (2002) disagrees with this analysis on the basis of its aspectual pre-
dictions. Terminal coincidence prepositions, in his own analysis, are related to
telic construals because they express a dynamic bounded displacement toward
a location, while central coincidence prepositions are stative and should trigger
atelic readings. Mateu (2002) does not identify any substantial aspectual differ-
ence between locatio and locatum verbs – both are telic – and therefore proposes
that terminal coincidence prepositions (the structure in 38a) underlie both location
and locatum verbs. For him, the difference between the two verbs refers to their
conceptual semantics: from the same structure, which implies that the two entities
come in contact, the question is which one, the incorporated noun or the object,
is interpreted as a location that contains the other. The relation between bottles
and liquids tells us, through conceptual information, that the liquid is located in
the bottle, and the relation between rocks and surfaces tells us that the rocks are
located in a surface and not vice versa.

The third option is to treat each class of verbs as distinct. Acedo-Matellán and
Real-Puigdollers (2015) argue that the aspectual properties of locatio verbs corre-
spond to those expected of path structures, while locatum verbs behave in a man-
ner similar to degree achievements with respect to quantification, and should be
treated as non-locative structures involving a predicational head that they identify
with the preposition *de* 'of'.

(39)   VP

```
        VP
       /  \
      V    ofP
          /   \
        DP     of
             /   \
           of     N
                 pedr-
```
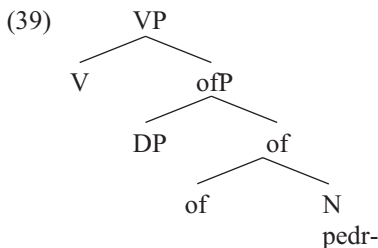
Another argument provided to treat locatio and locatum verbs in radically dif-
ferent ways has to do with the observation made in Mateu (2019, 2021) – see
also Fruyt (2017) – that very often locatum verbs do not need to be parasynthetic
in Romance; if correct, that would constitute an argument for treating the two

structures different, but we will see in §5.3.5 below that it is not correct to claim that non parasynthetic denominal verbs cannot express locatio.

The three options will be considered in the sections to come, and will be approached from the perspective of what systematic contrasts are produced between locatio and locatum verbs in the empirical overview. Let us proceed.

5.3.1 The properties of the base

Starting with locatio verbs, verbalisations involving this meaning are typically obtained from nouns that express regions, areas, spaces devoted to particular tasks and objects used to keep other entities inside (40), but the meaning can be obtained without the base denoting bona fide areas (41).

(40) caja 'box' > en-caj-a 'to fit inside', cajetilla 'pack' > en-cajetill-a 'to pack', cajón 'drawer' > en-cajon-a 'to box in, to squeeze in', callejón 'alley' > en-callejon-a 'to put someone in a narrow street, also figuratively', camino 'road' > en-camin-a 'to get on the road towards something', carril 'track' > en-carril-a 'to put on track', canasta 'basket' > en-canast-a 'to put in a basket', cápsula 'capsule' > en-capsul-a 'to put in capsules', cárcel 'jail' > en-carcel-a 'to put in prison', chiquero 'pigpen' > en-chiquer-a 'to put in the pigpen', cofre 'chest' > en-cofr-a 'to put in a chest', funda 'cover' > en-fund-a 'to put in the cover', gancho 'hook' > en-ganch-a 'to put something in a hook', horno 'oven' > en-horn-a 'to put in the oven', lata 'can' > en-lat-a 'to put in a can', vaso 'glass' > en-vas-a 'to put in recipients', borda 'rail' > a-bord-a 'to reach, to go to the rail of the boat'

(41) cama 'bed' > en-cam-a 'to get in bed', gresca 'fight' > en-gresc-a 'to get into a fight', causa 'legal case' > en-caus-a 'to put someone in a legal case', juicio 'trial' > en-juici-a 'to put someone on trial', rol 'role' > en-rol-a 'to put someone in a particular role', trono 'throne' > en-tron-a 'to put someone on the throne', gozne 'hinge' > en-gozn-a 'to place something on the hinges', cabeza 'head' > en-cabez-a 'to be at the head of a group', padrón 'register' > em-padron-a 'to put someone in the register', broche 'fastener' > a-broch-a 'to fasten something, to put the belt on the fastener' condición 'condition' > a-condicion-a 'to put something in (good) conditions'

There is also a relevant class where the place where the entity is located denotes a group that is formed as a result of the event.

(42) grupo 'group' > a-grup-a 'to group', cúmulo 'pile' > a-cumul-a 'accumulate', gavilla 'sheaf' > a-gavill-a 'to put something in a sheaf', montón 'pile' > a-monton-a 'to pile up', pelotón 'messy group of people' > a-peloton-a 'to crowd together', pila 'pile' > a-pil-a 'to pile up', piña 'close-knit group' > a-piñ-a 'to cram together'

Let us now examine the bases with locatum verbs, where the base describes an entity that is added, adjoined or placed in some location. The most frequent class of bases with these verbs are those expressing physical substances and materials (43), but other nouns are productively used too (44).

(43) arena 'sand' > en-aren-a 'to cover with sand', cal 'lime' > en-cal-a 'to cover with lime', cebolla 'onion' > en-ceboll-a 'to add onion', cartón 'cardboard' > en-carton-a 'to cover with cardboard', cera 'wax' > en-cer-a 'to cover with wax', chile 'chili' > en-chil-a 'to add chili', cola 'glue' > en-col-a 'to cover with glue', droga 'drug' > en-drog-a 'to put drugs into something', fango 'mud' > en-fang-a 'to cover with mud', goma 'gum' > en-gom-a 'to gum', gomina 'gel' > en-gomin-a 'to cover with gel', harina 'flour' > en-harin-a 'to cover with flour', hollín 'soot' > en-hollin-a 'to cover with soot', jabón 'soap' > en-jabon-a 'to cover with soap', lodo 'sludge' > en-lod-a 'to cover with sludge', madera 'wood' > en-mader-a 'to cover with wood, to put wood'

(44) cadena 'chain' > en-caden-a 'to put chains to someone', charco 'puddle' > en-charc-a 'to cover something with puddles', cizaña 'discord' > en-cizañ-a 'to introduce discord in a situation', cortina 'curtain' > en-cortin-a 'to put curtains to something', guirnalda 'garland' > en-guirnald-a 'to place garlands somewhere', hebra 'thread' > en-hebr-a 'to put the thread on the nail', ladrillo 'brick' > en-ladrill-a 'to put bricks', losa 'slab' > en-los-a 'to cover with slabs', cordón 'cord' > a-cordon-a 'to put a cord around something', cuño 'stamp' > a-cuñ-a 'to put the stamp in a coin', grieta 'crack' > a-griet-a 'to get cracks somewhere', mueble 'furniture' > a-muebl-a 'to put furniture', mordaza 'gag' > a-mordaz-a 'to gag someone', nido 'nest' > a-nid-a 'to put the nest somewhere', peste 'stink' > a-pest-a 'to fill a space with a bad smell', polilla 'moth' > a-polill-a 'to get moths', puntilla 'dagger' > a-puntill-a 'to put a dagger inside a bull'

A small group of locatum verbs takes body parts as its base, expressing the action of putting in contact that body part with some other person or object.

(45) brazo 'arm' > a-braz-a 'to put the arms around something', codo 'elbow' > a-cod-a 'to place the elbow against something', rodilla 'knee' > a-rrodill-a 'to put the knees against the ground'

5.3.2 *Properties of the prefixes*

One significant property of the locative verbs is that the prefixes that appear in parasynthetic formations are not restricted to *a-*, *en-* and *re-*; a variety of other prefixes with specific lexical meanings that enrich and specify the locative relation are possible, and moreover the prefix re- in these formations has a lexical meaning that connects with an iterative meaning or with the interpretation of movement that goes backwards. Let us examine these cases.

Starting with locatio verbs, the examples in (46) involve the notion of 'putting something in a position where they had been located before'.

(46) bobina 'reel' > re-bobin-a 'to put a tape back on its reel', patria 'homeland' > re-patri-a 'to put someone again in the homeland that he had left'

In §4.2.4 we saw that deadjectival parasynthetic formations involving *des-* are not productive. In contrast to this, we have plenty of instances of the prefix *des-* expressing a meaning of 'to take something out from the location expressed by the base'. Sometimes there is an antonym with the prefix *en-* expressing movement to the region defined by the base: *en-tron-a/des-tron-a* 'to put on a throne/ to remove from a throne', *en-carril-a/des-carril-a* 'to put on track/to get out of track', *en-mold-a/des-mold-a* 'to put into a cast/to take out from a cast', and in other cases there is a pair but the semantic relation is less obvious because metaphorical readings are established or different meanings of the base are used (*en-madr-a/des-madr-a* 'to get too close to one's mother/to misbehave and act as if one didn't have a mother to obbey', *en-terr-a* 'to bury'/*des-terr-a* 'to force someone to leave a land').

(47) quicio 'frame, hinge' > des-quici-a 'to unhinge', trono 'throne' > des-tron-a 'to depose a king', madre 'mother' > des-madr-a 'to go wild', carril 'rail' > des-carril-a 'to get out of track', molde 'mold' > des-mold-a 'to take out of a mold', tierra 'land' > des-terr-a 'to exile', plaza 'place, area' > des-plaz-a 'to displace'

There are also locatio formations meaning 'to remove from a place' with the prefix *ex-*.

(48) cárcel 'jail' > ex-carcel-a 'to get out of jail', claustro 'cloister' > ex-claustr-a 'to get out of a secluded location', pecho 'chest' > ex-pector-a 'to throw something out of the chest'

We have also formations with *extra-*, with the meaning 'to move to a location beyond the area defined by the base':

(49) vía 'road' > extra-vi-a 'to leave the road, to misplace', vaso 'glass' > extra-vas-a 'to overflood, to go beyond the area delimited by the container', límite 'boundary' > extra-limit-a 'to go beyond the boundaries'

The meaning of 'to move from one place to another of a similar status' is expressed with *trans-*. Temporal meanings, where the path that is covered refers to a time period, are also possible: *tras-noch-a* 'to pass part of the night without sleeping', from *noche* 'night', involves traversing a substantial part of the time extension of one night.

(50) borda 'gunwale' > trans-bord-a 'to move from one vehicle to another', fig-ura 'figure' > trans-figur-a 'to go from one figure to the other', vaso 'glass' >

trans-vas-a 'to move a liquid from a container to the other', letra 'letter' > trans-liter-a 'to move something from one writing system to the other', sub-stancia 'substance' > tran-substanci-a 'to move from being one substance to being another', nombre 'name' > trans-nombr-a 'to move from one name to the other', monte 'hill' > trans-mont-a 'to move from one hill to the other', lado 'side' > tras-lad-a 'to move from one side to the other'

Inter- or *entre-* express locations that are between two entities of the same type.

(51)   polo 'pole' > inter-pol-a 'to put something between the extremes of some-thing', coma 'comma' > entre-com-a 'to put something between com-mas', comilla 'quotation mark' > entre-comill-a 'to put between quotation marks', vena 'vein' > entre-ven-a 'to place something between the veins', viga 'beam of wood' > entre-vig-a 'to place something between the beams'

Con- means placing objects in contact to each other in a particular location.

(52)   frente 'front' > con-front-a 'to locate entities in front of each other', cadena 'chain' > con-caden-a 'to place objects in a chain in contact to each other', globo 'globe, group of entities' > con-glob-a 'to place objects in the same group'

The same diversity of prefixes with different lexical meanings is identified for locatum verbs. The iterative meaning of *re-* is identified in the following cases:

(53)   foresta 'forest' > re-forest-a 'to put a forest where it was before', caucho 'rubber' > re-cauchut-a 'to cover again in rubber some tire', vino 'wine' > re-vin-a 'to add new wine to a wine recipient'

The meaning of removing an object from a location is found in the following examples, among many others.

(54)   corcho 'cork' > des-corch-a 'to remove the cork', abeja 'bee' > des-abej-a 'to remove the bees from a place', barba 'beard' > des-barb-a 'to shave', corteza 'crust' > des-cortez-a 'to remove the crust', hoja 'leaf' > des-hoj-a 'to remove the leaves', hueso 'bone' > des-hues-a 'to remove the bones', piojo 'louse' > des-pioj-a 'to remove the lice', tripa 'gutts' > des-trip-a 'to gutt something'

The meaning of placing two objects so that something ends up being between them is also expressed here with *entre-*.

(55)   pierna 'leg' > entre-pern-a 'to place the legs around something'

The preposition *per-* expresses here the meaning that an object is located within an extended extension: *persignar* involves making a (religious) sign that

is produced by moving one hand across an area defined over the chest and the face

(56)   signo 'sign' > per-sign-a 'to make the sign of the cross by moving the hand'

Given that the prefix *con-* involves the existence of at least two objects that have to be in contact with each other, and in locatum verbs that object is expressed as the base, it is difficult to identify locatum verbs with *con-*. One possible example is *con-mensur-a* 'to place on something the same measure as was placed on something else', although the base is Latinate; *gracia* 'charm, grace, good intention' > *con-graci-a* 'to congratiate oneself with someone', which I believe can be interpreted as putting into a situation charm that connects two people with each other, might be another example. However, it is fair to say that these formations are not clear.

Thus, and as a summary, we can see that there is a diversity of lexical meanings expressed through prefixes in locative parasynthesis, including the fact that *re-* formations assign lexical meaning of iteration (or movement backwards) to the prefix. This is what is expected, in fact, if the denominal parasynthetic formations involve a full relational structure, including the equivalents to pP as a functional preposition and PP as a lexical layer that can adopt different meanings. Against adjectival exponents, nominal exponents do not lexicalise any part of the relational structure, which means that the prefix has more material to spell out than in deadjectival formations; that material, crucially, includes lexical layers. (57) presents a preliminary structure that shows how this analysis works.

(57)
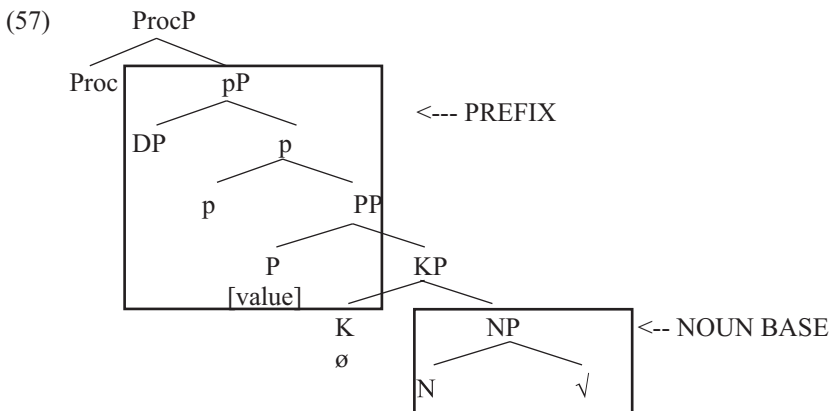
The different values adopted by the prefixes that we have just revised contrast with the alternation between *en-* and *a-* in locative verbs, whereas we saw in §4.2.4 there is no systematic meaning difference distinguishing the prefixes.

5.3.3 *Aspect*

Let us now examine the aspectual properties of these verbs. We will see that they are extremely homogeneous with respect to their aspectual properties, and moreover that – when one factors out quantification – locatio and locatum verbs are parallel in their aspectual behaviour, supporting Mateu's (2002) analysis and contra Hale and Keyser (1998) and Acedo-Matellán and Real-Puigdollers (2015).

Starting with locatio verbs, consider the following examples, where both the internal argument and the entity denoted by the base are count nouns. As can be seen, the behaviour is the one that one expects from an achievement verb.

(58) a.   Juan enfundó su pistola durante una hora.
            Juan in-holster-ed his gun for an hour
        'Juan holstered his gun and the gun stayed there for an hour'
      b.   Juan enfundó su pistola en dos minutos.
            Juan in-holster-ed his gun after two minutes

As can be seen, the reading of a *for*-phrase is restricted to measuring the result location, and the reading of an *in*-phrase does not measure the length of a process, but has a delayed event interpretation: it took two minutes before he put the gun in his holster.

This is the interpretation that one expects if the meaning of the event involves simply to put the internal argument in the location defined by the base: as soon as the internal argument crosses the perimeter of the area, the verb satisfies its meaning, and there is no real extension in a path that defines the movement.

If the verb becomes atelic, it is not because of the properties of the movement structure, but rather because of the properties of the internal argument, that might be divided in an unbounded number of portions, each one of which undergoes the same movement that arrives to the final location. (59a) has a clear reading where the for-phrase measures the extension of the event, but that is because the internal argument is a mass noun that can be partitioned. So to say, (59a) can be atelic because the event described can be subdivided in an unbounded number of microevents where small portions of wine cross each the perimeter of the bottle and end inside it. This is the same meaning that one can obtain with other achievement verbs when the argument is a mass noun, as in (59b).

(59) a.   Juan embotelló vino durante una hora.
            Juan in-bottle-ed wine for an hour
        'Juan put the wine in bottles and the wine stayed there for an hour'
      b.   Nació gente en este hospital durante veinte años.
            was.born people in this hospital for twenty years
        'People were born in this hospital for twenty years'

The crucial property for us is that when the internal argument is not partitionable the only interpretation is that of an achievement, because that informs us that

arriving to the final location does not involve an extended movement along a path. We will now show that this achievement status is not influenced by the semantic interpretation that can be given to the region defined by the base, that is, that even if the base is an elongated object that itself could be a path, the interpretation is one of achievement. *Camino* 'road' and *cauce* 'riverbed' are relevant areas for this test; as can be seen in (60), the for-phrase can only be interpreted as measuring the time during which the argument is on the (figurative) location.

(60) a. Juan encaminó a Luis en la buena dirección durante una semana.
         Juan en-road-ed DOM Luis in the good direction for a week
      'Juan put Luis on track, and Luis stayed on track for a week'
     b. Juan encauzó el proyecto durante una semana.
         Juan in-riverbed-ed the project for one week
      'Juan put the project on track, and the project stayed on track for a week'

This is so because even if the base denotes itself a path that is extended, the path that is relevant for the locatio verb is the one that takes the internal argument to the location, which is minimal. The length of the final location is irrelevant to define the change.

Let us now move to locatum verbs, and start with the same question: is there an extended path that allows the change of location to be interpreted as an accomplishment or an activity? The answer seems to be no when we set the conditions as we did for locatio verbs, that is, where both the internal argument and the base are count nouns.

(61) a. Juan encadenó a Pedro durante una hora.
         Juan en-chain-ed DOM Pedro for one hour
     b. Juan a-mortaj-ó al muerto durante una hora.
         Juan a-shroud-ed the corpse for one hour

As in locatio verbs, the atelic readings or the accomplishment readings depend on whether the internal argument can be partitioned in an unbounded or bounded number of portions without losing its descriptive entailments. This is visible in examples like those in (59) where the verb means to extract an unbounded number of portions of the entity, making the activity and the accomplishment readings possible.

(62) a. Juan desmigó el pan {durante un rato/en un rato}.
         Juan des-crumb-ed the bread for a while/in a while
     b. Luis des-pedaz-ó el buey {durante un rato/en un rato}.
         Luis des-piece-ed the ox for a while/in a while

Acedo-Matellán and Real Puigdollers (2015) note that locatum verbs allow quantification under certain circumstances (see also Bosque & Masullo 1997), as in (63) – note that this is never possible with locatio verbs (64).

(63) a.   Juan envinagró la ensalada demasiado.
          Juan in-vinegar-ed the salad too.much
      b.   Juan enharinó la sardina un poco.
          Juan in-flour-ed the sardine a bit
      c.   Juan en-ceboll-ó mucho el atún.
          Juan in-onion-ed a.lot the tuna

(64) Juan embotelló (*mucho) el vino.
      Juan in-bottle-ed a.lot the wine

The crucial property in common of locatum verbs that allow quantification, as the reader might have noticed, is that their base is a mass noun that expresses a substance, or that they express entities that are generally placed in a location as pluralities, like *mueble* 'furniture' > *amueblar* 'to put furniture'. If the base is a count noun that does not involve a plurality, quantification is impossible: #*Juan entubó mucho al paciente* 'Juan put a tube into the patient (a lot)' cannot mean that the quantity of tube introduced into the patient is a lot, but at best could mean that the action is performed very often. Contra Acedo-Matellán and Real Puigdollers (2015), then, we do not believe that the contrast in (63)-(64) is enough to argue that locatio and locatum verbs have two different structures. The variability in (63) is not general for locatum verbs: those whose base is a bound object like *tubo* 'tube' do not allow it. The atelic reading availability is parallel to the one that we have seen with locatio verbs: if the entity that comes in contact with the area is unbounded and can be partitioned, the event can be interpreted as consisting of microevents, each one of them an achievement.

5.3.4 Analysis

The crucial properties that define a verb as locative are on the prepositional area; our proposal is that the following layers are present: pP, a lexical layer PP which corresponds only to a stative locative relation, and KP. Crucially, I claim that there is no PathP layer in the general case.

(65)

```
          EvtP
         /    \
       DP      Evt
              /    \
           Evt     ...ProcP
           -a      /      \
                 DP        Proc
                          /    \
                       Proc     pP
                               /  \
                             D̶P̶    p
                                  /  \
                                 p    PP
                                     /  \
                                    P    KP
                                        /   \
                                       K    NP...
```
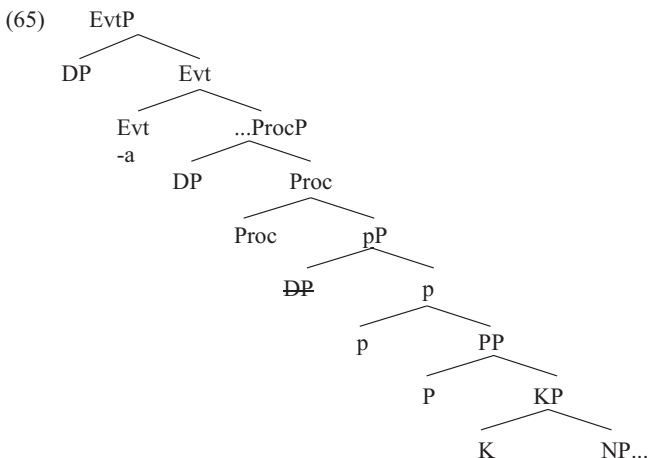
Remember that pP is the functional prepositional layer that introduces the subject of predication of the prepositional structure, the figure that is related to the ground, here an NP that becomes the base of the verb. I take this projection to be parallel to PredP, that is, a stative relational head equivalent to Wood and Marantz' (2017) iotta head and which configurationally is interpreted as a result phrase when selected by Proc. This is what licenses the telic reading that is standard for these locative verbs, and what makes it possible that there is a result phrase interpreted that can be measured by a for-phrase, in parallel to the change of state cases.

The achievement reading is obtained by the result phrase interpretation: in the absence of a PathP (or an equivalent head, like ScaleP), there are only two values: being in contact with the other object or not being in contact with the other object. This is a yes-no property, that is interpreted because the process involves resulting in a location without any head specifying an extended path that allows that transition to happen in a progressive manner.

When the verb is a locatio and therefore the NP corresponds to the final locatio, the configuration in (65) makes the properties of the location irrelevant: what counts is that the internal argument arrives to the area defined by the location, not whether this location is extended or not. This block atelic readings in two ways: one cannot interpret that the internal argument moves through an extended path to arrive at the location and one cannot interpret that, once in the location, the internal argument traverses it even if it is itself an extended path, as in *encaminar* 'to put on track'.

5.3.4.1 *Locatio and locatum correspond to the same structure*

Let us now consider the general difference between locatio and locatum verbs. Our proposal is, in this sense, essentially Mateu's (2002): locatum and locatio verbs share the same syntactic structure, meaning 'to come in contact', and conceptual semantics determines which entity is included within which entity. We have seen that both take roughly the same set of prefixes in parasynthesis – contra any approach that treats them as involving different relational structures – there are no systematic differences between the two classes of verbs with respect to their syntactic or aspectual behaviour, even to the point that the presence of mass nouns in the structure has the effect of allowing atelic readings. For this reason, I propose that the same structure in (65) can be used for both locatio and locatum, without involving different values of p or P, and that as Mateu (2002) proposes the question reduces to which one of the two elements, the figure or the ground, is interpreted conceptually as the location for the other.

(66) a.   en-sill-a
           in-saddle-ThV
      b.   en-cam-a
           in-bed-ThV

Because humans conceptually use chairs but horses don't, the relation between a horse and a chair or saddle involves the saddle being on the horse so that a human can use it – in fact, the Real Academia dictionary notes that

ensillar 'to saddle' was also used as a locatio verb equivalent to 'to put some-one on a throne'. Because beds are never put on top of other individuals, and individuals get inside them, (66b) is a locatio verbs. I hasten to add that since 2002 Mateu has retracted from this position, and that in Mateu (2019, 2021) he suggests that the two structures might be more different; his argument is that locatum verbs often lack a prefix, while locatio verbs need a prefix. We will however see in §5.3.5 below that this is not empirically correct, so I conclude that there are no empirical reasons to distinguish the structure of locatio and locatum.

That the two structures are the same also explains why there are verbs that can be intepreted as both locatio and locatum; we saw the case of *interpaginar* 'to put pages between two pages', which seems to have the two interpretations, virtually indistinguishable. Similarly, *encadenar* 'to chain' can be to put chains to someone or to put something on a chain, alternatively, and this seems to depend on the type of internal argument that is taken (specifically, the second reading is only possible if the direct object is a plurality that can be arranged within a chain):

(67) a. encadenar al preso
         in-chain-ThV the prisoner, 'to put chains to the prisoner'
      b. encadernar palabras
         in-chain-ThV words, 'to put words in a chain'

5.3.4.2 Lexically strong prefixes

Consider now the manifestation of the prefixes. Our proposal is that the lexical richness of different prefixes that are allowed in these denominal parasynthetic verbs is produced because the prefixes here are the spell out of both p and P, where the lexical P head contains information that differentiates between the prefixes. For instance, in the case of *inter-* or *entre-*, the value of P involves defining a loca-tion that presupposes two identical entities.

(68)
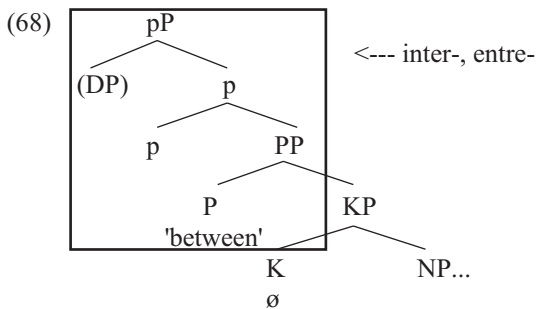
The other prefixes with lexical meaning would just differ in terms of the content of P: *con-* is associated to a 'company' meaning which is clearly related to the preposition 'with'; *extra-* relates to a meaning of absence of coincidence that one can chracterise as 'disjoint' (Romeu 2014), just like *ex-*, which means that one is outside the space defined by the other object; *per-* implies an extended location, *re-* would introduce the presupposition that the location had already been held before, and so on. The limit, as far as I can see it, depends only on the variety of meanings that one allows to locate as entailments of a lexical head, which to the best of my knowledge is not reduced to a closed list.

In the case of the prefix *des-* I follow Gibert-Sotelo (2017) in her proposal that this prefix involves a reversion from a previous state, locative or not. I propose to represent it as a structure headed by a functional prepositional layer (Pred or little p, as they are both ɩP in Wood & Marantz 2017) that takes as complement a reversative head denoting 'outside' (remember footnote 2, §4.2.4). The result is to express movement outside of the location expressed by the base.

(69)

<--- des-
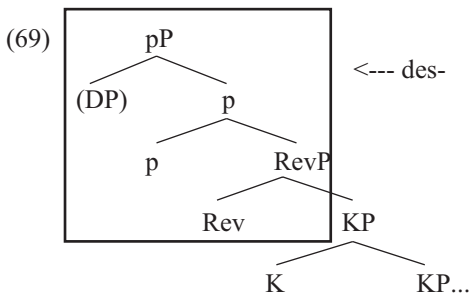
5.3.5 *Non parasynthetic locative verbs in* -a

Let us now move to locative verbs in -a which lack a prefix. In my proposal, the absence of a prefix signals complete absence of p and P, which makes the conceptual meaning of the lexical noun crucial in determining how the verb is interpreted.

My take is that the different verb classes obtained from bases that lack p and P are differentiated by the qualia structure of the noun (Pustejovsky 1995), following Batiukova (2015), Gibert-Sotelo (2017, 2018) and Gibert-Sotelo and Pujol Payet (2015). That is, syntax does not specify what type of relation is denoted between the base and the verb, because there is no lexical head P, and conceptual semantics determines the reading. I operationalise conceptual semantics as qualia structure. As it is already well-known, qualia structure is a proposal to systematic the non-syntactic meaning aspects of lexical elements. Qualia structure

decomposes the meaning of lexical categories in four dimensions (Pustejovsky 1995: 85–86):

a) Formal quale, which specifies the taxonomic properties that distinguish one class of entities from others within a broader domain, such as shape, colour, size and other evaluative properties

b) Constitutive quale, which specifies the internal parts of an object – what it contains, which objects compose it, what substance it is made of.

c) Telic quale, which specifies the function or usage of the object as a built-in purpose

d) Agentive quale, which specifies the factors involved in the bringing about of an object, such as its nature as an artifact created by another entity

My claim is that, when there is no PP layer that specifies the type of notion that is involved in the verb, the qualia structure of the base noun is taken into account to assign a meaning to the eventuality. As there is no syntactic structure to restrict these readings, a broad range of options emerge.

The change of state interpretation of denominal verbs emerges when the quale that is chosen to give content to the verb is the formal one. As the reader might have expected, I will claim that the telic quale is involved when the prefix-less denominal verb has an instrumental meaning (cf. §5.5 in this chapter), and I will also use the agentive quale to characterise a class of prefix-less denominal verbs that produce action and result object interpretations (§5.6.1 in this chapter).

For locative interpretations, I propose that the constitutive quale is the one that gets activated. For a locatio verb, this means that the interpretation emerges when the internal argument is interpreted as becoming a constitutive part of the location – the location contains the internal argument. For a locatum verb, the interpretation is that the base noun becomes something that is added to the internal argument, and therefore also becomes part of its state when the event concludes.

With this background in mind let us first show that there are verbs of this class that are interpreted as locatio (contra Mateu 2019). All the verbs in (70) have in at least one of their readings a meaning that corresponds to 'to put something in N'.

(70)   almacén 'warehouse' > almacen-a 'to store', estación 'station' > estacion-a 'to park', catálogo 'catalogue' > catalog-a 'to cataloge', centro 'centre' > centr-a 'to put something in the center', censo 'register' > cens-a 'to put on the register', cobijo 'shelter' > cobij-a 'to put someone in a shelter', enchufe 'socket' > enchuf-a 'to put a plug in the socket', establo 'stable' > estabul-a 'to put an animal on the stable', estuche 'case' > estuch-a 'to put something in a case', exilio 'exile' > exili-a 'to send someone to exile', margen 'border, periphery' > margin-a 'to marginate, to put someone to a side', posición 'position' > posicion-a 'to put something in a particular position'

As expected if the locative reading involves constitutive quale, most nouns in the list already express locations. This is not the only locatio reading available

when there is no prefix. Remember that in parasynthetic verbs, the presence of pP triggers an interpretation of result state that blocks any extended reading of a path associated to the movement. Consequently even when the location is itself extended, as in *encaminar* 'to put on track', the reading of the movement cannot be atelic. In prefix-less locatio verbs, on the other hand, the absence of pP and PP should imply that if the location is extended that reading would emerge.

 This is precisely what happens: several locatio verbs without a prefix involve the notion of following a particular path defined by the base noun, and as such they can be atelic. The most spectacular case is perhaps *caminar*, which is a minimal pair to *encaminar*. Note that all of these verbs are atelic.

(71)   camino 'road' > camin-a 'to follow the road, to walk through a path', círculo 'circle' > circul-a 'to go around', curso 'course' > curs-a 'to follow a course (of a river or of a school)', órbita 'orbit' > orbit-a 'to follow the orbit of a planet', surco 'track' > surc-a 'to sail through, to cut through some space'

(72)   a.   Juan caminó durante horas.
          Juan road-ed for hours
       'Juan followed an unbounded path'
       b.   Juan cursó el mar durante horas.
          Juan course-ed the sea for hours
       'Juan followed the course of the sea for hours'

 I propose that these verbs have a structure where the base noun is directly selected by ProcP, producing an atelic construal because there is no stative relational head in the complement of Proc. When Proc and N combine together without the intermediation of additional heads, the base noun can be taken as a path itself, if it expresses an entity that involves a trajectory, as it is the case with roads and orbits, for instance. Thus, the meaning of the verbalisation involves moving across the path defined by the base itself, not arriving to the result location of the base, and the interpretation can be atelic.

 There are also prefix-less verbs that are locatum. (73) gives a few examples.

(73)   baliza 'buoy' > baliz-a 'to put buoys on a track', brida 'bridle' > brid-a 'to put bridles to the horse', cerca 'fence' > cerc-a 'to fence', chapa 'metal sheet' > chap-a 'to cover with metal sheets', cloro 'chlorine' > clor-a 'to add chlorine to water', corona 'crown' > coron-a 'to put the crown to someone', condimento 'spices' > condiment-a 'to add spices', cromo 'chrome' > crom-a 'to cover in chrome', disfraz 'disguise' > disfraz-a 'to put a disguise on someone', escabeche 'brine' > escabech-a 'to put marinade to something', escayola 'plaster' > escayol-a 'to plaster', espacio 'space' > espaci-a 'to put space between two things', fecha 'date' > fech-a 'to add a date to something', felpa 'plush' > felp-a 'to cover with flush', fluor > fluor-a 'to add fluor', pigmento 'pigment' > pigment-a 'to add a pigment', rótulo 'label' > rotul-a 'to put labels', rúbrica 'signature' > rubric-a 'to put the signature in a document', sal 'salt' > sal-a 'to put salt to something', sazón

'seasoning' > sazon-a 'to put seasoning into something', sufijo 'suffix' > sufij-a 'to add a suffix', tapia 'wall' > tapi-a 'to put walls to something', techo 'roof' > tech-a 'to add a roof', trufa 'truffle' > truf-a 'to put truffles into some dish', valla 'fence' > vall-a 'to add fences'

In the absence of pP and PP layers, there is no space to define locatum verbs that revert the movement – cf. *des*- previous verbs – and mean 'to take something out from a location'. That meaning must come from the conceptual semantics of the noun, that should designate some entity that is typically useless or dangerous and has to be removed from an object before it can be used.

(74)   escama 'fish scale' > escam-a 'to remove the scales from a fish', espiga 'spike' > espig-a 'to take the spikes out of the harvest', espuma 'foam' > espum-a 'to skim a soup', monda 'peel' > mond-a 'to remove the peel from a fruit', piel 'skin' or pelo 'hair' > pel-a 'to remove the skin or the hair', grano 'grain' > gran-a 'to take out the grains of a fruit', rastrojo 'stubble' > rastroj-a 'to remove the stubble from a fish', resina 'resin' > resin-a 'to take the resin out from a tree'

Let us now move to transfer and possession verbs.

5.4 Parasynthetic denominal verbs in -*a* with participant readings (2): transfer verbs, possessive verbs and other stative verbs

There is a class of denominal parasynthetic (and we will see, non parasynthetic) verbs that express the event of transfering some notion, expressed by the base, to the internal argument. These verbs have similar properties to locatum verbs, with the only difference – that we will take as being due to conceptual semantics, and not the syntactic structure – that the internal argument ends up possessing the transferred entity, not only being in spatial contact with it. Among the parasynthetic verbs that follow this pattern we have the following:

(75)   poder 'power' > em-poder-a 'to give power to someone', deuda 'debt' > en-deud-a 'to give someone a debt', tono 'tone' > en-ton-a 'to liven up, give the (right) tone or energy to something', bollo 'bump' > a-boll-a 'to make holes to something', bronca 'scolding' > a-bronc-a 'to give someone a scolding', calambre 'cramp' > a-calambr-a 'to give cramps to someone', caricia 'caress' > a-carici-a 'to caress someone', catarro 'cold' > a-catarr-a 'to get a cold', consejo 'advice' > a-consej-a 'to give someone a piece of advice', crédito 'reputation' > a-credit-a 'to give (good) reputation to someone'

(76)   amor 'love' > en-amor-a 'to cause love on someone', capricho 'whim' >
        en-caprich-a 'to cause or trigger a whim on someone', cariño 'affection' >
        en-cariñ-a 'to get affection for someone', celos 'jealousy' > en-cel-a 'to
        cause or trigger jealousy on someone', vicio 'vice' > en-vici-a 'to trigger
        a vice on someone', rabia 'rage' > en-rabi-a 'to trigger rage on someone',
        modorra 'drowsiness' > a-modorr-a 'to cause drowsiness on someone',
        letargo 'lethargy' > a-letarg-a 'to cause lethargy on someone', pena 'pity' >
        a-pen-a 'to cause pity on someone', pesadumbre 'grief' > a-pesadumbr-a
        'to cause grief on someone', prisa 'rush' > a-presur-a 'to trigger rush on
        someone', susto 'scare' > a-sust-a 'to scare someone', tormento 'torture' >
        a-torment-a 'to torture someone', vergüenza 'shame' > a-vergonz-a 'to
        shame someone'.

The examples in (75) involve bases of different physical or abstract objects that
are used to define different relations that involve a theme and a goal, generally a
human. In (76) the bases express different abstract nouns that denote psychologi-
cal states. In both cases, there is a result state where the internal argument, gener-
ally interpreted as a goal, is in possession of the notion denoted by the base noun.
While in the case of psychological states a paraphrase along the lines of 'to cause
or trigger N to someone' is more appropriate, the crucial property that makes
us treat them as transfer verbs is that in Spanish many of these verbs have pairs
involving the light verb *dar* 'give' expressing the same or a similar meaning (see
77 for some examples).

(77)   darle poder a alguien 'to give power to someone' ~ empoderar, darle
        vergüenza a alguien 'to give shame to someone' ~ avergonzar, darle celos a
        alguien 'to give jealousy to someone' ~ encelar, darle caricias a alguien 'to
        give caresses to someone' ~ acariciar . . .

I take it that the gloss 'to trigger or cause N in someone' for parasythetic verbs
derived from psychological state nouns is a conceptual semantics matter. Psych-
ological states are conceived as triggered within animate beings, either internal
to their own mental processes or caused by an external force. Even if languages
use the metaphor of 'getting N' or 'giving N to someone', the result state where
the entity holds the mental state is one where the notions of possession is clear
also through the light verbs used, which tend to be in Spanish tener 'have': *tener
vergüenza* 'to have shame', *tener pena* 'to have pity', *tener prisa* 'to have rush',
tener una costumbre 'to have a habit', etc.
   Beyond this, the aspectual properties that these verbs have are the same ones
that we have seen in the case of locatum verbs: the verbs are clearly telic and
behave as achievements (78), with the caveat that if the base noun can be inter-
preted as a plurality, other aspectual notions emerge (79)-(80). As virtually all
nouns denoting psychological states are mass nouns, the quantification option

with its associated aspectual properties is particularly frequent in the case of the verbs in (76).

(78)　a.　Juan empoderó a María durante una hora.
　　　　Juan em-power-ed DOM María for one hour
　　　'Juan made María have power, and María had the power for one hour'
　　b.　Juan empoderó a María en una hora.
　　　　Juan em-power-ed DOM María in one hour
　　　'Juan made María have the power in one hour'
(79)　a.　Juan abolló mucho el coche.
　　　　Juan a-bump-ed much the car
　　　'Juan produced a lot of bumps into the car'
　　b.　Juan abolló el coche durante una hora.
　　　　Juan a-bump-ed the car for one hour
　　　'Juan was producing bumps into the car for one hour'
(80)　a.　Juan avergonzó mucho a María.
　　　　Juan a-shame-ed much DOM María
　　b.　Juan avergonzó a María durante horas.
　　　　Juan a-shame-ed DOM María for hours
　　　'Juan was shaming María for hours'

　　Given these properties, I propose to analyse transfer verbs on a par with locatum verbs, with the only caveat that the possession end state expressed by pP is defined by a P layer that defines general physical contact of inclusion or contact, without the specific locative relation between the two entities being relevant. Perhaps this follows from the possessive meaning: if what is relevant is that the two entities are in a possessive relation, it is irrelevant what type of spatial configuration the possessor and the possessee hold with each other. (81) represents the structure that I propose.

(81)
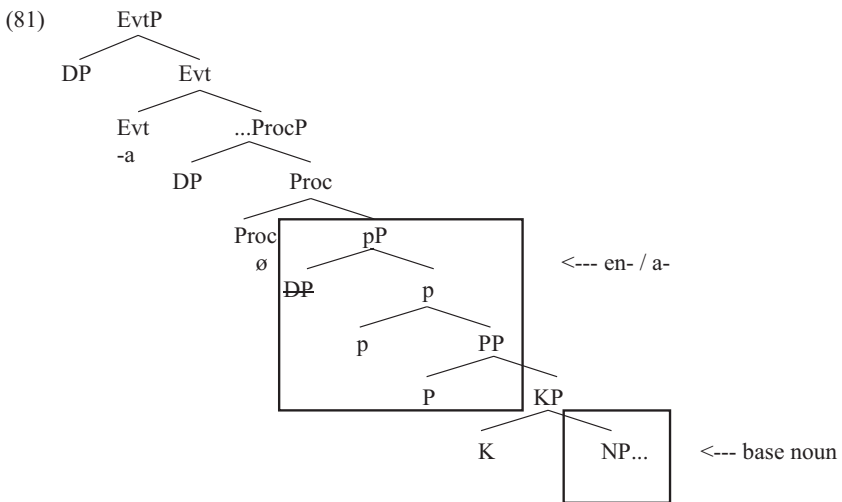
5.4.1 *Possessive verbs as stative transfer verbs*

I have identified four verbs that have a stative possessive meaning.

(82)   deuda 'debt' > a-deud-a 'to have a debt with someone', mérito 'merit' >
   a-merit-a 'to have merit, to deserve something', pasión 'passion' > a-pasion-
   a 'to have or to feel passion for something', ventaja 'advantage' > a-ventaj-a
   'to have an advantage over someone'

   While this is not a productive class of parasynthetic formations, note that their
existence is predicted by the framework that we are adopting. In order to be a sta-
tive formation, the relational structure must combine directly with InitP without
the intermediation of ProcP. We have seen that this is not possible if the base
includes PredP/pP, because PredP/pP is configurationally interpreted as a stative
head and direct selection by InitP would mean to combine with another stative
head that is relational and expresses the notion of holding a set of properties by
virtue of the internal properties of the specifier.
   Thus we propose that these possessive stative verbs correspond to the
structure in (83), where the relational structure contains PP but no pP; NP can
itself be complex and introduce additional participants, such as the value of
the debt, the person that the debt is related to, or the entity that the merit is
about:

(83)

```
          EvtP
        ╱      ╲
      DP        Evt
             ╱       ╲
          Evt         InitP
          -a         ╱     ╲
                  Init      PP
                   ø       ╱   ╲
                         P       KP
                       en-/a-   ╱   ╲
                             ┌──────────────┐
                             │ K        NP   │
                             │ ø      ╱   ╲  │
                             │      N      √ │
                             └──────────────┘
```
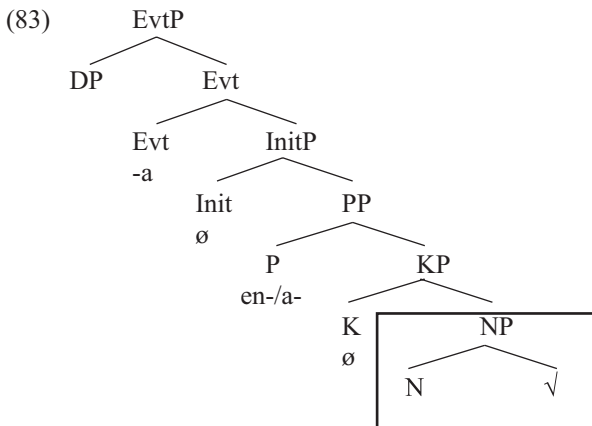
   Parasynthetic deadjectival verbs cannot be stative, because the only material
left for the prefix to spell out is PredP in them, and PredP cannot be combined with
InitP directly. However, in nominal bases, the noun exponent spells out a smaller
chunk that does not include the equivalent of PP; this layer is available for the
prefix to spell out, and this results in configurations that can be stative because pP
is not present, but where there is still enough prepositional structure for the prefix
to materialise.

5.4.2 *Transfer verbs without a prefix*

As in the case of locatum verbs, there are also plenty of cases of denominal prefix-less verbs that have the meaning of 'giving N to someone'.

(84)   baño 'bath' > bañ-a 'to give a bath', beca 'grant' > bec-a 'to give a grant', beneficio 'benefit' > benefici-a 'to give benefits', beso 'kiss' > bes-a 'to give a kiss', consuelo 'comfort' > consol-a 'to give comfort to someone', detalle 'detail' > detall-a 'to give details', elogio 'praise' > elogi-a 'to give praise', enfado 'anger' > enfad-a 'to trigger anger', espanto 'fear' > espant-a 'to trigger fear', equipo 'equipment' > equip-a 'to give equipment', esperanza 'hope' > esperanz-a 'to give hope', estrés 'stress' > estres-a 'to produce stress', fastidio 'annoyance > fastidi-a 'to produce annoyance', galardón 'prize' > galardon-a 'to give a prize', hábito 'habit' > habitu-a 'to trigger a habit', hechizo 'spell' > hechiz-a 'to give a spell', hostia 'hit' > hosti-a 'to give someone a strong punch', inicial 'initials' > inicial-a 'to put the initials in a document', insulto 'insult' > insult-a 'to insult', interés 'interest' > interes-a 'to have an interest on something', medicina 'medicine' > medicin-a 'to give medicines', oferta 'offer' > ofert-a 'to offer', ofrenda 'offering' > ofrend-a 'to offer', orden 'order' > orden-a 'to give an order', pasaporte 'passport' > pasaport-a 'to give a passport', pertrecho 'supplies' > pertrech-a 'to give supplies', potencia 'potence' > potenci-a 'to give potence', premio 'prize' > premi-a 'to give a prize', pregón 'announcement' > pregon-a 'to transmit an announcement to someone', prestigio 'prestige' > prestigi-a 'to give prestige', saludo 'greeting' > salud-a 'to give greetings', sanción 'fine' > sancion-a 'to give a fine', sentencia 'sentence' > sentenci-a 'to give a sentence', sosiego 'peace' > soseg-a 'to trigger peace', vacuna 'vaccine' > vacun-a 'to give a vaccine', vitamina 'vitamine' > vitamin-a 'to give vitamines', punto 'point' > puntu-a 'to give points'

These verbs are always telic, with the same caveats as in the other cases when the base is a mass noun, and involve a result state. For this reason I propose the structure in (85) for them, where the ResP activates the constitutive quale of the base noun.

(85)

```
        ProcP
       /    \
     DP     Proc
           /    \
        Proc    ResP
               /    \
             DP     Res
                   /   \
                 Res    NP
```
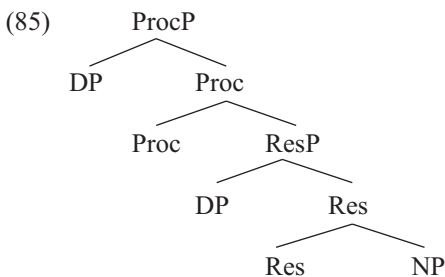
Finally, we also have stative cases that produce possessive verbs glossed as 'to have N', which I take to be instances where ProcP is missing. Most of these verbs have psych nouns as their bases.

(86)   duda 'doubt' > dud-a 'to have doubts', predominio 'predominance' > predomin-a 'to have predominance', sospecha 'suspicion' > sospech-a 'to have suspi-cions', codicia 'greed' > codici-a 'to covet', envidia 'envy' > envidi-a 'to envy'

5.5 Denominal verbs in *-a* with participant readings (3): instrumental verbs

Let us now move to the last class of parasynthetic verbs with *-a*: instrumental verbs. This class is small in the case of the suffix *-a*, in comparison with verbs in *-ear* that will be analysed in chapter §8.4.1. However, there are some verbs of this class, and they have the interesting property that they all involve the prefix *a-* and are always atelic.

5.5.1 Parasynthetic verbs

The biggest group inside this small class has weapons, tools and other instruments as their bases.

(87)   batán 'fulling mill' > a-batan-a 'to beat with a fulling mill', cuchillo 'knife' > a-cuchill-a 'to use a knife', crisol 'crucible' > a-crisol-a 'to purify, to use the crucible with a metal', cuna 'craddle' > a-cun-a 'to rock', maña 'knack' > a-mañ-a 'to use a knack in a competition', martillo 'hammer' > a-martill-a 'to use a hammer', metralla 'shrapnel' > a-metrall-a 'to use a machine gun', palanca 'crowbar' > a-palanc-a 'to use a crowbar', puñal 'dagger' > a-puñal-a 'to use a dagger against someone', sierra 'saw' > a-serr-a 'to use a saw', tenazas 'tongs' > a-tenaz-a 'to use the tongs'

Perhaps the most significant property of these instrumental verbs is their aspectual behaviour. In strong contrast with the rest of verb classes that we have examined in the last three chapters, they are typically atelic, as witnessed by the interpretation of the for-phrase. Note that in (88) none of the direct objects is a plurality and the base noun is not one that is typically interpreted as a plurality.

(88)   a.   Juan a-serr-ó el tronco durante una hora.
               Juan a-saw-ed the trunk for one hour
          'Juan was sawing the trunk for one hour'
       b.   El asesino a-cuchill-ó a su víctima durante diez minutos.
               the murdered a-knife-ed DOM his victim for ten minutes
          'The murderer was stabbing his victim for ten minutes'
       c.   Pedro a-cun-ó a su hijo durante una hora.
               Pedro a-cradle-ed DOM his son for one hour
          'Pedro was rocking his son's cradled for one hour'

The question is whether these two properties, having only *a-* as a prefix and being generally atelic, can be related to each other. I believe they can. It is tempting to relate the instrumental verbs with the following prepositional construction in Spanish, which also uses *a* as a preposition and where the base noun tends to appear without determiners or modifiers, just like the relevant verbalisation bases (RAE & ASALE 2009: §15.13q, §39.6b-d).

(89)   a mano 'by hand', a lápiz 'by pencil', a cuchillo 'by knife', a máquina
       'using a machine', a pie 'by foot', a pistola 'by gun'

RAE & ASALE (2009: §39.6b) note two relevant properties of these structures, which are relatively productive in Spanish when they combine with entities that can be used as tools or means of performing an action: they express manners rather than instruments, and they are associated to specific events that are performed in a particular way. With respect to why they are manners and not instruments, note that the expressions in (89) are recovered with the interrogative *cómo* 'how', not *con qué* 'with what'.

(90)   a.   A: -¿Cómo escribiste la carta?
                 how   wrote.2sg the letter
            'How did you write the letter?'
            B: -A mano/*con la mano.
            by hand/with the hand
       b.   A: -¿Con qué escribiste la carta?
            with what wrote.2sg the letter
            'What did you write the letter with?'
            B: -Con la mano/*A mano.
            with the hand/by hand

With respect to the second property, it is frequently the case that each one of these expressions is associated to a particular type of event, where they designate different conventionalised ways of performing it, or different techniques applied to its performance. For instance, with movement verbs like arriving, traveling, etc., one gets *a pie* 'by foot' or *a caballo* 'by horse', and with verbs of creation like painting one gets *a lápiz* 'using pencil', *a(l) carbóncillo* 'using charcoal', *a mano alzada* 'freehand drawing', *a pincel* 'using paintbrush', etc.

My claim is that, despite the traditional name of 'instrumental verbs', these verbs should actually be analysed as manner verbs where the base expresses a particular technique or way to perform an event, which is generally underspecified by the verbal projections. Treating them like manners is a first step to explain why the only prefix involved in these formations is *a-* and why the verbs tend to be atelic, as the base does not denote a result state, but a predicate from the Proc head that specifies how the dynamic part of the event is performed.

From this respect, *agarrar* 'a-claw-ThV' is a verb that expresses a way of holding something; *acrisolar* 'a-crucible-ThV' is a verb that specifies a way of

purifying some metal, *apuñalar* 'a-dagger-ThV' is a verb tha specifies a way to perform any action by using a particular tool, and so on. The meaning of the event is unspecified in the syntactic structure, but can be conventionalised when, as in the case of *acrisolar*, the object named in the base can only be used for one task.

The next question is how manner should be expressed. The notion of manner is different from the notion of instrument, place or goal in one interesting sense: manners are predicates that describe how events are performed, and they are not participants in the event (see Alexeyenko 2020 for a recent overview of the notion of manner in modern semantic approaches).

Following Oltra-Massuet and Castroviejo (2014), I propose that the nature of manner as a predicate of events and not a participant means that manner corresponds to a functional prepositional layer corresponding to pP, without the lexical layers P and K, whose role is to specify the type of participant relation that the noun holds with the verb as a participant in the event. In other words: in order to express a manner a noun does not need to be identified with a specific participant – hence, they can be bare nouns and not DP structures – because a manner describes the event. PP is unnecessary because there is no conceptual meaning associated to the type of relation that manner expresses – it simply describes the process, and for the same reason KP is missing.

Moving now to the structure, I propose that (91) corresponds to the traditionally called 'instrumental verbs'.

(91)
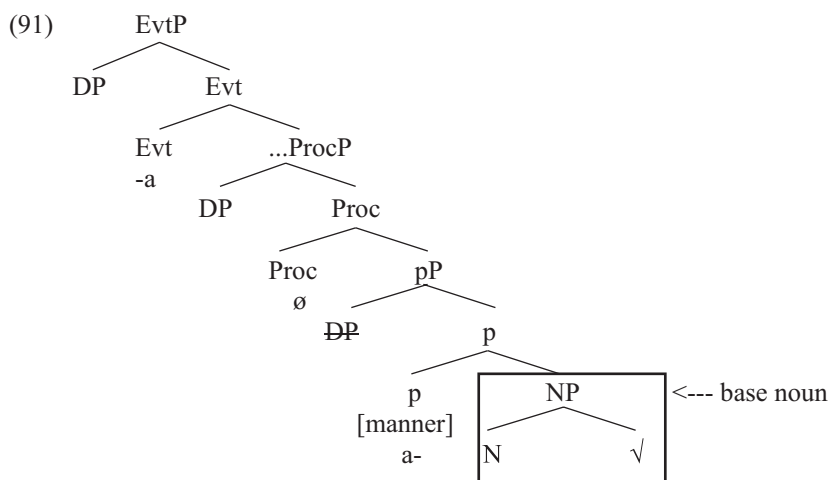
As can be seen, I am tagging the p head with [manner], again following Oltra-Massuet and Castroviejo (2014). This detail is crucial in the analysis. In my view, this feature is what differentiates the standard pP layer without any functional information beyond it being a stative relational head from the pP layer that we find in manner verbs. Without the manner feature in p, the pP layer will be interpreted configurationally as a result state when selected by Proc, and the resulting verbs

would necessarily be telic, like change of state verbs, locative verbs and transfer verbs. The presence of the manner feature is what turns the relational functional head p into a predicate of the event expressed by the Proc head that takes it as complement. This blocks the result state reading, and as a consequence the event remains atelic by default because there is nothing that delimits it.

Moreover, the p tagged as manner will have only one spell out, in contrast with the pP layer that lacks this tag or its equivalent PredP, which can be spelled out both as *a-* and *en-*. The head p[manner] is spelled out only as one element, *a*.

(92)   p[manner] <---> a

The absence of PP, due to the fact that the base noun is not a participant in the event but a predicate that defines a way to perform the process, blocks the potential spell out of the relational area with lexically strong prepositions that express different types of relations. This means that NP directly relates to p without any K layer that builds a particular relation from it or P layer that conceptually gives value to it. From this perspective, these verbs are like prefix-less verbs in that there is no layer that provides its own conceptual semantics beyond the meaning provided by the lexical noun. This explains that the nouns that can be used as bases for instrumental verbs must be nouns that, to begin with, are interpreted as instruments and therefore are lexically specified as containing a telic quale that denotes the type of event that they can be used to perform.

This telic quale contained in the conceptual semantics of the base noun is the only element that in (91) specifies the type of event that Proc should express. In contrast to the classes where pP or PredP are interpreted as a result state, the process cannot be defined as reaching the situation described by its complement, and the only option is to restrict the type of process expressed with the conceptual information that the noun contains. *Agarrar* is a way of performing a holding event, *acrisolar* is a purifying event because crucibles are used to purify metals and *apuñalar* is a way to wound someone because daggers are used to wound.

However, the presence of pP still defines an external argument of the manner, which corresponds to the entity towards which the manner defined by the complement is directed. This figure always corresponds to the internal argument of the verb, as from pP it moves to ProcP, and if the verb is transitive it is projected as a direct object.

To conclude this section: instrumental verbs have two relevant properties that set them apart from all other parasynthetic verbs. They are atelic and they always display the prefix *a-*, which corresponds to the standard functional preposition in the verbal domain. I propose that the two properties are related: these verbs should be considered manner verbs, and contain only a pP layer specified as such, which describes the way in which the process is performed – not a result state following its completion.

With this we end the discussion about all parasynthetic denominal classes, but there are additional classes of denominal verbs not involving parasynthesis. We

will revise these in §5.6 below, but before we do that let us discuss the prefix-less instrumental verbs.

5.5.2 *Prefix-less instrumental verbs*

As expected, without any relational structure the manner reading can be obtained with a number of prefix-less denominal verbs whose bases express different types of instruments.

(92)　baremo 'scale' > barem-a 'to use a scale to rank', catapulta 'catapult' > cat-apult-a 'to catapult', cepillo 'brush' > cepill-a 'to brush', cincel 'chisel' > cincel-a 'to chisel', clavo 'nail' > clav-a 'to nail', columpio 'see-saw' > columpi-a 'to play with a see-saw', criba 'sieve' > crib-a 'to sieve', cronómetro 'chronometer' > cronometr-a 'to use the chronometer', dina-mita 'dynamite' > dinamit-a 'to blow with dynamite', escudo 'shield' > escud-a 'to use a shield', flagelo 'whip' > flagel-a 'to beat with a whip', fuerza 'force' > forz-a 'to do something by force', freno 'brake' > fren-a 'to brake', fusil 'gun' > fusil-a 'to kill with a gun', guillotina 'guillotine' > guillotin-a 'to kill by guillotine', lija 'sandpaper' > lij-a 'to use sandpaper', martillo 'hammer' > martill-a 'to hammer', patín 'skate' > patin-a 'to use skates', serrucho 'handsaw' > serruch-a 'to use a handsaw', taladro 'drill' > taladr-a 'to drill', tamiz 'sieve' > tamiz-a 'to sieve', tractor 'tractor' > tractor-a 'to use tractors in an area', zurriago 'whip' > zurriag-a 'to hit with a whip'

　　I have very little to add to what I have already said for prefix-less cases: the bases invariably denote artifacts which are used to perform events, so they specify a particular type of event in their telic quale, which is the one used to define the type of event that Proc corresponds to. Again, and unless that event is inherently telic, the default reading of these verbs is atelic. I propose therefore that these are cases where NP is directly selected by ProcP, as in the other prefix-less atelic cases.

5.6 Non parasynthetic denominal verbs in -*a*: creation verbs and other readings

Let us now move to some classes that are only attested without parasynthesis. In my approach, parasynthesis reflects a higher degree of syntactic complexity. When parasynthesis appears, syntax is restricting the readings and the grammati-cal behaviour of the resulting verbs. Absence of parasynthesis, on the other hand, means that less syntactic structure is being projected, so syntax restricts the verb types less. This implies that there should be verb classes that are only attested without parasynthesis, because they involve configurations that lack relational structure or because the relevant interpretation is triggered by the base's con-ceptual semantics when syntax does not restrict the verb type. This section will

first discuss the case of creation and activity verbs, which require an NP as the complement of Proc (Ramchand 2008) and then will move to a selection of less systematic readings where the conceptual semantics of the base noun produces more complex semantic interpretations.

5.6.1 Creation and activity performance verbs

Within Ramchand's (2008) proposal, the complement of Proc can be taken to be an entity that defines the event's progression by its internal properties. A creation predicate like 'paint a portrait' can be viewed as an event where the creation is defined by the parts of the portrait that are completed at each temporal point of the process, in the same way that a consumption predicate like 'to eat an apple' is defined by making each portion of the apple disappear at a different moment of the process of eating. Similarly, 'to dance a tango' can be viewed as a process that is defined by performing a tango, so that the nature of the event itself depends on the development of the conventionalised series of movements that we call 'tango'. For Ramchand these three cases share the configuration where a nominal participant is combined directly with the ProcP, as in (93).

(93) [ProcP   DP   Proc   [NP]]

(93) is a possible configuration in denominal prefix-less verbs, as we have seen. Therefore, we expect there to be also prefix-less verbs built from nouns where the meaning is to create the entity denoted by the base, or to perform an action that is denoted by the base. The configuration in (93) previously allows different readings, depending on the quale that has been activated, and we have examined the cases involving the formal quale (§5.2.2), the constitutive quale (§5.3.5, and §5.4.2) and the telic quale (§5.5.2). The fourth option is that the agentive quale is activated, and I argue that this is the case with verbs that denote the creation of the noun in the base. The agentive quale expresses the event that brings about the entity in question, that is, what produces or creates the entity denoted by the noun phrase. The cases in (94) involve bound nouns as bases and are interpreted as 'to produce N'.

(94) blasfemia 'blasphemy' > blasfem-a 'to produce blasphemies', bote 'jump' > bot-a 'to jump', bostezo 'yawn' > bostez-a 'to yawn', brillo 'shining' > brillar 'to produce light', congestión 'congestion' > congestion-a 'to produce a congestion', contusión 'contusion' > contusion-a 'to produce a contusion', cortocircuito 'short circuit' > cortocircuit-a 'to make a short circuit', decreto 'decree' > decret-a 'to write a decree', diagnóstico 'diagnose' > diagnostic-a 'to produce a diagnose', dictamen 'ruling' > dictamin-a 'to rule', esbozo 'sketch' > esboz-a 'to make a sketchg', estornudo 'sneeze' > estornud-a 'to sneeze', explosión 'explosion' > explosion-a 'to produce an explosion', esprint 'sprint' > esprint-a 'to sprint', fotocopia 'photocopy' > fotocopi-a 'to make a photocopy', fotografía 'photograph' > fotografi-a

'to photograph', fracción 'fraction' > fraccion-a 'to divide into fractions', fractura 'fracture' > fractur-a 'to make a fracture', fusión 'fusion' > fusion-a 'to make a fusion', mención 'mention' > mencion-a 'to mention', relincho 'neigh' > relinch-a 'to neigh', reseña 'review' > reseñ-a 'to make a review'

In a configuration like (93) where the complement of Proc is interpreted as a result object and Proc as the event that produces it, the aspectual interpretation of the NP corresponds to a rheme path (Ramchand 2008). A rheme path is an entity whose mereological parts measure the extension of the event; different portions of the entity correspond biunivocally with different temporal points in the progression of the event, which results on the NP indirectly determining whether the event is bounded or unbounded. The examples in (94) produce telic events because their bases involve bounded entities, physical objects or events.

There is a second group of verbs where the NP is interpreted as an activity, hobby or occupation whose performance gives content to the Proc part of the event. In these cases, there is no result object, but the activity or action is created as the event proceeds. The most appropriate gloss in these cases is 'to do N'.

(95) cortejo 'courtship' > cortej-a 'to court', comercio 'trade' > comerci-a 'to do trading', concurso 'competition' > concurs-a 'to participate in a competition', danza 'dance' > danz-a 'to dance', disparate 'nonsense' > disparat-a 'to act in a stupid way', esquí 'ski' > esqui-a 'to do ski', faena 'work' > faen-a 'to work', festejo 'party' > festej-a 'to participate in a party', gestión 'management' > gestion-a 'to do management', labor 'job' > labor-a 'to work', procesión 'procession' > procesion-a 'to be part of a procession', pugna 'fight' > pugn-a 'to participate on a fight', sitio 'siege' > siti-a 'to siege', tráfico 'illegal traffic' > trafic-a 'to traffic'

By definition, hobbies and occupations are unbounded entities, so all the verbs in this subgroup are atelic. There is again a strong tendency to be intransitive: with the exception of *cortejar a alguien* 'to court someone' and *gestionar algo* 'to manage some business' the verbs in this group either completely reject a direct object or sound very natural without it.

5.6.2 Other interpretations

So far the cases that we have revised with prefix-less denominal verbs in -*a* are quite systematic because they correspond to relatively 'pure' interpretations of their formal, constitutive, telic and agentive quale. However, our explanation of the interpretation of bases with such verbs is entirely based on the conceptual semantics of the noun, in the absence of syntactic structure, and conceptual semantics is a quite fuzzy area. The prediction is, then, that beyond the more systematic classes that have been presented in the previous sections we should have other verbs in the group whose meaning, without being demotivated, require more complex semantic interpretations that entirely depend on its conceptual meaning.

One first class is produced by emission verbs, which could be taken as a subcase of the result object and activity verbs in §5.6.1, only that the conceptual nature of the noun – a substance that is kept inside the human body – blocks the result object reading, as the substance existed before. (96) shows some of these cases.

(96)   orina 'urine' > orin-a 'to urinate', saliva 'saliva' > saliv-a 'to produce saliva', sangre 'blood' > sangr-a 'to bleed', vómito 'vomit' > vomit-a 'to vomit'

There is another group of verbs which might be related to transfer or locatum verbs, but where the base designates some measure or value that is determined and identified. The meaning of *calibrar* 'to calibrate' is not exactly to give a caliber to something, but to identify or measure the caliber. The same description stands for the verbs in (97), whose gloss is along the lines of 'to determine N for an entity'.

(97)   calibre 'caliber' > calibr-a 'to calibrate', dimensión 'dimension' > dimen-sion-a 'to determine the dimensions of something', grado 'degree' > gradu-a 'to determine the degree of something', valor 'value' > valor-a 'to determine the value of something'

The diversity of semantic interpretations is very high, and we do not attempt to cover them all, as that would be a lexicographic task that goes beyond our goals. We will just give two interesting examples where the semantic complex-ity is representative of the range of readings that can be obtained. The verb in (98) relates the kingdom with the action of being its ruler, and would require a gloss along the lines of 'to act in N' or 'to rule N', with a much more specific reading than the ones we obtained with the other activity verbs but perhaps related to it.

(98)   reino 'kingdom' > rein-a 'to act as the ruler of a kingdom'

In (99), the verb involves performing an action typically performed on the base: a deck of cards is typically shuffled, and (99) involves shuffling things; note that the deck of cards is not an instrument or a predicate expressing a set of properties. The gloss necessary for this case would be 'to do as with N'.

(99)   baraja 'deck of cards' > baraj-a 'to shuffle'

Our point here is that these readings go beyond the options that one obtains with parasynthetic verbs, something that in our analysis is explained because parasyn-thesis corresponds to syntactic structures where the heads used and their configu-rations restrict the possible meanings, while in the absence of the prepositional structure those readings are taken from any information that can be obtained from conceptual semantics.

5.7 Interim summary: parasynthesis vs. non parasynthesis in the absence of overt verbalisers

Let us conclude this chapter by providing a short overview of what we have seen in the comparison between parasynthetic and non-parasynthetic verbs in -a, which are the two biggest classes of verbalisations in Spanish.

If we abstract away from the specific labels that the relational structure adopts in nouns (pP – PP – KP) and adjectives (PredP – ScaleP – PP – KP), in the parasynthetic cases, we have seen three structures: a structure which produces a change of state reading (96a, 96b) and where the prefix corresponds to Pred and is therefore functional, a structure that corresponds to participant readings (96c) where the prefix includes lexical and functional layers and a structure for manner/instrumental verbs which also corresponds only to the prepositional functional layer (96d).

(96) a. [Proc [Pred [Deg [ADJECTIVE]]]]
      b. [Proc [Pred [NOUN]]]
      c. [Proc [p [P [K [NOUN]]]]]
      d. [Proc [p^{manner} [NOUN]]]

In (96a-c), the functional prepositional layer is interpreted as a result phrase configurationally, producing telic readings that can only become atelic by coercion through an appropriate for-phrase or by having pluralities or masses in the structure below Proc. In contrast, in (96d) the manner value of the functional prepositional layer triggers atelic readings.

The main difference between (96a) and (96b) follows from nouns lacking scales and degrees, which restricts the types of aspectual readings that denominal change of state verbs can have.

(96c) can only appear with nominal bases, because as argued in Chapter 3 and Fábregas (2020) the structure of an adjective in Spanish already incorporates Scale (as PathP), PP and KP, which are spelled out together with the adjectival exponent. The main difference between nominal and adjectival bases is that in a configuration like (96c) the base does not spell out the lexical PP layer, which is left for the prefix – producing as a result a broader range of prefixes that intervene in denominal parasynthetic formations.

The important property of the configurations in (96) is that there is a bigger or smaller part of the relational structure projected in the syntax. Taking into account that the adjective already contains the equivalents of PathP, PP and KP, (96a) and (96c) involve a full expansion of the structure, while (96b) and (96d) involve a partial expansion restricted to the functional layer.

In the case of deadjectival and denominal prefix-less verbs in -*a*, the absence of the prefix involves removing the part of the relational structure corresponding to the prefix. In the case of the adjective, this removes only PredP, and in the case of the noun it involves removing the structure completely. There are three possible configurations depending on the verbal head that takes the adjective or

noun as its complement: ResP can combine with the base, producing change of state or change of location configurations (97a, 97b); ProcP can combine with the base, producing readings where a property is exhibited during the running time of an event, as well as atelic movement readings, instrumental readings, result object readings and activity readings (97c, 97d), and InitP can take the base, producing stative verbs involving 'to be A/N', to be in a location or to have something (97e, 97f).

(97)   a.   [Res [Deg [ADJECTIVE]]]
        b.   [Res [NP]]
        c.   [Proc [Deg [ADJETIVE]]]
        d.   [Proc [NP]]
        e.   [Init [Deg [ADJECTIVE]]]
        f.   [Init [NP]]

In my account, adjectives always give property interpretations because their internal structure already incorporates the equivalent to PP that denotes a particular type of quality. In the case of nouns, the different readings depend on the quale that is identified to give content to the procesual part of the verb.

This ends our discussion of verbs with the theme vowel -*a* as the only overt verbal affix, both with and without parasynthesis. In the next chapter, we move to the discussion of the overt verbalisers, starting with the case of -*ecer*.

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6 Verbalisations in -*ecer*, parasynthetic or not

6.1 Overview of the chapter

The goal of this chapter is to provide a description and analysis of verbs that contain the suffix -*ec-e*. This includes two main morphological patterns: parasynthetic formations, typically from adjectives and typically with the prefix *en-* (1a-b; but see 1c, 1d), and verbs where the suffix is identifiable but no prefix is recognisable on the surface (2).

(1) a. en-grand-ec-e
        in-big-EC-ThV, 'to make bigger'
    b. en-loqu-ec-e
        in-crazy.-EC-ThV, 'to make crazy'
    c. a-noch-ec-e
        A-evening-EC-ThV, 'to get dark, to dusk'
    d. en-moh-ec-e
        in-mold-EC-ThV, 'to make moldy'
(2) a. humed-ec-e
        wet-EC-ThV, 'to make wet'
    b. flor-ec-e
        flower-EC-ThV, 'to get flowers'

Our specific proposal for the suffix -*ec*- is that is spells out, maximally, the structure in (3), which contains – crucially – a verbal PathP that measures the process. This differentiates -ec(e) from zero verbalisations involving only -*a*.

(3)   InitP
           /   \
        Init   ProcP
               /   \
            Proc   PathP
                   /   \
                Path   ResP
                          \
                          Res
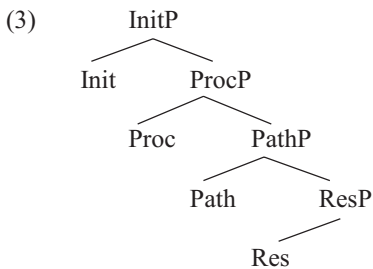
By the Superset Principle, then, this means that this suffix will be able to spell out dynamic verbs – causative or inchoative – only if the structure contains also a Path which measures the change of state, as there is no constituent that contains Proc and not Path in this tree. This, as we will see, is what captures the (strong) generalisation that dynamic verbs with *-ec-* involve some type of gradual change or some transference across an implicit path.

(3)
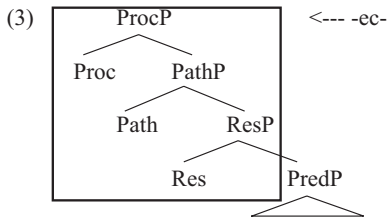
Another relevant property of this suffix is that it is frequently the case that speakers admit both the parasynthetic and the non-parasynthetic version expressing exactly the same meaning, as in (4).

(4) a.   palid-ec-e
          pale-EC-ThV
     b.   em-palid-ec-e
          in-pale-EC-ThV

This situation contrasts with the case of verbs in *-a*, where – as we saw – speakers have clear intuitions about the distinct meaning of the verbs with and without the prefix.

The account that we will offer of this alternation uses the configurational interpretation of pP/PredP as a result state in the complement of Proc position. In principle, the suffix can spell out a ResP head, which is a relational stative head which defines the entity that holds a state as its specifier. In these conditions, the change of state semantics is obtained without relational structure.

(5)
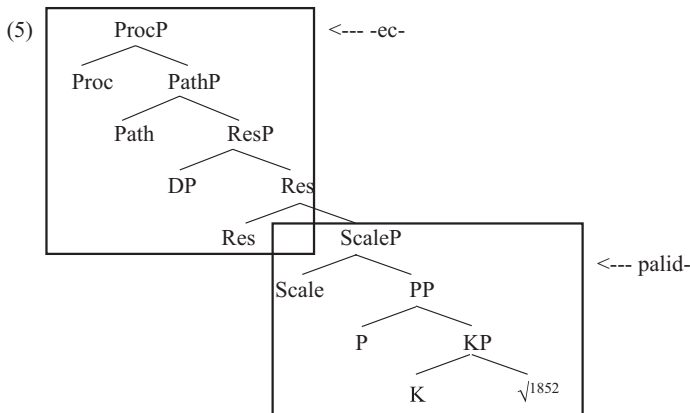
However, syntax can build the structure also with PredP – another instantiation of Wood and Marantz' (2017) iotta phrase – which gives the same result state interpretation but where the verbal suffix cannot spell out the layer. In such cases, a prefix spells out the functional prepositional head Pred, and the result is parasynthesis even though the structure gets assigned the same meaning as (6).

(6)

```
      ProcP              <--- -ec-
      /    \
   Proc   PathP
          /   \
       Path   PredP
             /    \
           DP     Pred
                  /    \
               Pred   ScaleP     <--- palid-
               en-    /    \
                   Scale   PP
                          /  \
                         P   KP
                            /  \
                           K   √1852
```
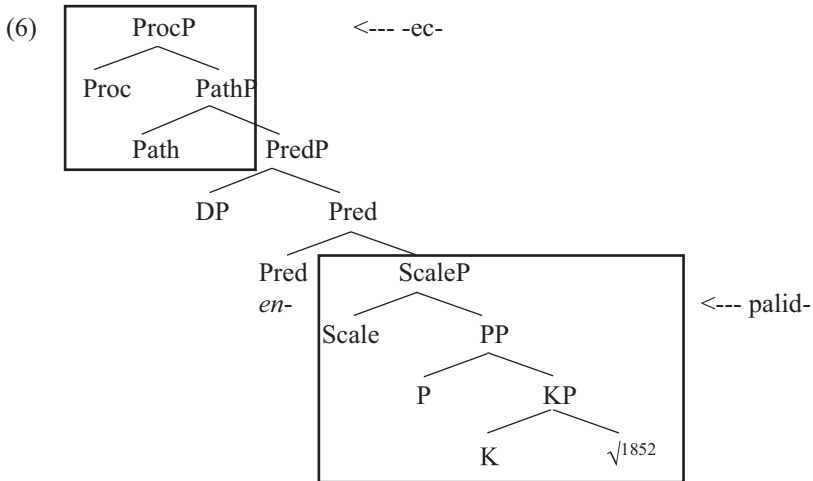
This chapter is structured as follows. In §6.2 we will address the general properties of this suffix from its Latin origin, and we will motivate the claim that the suffix incorporates a path component. In §6.3 we will examine the deadjectival cases, and in §6.4 we will analyse the denominal cases. §6.5 discusses the possible use of *-ec-e* with roots, in non-derived verbs, and §6.6 concludes.

6.2 The suffix *-ec-e* and its problems

As is well-known, the suffix *-ec-e* used in Spanish has its historical origin in the suffix *-sc(o)*, which in Latin was characterised as an inchoative suffix that combined with stative verbs denoting properties (Malkiel 1941; Maurer 1951; Dworkin 1985; Elvira 2001; Batllori 2015). The Latin second conjugation, characterised by the theme vowel *-e-*, stored most of the stative deadjectival verbs in Latin, which means that the resulting sequence was often *-e-sco*. (7) provides one example of this type of derivation:

(7) a.   rub-e-o
            red-ThV-1sg, 'I am red'
     b.   rub-e-sc-o
            red-ThV-inch-1sg, 'I am getting red'

The term 'inchoative', which sometimes is still used to characterise *-ec-e* in some descriptive works about Spanish, is meaningful in Latin pairs such as (7):

(7a) has a stative meaning and the verb derived with *-sc-* in (7b) denotes an event whereby the state is initiated, that is, a change of state verb. Verbs such as (7b) expressed, then, change of state meanings that could also be obtained in Latin with the fourth conjugation (e.g., *mollis* 'soft' > *moll-i-re* 'to soften').

In Romance, the *-sc-* suffix was grammaticalised in different ways; French and Italian incorporated it as part of the inflection of certain classes of verbs (Maurer 1951), while in Spanish it became part of the derivation of a verb. The meaning association between Latin verbs in *-ire* and derived verbs in *-scere* meant that many Old Romance formations in Spanish *-ir* where substituted by formations in *-escer* (Dworkin 1985), as in *fallir* 'to fail' > *fall-ec-er* 'to die'. This change was of course also applied to derived cases, as in *negro* 'black' > *(en)negr-i* > *en-negr-ec-e* 'to get black'.

However, despite this historical course, it seems clear that the term 'inchoative' is not meaningful to characterise the suffix *-ec-e* in Spanish. If 'inchoative' is taken as meaning that the verb concentrates on the initial stage of change, and does not denote a progression or a result, 'inchoative' clearly does not apply to the derived verbs, as (8) can get a progressive meaning and (9) can get a result meaning for the for-phrase.

(8)   Juan se enriqueció durante dos años.
      Juan SE en-rich-ec-ThV for two years
      'Juan became richer and richer for two years'
(9)   Pedro en-mud-ec-i-ó durante dos horas.
      Pedro en-mute-ec-ThV-ed for two hours
      'Pedro fell silent, and stayed silent for two hours'

If 'inchoative' should be taken as opposed to 'causative' – that is, that the verb is intransitive and unaccusative (Levin & Rappaport 1995) – again this term would not characterise these verbs, which can have causative pairs under conditions similar to the ones described for change of state verbs in *-a*.

(10)   a.   Los negocios enriquecieron a Juan.
             the businesses en-rich-ec-ed DOM Juan
       'His businesses made Juan rich'
       b.   El trauma en-mud-ec-i-ó a Juan.
             the trauma en-mute-ec-ThV-ed DOM Juan
       'The trauma made Juan fall silent'

The question is however how much of the change of state meaning building events from states is kept in the Spanish version of this suffix. Here I want to argue that, in contrast with formations in *-a* and other affixes, *-ec-e* in Modern Spanish is crucially characterised by the presence of a verbal Path head, in addition to the Proc and Res heads.

Remember from Chapter 1 (§1.2.3) that the role of a Path is to define a dimension of progressive change which Proc interprets to assign a durative component

to the event that it builds. We already saw in the previous chapter (§5.6.1) that cre-
ation verbs take the noun in the base as the path that measures the creation event.
A path is nothing but an ordered set of points within one dimension, that when
taken as complement of Proc defines the measure of change. Scales in adjec-
tives are instances of non-verbal paths, because they involve a set of two or more
ordered values.

Absence of a verbal path in verbs in -*a* resulted in a basic achievement mean-
ing where the complement of Proc was interpreted as a result component. No
extension is recognised in the event defined by Proc, as a consequence of this.
Only with adjectives, when there is a comparative degree and a flexible scale,
can one obtain an activity reading through repetition of change. In contrast to
this, if -*ec-e* contains a path we should be able to identify situations where the
suffix itself produces an extended durative event reading in the absence of other
elements – pluralities, adjectival scales – that license that duration. What would
be that type of situation? Given that adjectival bases generally involve scales
that can give a duration component to the event through repetition, the way to
argue for the presence of a path component inherent to -*ec-e* is to examine nom-
inal bases. With the exception of instrumental/manner verbs, we have seen that
change of state or locative verbs built from nominal bases systematically pro-
duce telic achievement readings (cf. §5.2.1), a property that follows from them
not projecting scales or degree heads. In themselves, nouns involve changes
that are yes/no properties where the only option is to trigger an instantaneous
transition from not having the property to having it. If -*ec-e* incorporates a path
component, we expect that this should produce durative readings of the event
with nominal bases.

I believe that this prediction is borne out. Consider the parasynthetic verbs
noche 'night' > *a-noch-ec-e* 'to dusk, to get dark' and *tarde* 'evening' > *a-tard-ec-
e* 'to dusk, to get dark'. Crucially, these nouns are stubbornly count nouns, which
do not allow a mass interpretation, as witnessed by the impossibility of combining
it with singular *mucho* 'much'.

(11)   *mucha {tarde/noche}
         much   evening/night

However, the duration component is clear with these verbs: the for-phrase can
measure a gradual change where the sky gets darker and darker.

(12)   {Atardeció/Anocheció} durante dos horas.
         got.darker/got.darker for two hours
         'It got darker and darker for two hours' or 'It got dark, and it stayed dark for
         two hours'

In other denominal change of state verbs only the second gloss is appropriate,
where the for-phrase measures the length of the result state. The existence of the
first reading is unexpected given that there is no mass and no plurality involved in

the linguistic material present. My claim is that the duration component is due to a path which is introduced by the suffix.

Once the hypothesis that *-ec-e* contains a path component is put forth, it is tempting to use this element to explain some of the other specific properties of this verbaliser. Take for instance its productivity with nominal and adjectival bases. In contrast with *-a* verbs, and as we will see with verbs in *-ific-* and *-e-a*, *-ec-e* is clearly more productive with adjectives than with nouns. The number of denominal formations is very low, in contrast to deadjectival ones, even if some nouns can be taken as bases. A possible explanatory answer to this asymmetry comes from the fact that adjectives, but not nouns, are associated to scales which are projected in their syntactic structure, as a path element. If *-ec-e* incorporates in its structure a path component that introduces a measure of change, it makes sense that the type of base that gives content to the process would also be one that contains a path structure that can be matched with the change component of Proc. With this, one obtains a straightforward interpretation where the change component is a transition through the scale of adjectival base.

Following this line of reasoning, one can obtain other interesting predictions that are, however, a bit more speculative. As we will see in §6.4 below, the few denominal formations with this suffix fall into two classes: change of state verbs and transfer verbs. If in the first class we have already motivated the presence of some duration (one that will be licensed by access to the formal quale of the base, in the absence of lexical PP layers), it is interesting that beyond this class one gets transfer verbs where, moreover, the preferred meaning is that some entity grows out of the subject. This is the case of flowers in a tree, and also in other examples that we will see, like teeth growing out of an animal, branches growing out of a trunk, grass growing out of the earth, etc. The interpretation of these events involves always some type of path that takes the subject as its origin and extends outwards from it. My claim will be that this 'subject-as-origin' reading follows from the presence of a path component in the verbaliser. But for this we should already start the discussion of deadjectival verbs, which we will immediately do.

6.3 Deadjectival formations

As its Latin equivalent, the suffix *-ec-e* is productive with adjectival bases expressing physical (13) or non-physical (14) properties (cf. Pena 1980, 1993; Beniers 2004; RAE & ASALE 2009: §8.6, Batiukova 2021).

(13)   bello 'pretty' > em-bell-ec-e 'to get pretty', bermejo 'red' > em-bermej-ec-e 'to get red', calvo 'bald' > en-calv-ec-e 'to get bald', cano 'white-haired' > en-can-ec-e 'to get white hair', duro 'hard' > en-dur-ec-e 'to get hard', flaco 'slim' > en-flaqu-ec-e 'to get slim', lento 'slow' > en-lent-ec-e 'to get slow', lóbrego 'gloomy' > en-lobregu-ec-e 'to get gloomy', magro 'lean, skinny' > en-magr-ec-e 'to get lean', negro 'black' > en-negr-ec-e 'to get black', pequeño 'small' > em-pequeñ-ec-e 'to make small', rojo 'red' > en-roj-ec-e

‘to get red’, sordo ‘deaf’ > en-sord-ec-e ‘to get deaf’, triste ‘sad’ > en-trist-ec-e ‘to get sad’, viejo ‘old’ > en-vej-ec-e

(14) bobo ‘stupid’ > em-bob-ec-e ‘to become stupid’, caro ‘expensive’ > en-car-ec-e ‘to get expensive’, noble ‘noble’ > en-nobl-ec-e ‘to become noble’, pobre ‘poor’ > em-pobr-ec-e ‘to become poor’, rico ‘rich’ > en-riqu-ec-e ‘to become rich’, rudo ‘rough’ > en-rud-ec-e ‘to become rough’, torpe ‘clumsy’ > en-torp-ec-e ‘to make someone become clumsy’, vil ‘vile’ > en-vil-ec-e ‘to become vile’, tierno ‘tender’ > en-tern-ec-e ‘to become tender’, tonto ‘stupid’ > en-tont-ec-e ‘to become stupid’, soberbio ‘arrogant’ > en-soberb-ec-e ‘to get arrogant’, loco ‘crazy’ > en-loqu-ec-e ‘to get crazy’

As can be seen in the previous lists, with adjectival bases this suffix is productive specially with parasynthetic formations. Deadjectival bases, to the best of my knowledge, never combine with the prefix *a-*, and *en-* is by far the most frequent affix in such cases. A small number of deadjectival verbs of change of state take the prefix *re-*.

(15) blando ‘soft’ >   re-bland-ec-e ‘to get soft’, crudo ‘crude’ > re-crud-ec-e ‘to get crude’, joven ‘young’ > re-juven-ec-e ‘to get young’

These verbs, like the deadjectival equivalents in *-a*, do not involve an iterative or repetition meaning. Nothing in a verb like *reblandecer* ‘to soften’ implies that the entity that undergoes the change was soft before, and nothing in *recrudecer* ‘to get crude’ gets this type of meaning. It is true that the base in *rejuvenecer* ‘to get young’ might involve going back to a previous state, but note that it is the base what expresses this – in normal conditions, living creatures start being young, so getting young(er) conceptually implies being young for a second time. See below in §6.4.1 for the case of *reverdecer* ‘to get green again’, which I claim to come from the noun *verde* ‘green’, not the adjective.

While by far the parasynthetic formations are the most productive ones with adjectives, there is a small group of deadjectival verbs which are prefix-less (16). As can be seen in (16), many of these verbs have a parasynthetic pair, and the number of formations that are never parasynthetic is very reduced.

(16) blanco ‘white’ > blanqu-ec-e ~ em-blanqu-ec-e ‘to get white’, bruto ‘stupid’ > em-brut-ec-e ‘to make someone stupid’, claro ‘clear’ > clar-ec-e ~ es-clar-ec-e ‘to clarify’, estable ‘stable’ > establ-ec-e ‘to make something stable, to establish’, fuerte ‘strong’ > fortal-ec-e ‘to make stronger’, húmedo ‘wet’ > humed-ec-e ~ en-humed-ec-e ‘to make wet’, lánguido ‘listless’ > languid-ec-e ‘to languish, to lose energy’, lívido ‘pale’ > livid-ec-e ‘to become pale’, oscuro ‘dark’ > oscur-ec-e ‘to become dark’, pálido ‘pale’ > palid-ec-e ~ em-palid-ec-e ‘to become pale’, robusto ‘robust’ > robust-ec-e ‘to make something robust’, verde ‘green’ > verd-ec-e ~ re-verd-ec-e ‘to become green’

As we will immediately see, unlike the case of verbs in -*a*, there are no recognisable differences between the parasynthetic and the non-parasynthetic deadjectival verbs in -*ec-e*.

6.3.1 Syntactic properties

All deadjectival verbs in -*ec-e* fall into the class of change of state verbs. From a syntactic perspective, their behaviour is very stable, both in the parasynthetic and the (scarce) prefix-less formations. The following properties, that the reader will find familiar from the description of deadjectival parasynthetic verbs in -*a*, apply to all deadjectival verbs in -*ec-e*.

a)   These verbs are eventive, and there are no cases where the verb has a stative construal. This applies as well to the non-parasynthetic cases, unlike what we saw for prefix-less verbs in -*a*.

b)   In principle, these verbs allow both a causative and an anticausative construal, with the same lexical restrictions as in the case of verbs involving a zero verbaliser (Levin & Rappaport 1995), which is due to conceptual semantics and relates to which changes can be conceptualised as triggered by an external agent or not.

c)   Without exception, the change of state is predicated from the entity that is projected as the internal argument. This also applies both to parasynthetic and to non-parasynthetic verbs, in contrast with -*a* cases, where the prefix-less verbs might be predicated from the external argument or the event.

(17)   a.   El susto em-palid-ec-i-ó a Pedro.
            the scare in-pale-ec-ThV-ed DOM Pedro
        'The scare made Pedro become pale'
      b.   Pedro em-palid-ec-i-ó.
            Pedro in-pale-ec-ThV-ed
        'Pedro became pale'
      c.   El ejercicio fortal-ec-i-ó sus brazos.
            the exercise strong-ec-ThV-ed his arms
        'Training made his arms strong'
      b.   Sus brazos se fortal-ec-ie-ron.
            his arms SE strong-ec-ThV-ed
        'His arms got stronger'

6.3.2 Aspectual properties

The aspectual behaviour of deadjectival verbs in -*ec-e* matches what Kearns (2007) predicts for adjectival bases, with both cases where the comparative version seems to be at play and cases where the positive degree version seems to be involved. From this perspective, and unlike what we haver already seen in the

case of denominal bases, there are no significant differences between the aspectual options in -*a* verbs and those in -*ec-e* verbs.

Most verbs in -*ec-e* allow an atelic reading where the *for*-phrase measures the progression of the change of state, and which can be built over the comparative version, through coercion.

(18) a. El ritmo de vacunación se enlentenció paulatinamente durante dos meses.
            the rythm of vaccination SE in-slow-ec-ed gradually for two months
        'The vaccination rythm got slower and slower for two months'
      b. Juan encaneció poco a poco durante un año.
            Juan in-grey.haired-ec-ed little by little for one year
        'Juan's hair got greyer and greyer for one year'
      c. El cielo se oscureció poco a poco durante una hora.
            the sky SE dark-ec-ed little by little for one hour
        'The sky got darker and darker for one hour'

As expected, these verbs allow also telic readings, specifically achievement readings where the for-phrase measures the result state.

(19) a. El proceso se enlenteció de golpe durante dos meses.
            The process SE in-slow-ec-ed suddenly for two months
        'The process got slower and stayed slow for two months'
      b. Juan encaneció por el trauma durante dos meses.
            Juan in-grey.haired-ec-ed by the trauma for two months
        'Juan got grey hair for two months due to trauma'
      c. El cielo se oscureció durante dos horas debido al eclipse.
            the sky SE dark-ec-ed for two hours due to.the eclipse
        'The sky got dark for two hours due to the eclipse'

As predicted both by Kearns' (2007) and Hay et al. (1999), the adjectives that have closed scales and reference values that are not flexible reject the atelic interpretations. This includes, among others, the following verbs.

(20) a. El tejido se humedeció durante una hora.
            the tissue SE wet-ec-ed for one hour
        'The tissue got wet and stayed wet for one hour'
      b. Juan enmudeció durante una hora.
            Juan in-mute-ec-ed for one hour
        'Juan got mute and stayed mute for one hour'
      c. Pedro palideció durante una hora.
            Pedro pale-ec-ed for one hour
        'Pedro got pale and stayed pale for one hour'
      d. Carlos se enronqueció durante una hora.
            Carlos SE in-hoarse-ec-ed for one hour
        'Carlos got hoarse and stayed hoarse for one hour'

6.3.3 Analysis

Let us now present our analysis. Our proposal is that *-ec-e* incorporates a Path in the material spelled out by it, and that in principle *-ec-e* can lexicalise not only the Init, Proc and Path heads, but also a Res head, as represented in (21).

(21)

```
            InitP
           /    \
        Init    ProcP                      <--- -ec-
              /    \
            DP     Proc
                  /    \
               Proc    PathP
                      /    \
                   Path    ResP
                          /    \
                        DP     Res
                              /    \
                           Res    DegP              <--- palid-
                                 /    \
                               Deg    ...KP
                                     /    \
                                    K    √1852
```
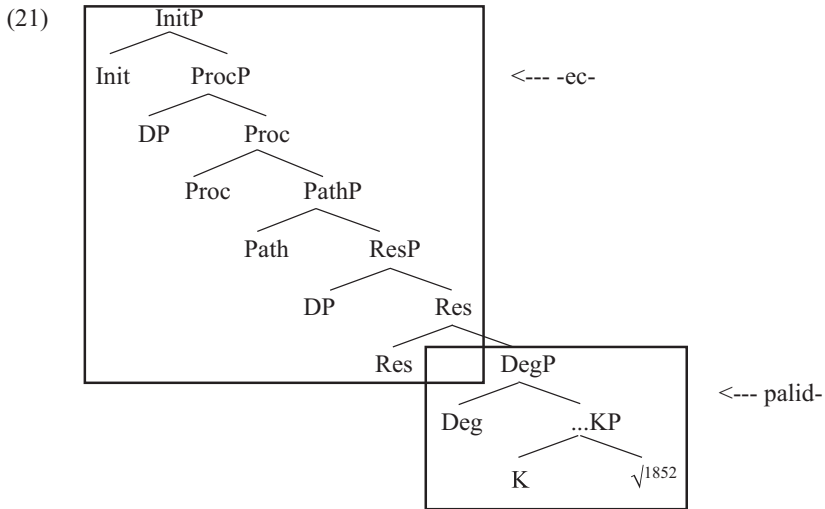
This, of course, would by default produce a prefix-less parasynthetic formation, given that the only relational material that the adjectival base leaves without spell out is spelled out as part of the verbaliser. In the parasynthetic formations, I propose, the ResP layer is substituted by a PredP layer. The verbaliser, by underassociation, is restricted to the Init, Proc and Path layers, and the Pred head is matched by the prefix, which here lacks lexical content.

(22)

```
            InitP
           /    \
        Init    ProcP                      <--- -ec-
              /    \
            DP     Proc
                  /    \
               Proc    PathP
                      /    \
                   Path    PredP
                          /    \
                        DP     Pred
                              /    \
                           Pred    DegP              <--- palid-
                           em-    /    \
                               Deg    ...KP
                                     /    \
                                    K    √1852
```
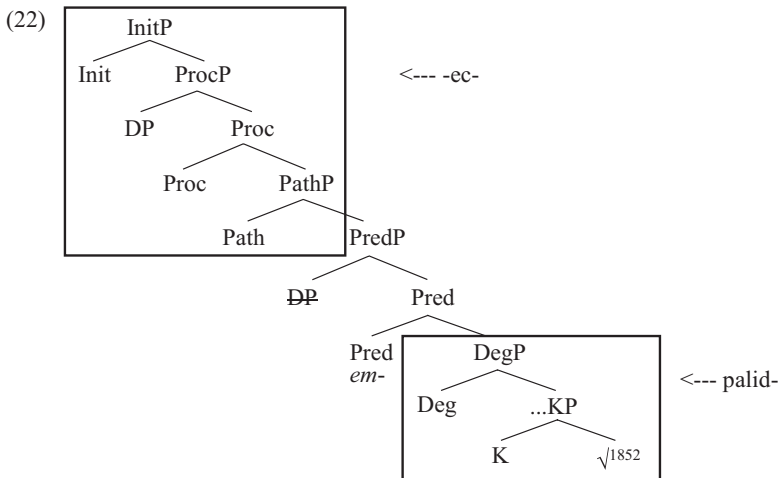
The crucial property for us is that, as far as the syntactic and semantic properties of the verbalisation go, the two configurations are identical because both ResP and PredP are stative relational heads, manifestation of iotta phrases (Wood & Marantz 2017, see §1.2.3) that are syntactically identical: in the case of (21), the result state is expressed through a designated Res head that appears in the complement of Proc; in (22), there is a PredP layer, also headed by a relational element with stative meaning, that configurationally gets interpreted as a result state. In both cases, the relevant head, Res/Pred, defines a specifier that corresponds to the subject of the stative predicate in the complement position, which in both cases is the DegP associated to the adjectival head. That defines, through the syntactic configuration in both cases, the internal argument of the verb as the subject of the property used to measure the change of state.

This explains that with this suffix, with or without parasynthesis, the properties of the change of state are identical: crucially, and in contrast with verbs in -*a*, here we have a suffix that can spell out a Res head, and that Res head makes the same role than a PredP layer with adjectival bases. What differentiates these two heads is their spell out: the relational head that introduces the result is part of the verbal structure in the non-parasynthetic case and part of the relational structure in the parasynthetic case. Consequently, the spell out changes in parallel, with the suffix materialising the result state layer in the first case and the prefix, in the second; but this is all that counts as different, because the PredP is configurationally interpreted as a result as a complement to Proc.

6.4 Denominal formations

The first remarkable property of denominal formations in -*ec-e* is that there are only a few of them, in particular when we compare them to deadjectival formations (Pena 1980; Rifón 1997; RAE & ASALE 2009: §8.6, Lavale Ortiz 2013; Batiukova 2021). As we have said, within our analysis, -*ec-e* incorporates a path among the verbal heads that the suffix spells out. We propose that this is behind the explanation of why there are so few denominal formations with this suffix. The core idea is that this suffix defines a gradual change or process, through the presence of that PathP layer, and this gradual change does not combine well with bases that, like nouns, lack any scale associated to it. This explains automatically that there are very few change of state denominal formations in -*ec-e*, in contrast to the cases with -*a* that were examined in chapter 5.

To the best of my knowledge, the change of state verbs with nominal bases reduce to four formations in the case of this suffix. Out of them, two are usual formations (23) – I am not counting the verb *amanecer* 'to dawn', which can be etymologically related to a parasynthetic formation with the Latin adverb *mane* 'early, morning hours', but it might be included if one takes the base to be an allomorphic form for *mañana* 'morning'.

(23)   noche 'night' > a-noch-ec-e 'to get dark, to dusk', tarde 'evening' > a-tard-ec-e 'to dusk'

Beyond this, I have documented in dictionaries only two more denominal formations in the group, both with the prefix *en-*.

(24)   bosque 'forest' > em-bosqu-ec-e 'to become a forest', puta 'whore' > em-put-ec-e 'to become a whore'

Interestingly, the only other class of denominal formations that one documents with this verbaliser is verbs of transfer or locatum (25), which might be divided in two groups: a good number of formations where the meaning of 'getting N' involves entities that emerge, flow or sprout from the subject (25a) and a set of more varied interpretations where the entity that one gets does not need to grow from the subject (25b).

(25)   a.   barba 'beard' > em-barb-ec-e 'to get a beard', callo 'callus' > en-call-ec-e 'to get callus', carne 'flesh' > en-carn-ec-e 'to put on flesh', diente 'tooth' > en-dent-ec-e 'to get teeth', pluma 'feather' > em-plum-ec-e 'to get feathers', tallo 'stem, stalk' > en-tall-ec-e 'to sprout'
       b.   fiebre 'fever' > en-febr-ec-e 'to get a fever', furia 'fury' > en-fur-ec-e 'to get fury', moho 'mould' > en-moh-ec-e 'to get mould', mugre 'filth' > en-mugr-ec-e 'to get filth', orgullo 'pride' > en-orgull-ec-e 'to fill with pride', pavor 'fear' > em-pavor-ec-e 'to fill with fear', sombra 'shadow' > en-sombr-ec-e 'to fill with shadows', tiniebla 'darkness' > en-tenebr-ec-e 'to fill with darkness'

I propose that the verb *reverdecer* 'to get green again' should be treated like a transference denominal verb meaning 'to get green colour again'. Therefore, I propose for this verb that the base is the noun *verde* 'green', not the homophonous adjective, which explains why the prefix *re-* has the iterative meaning that is only attested with nominal bases.

Prefix-less denominal formations are not often found, one can find verbs glossed as 'to get N' (26a) next to verbs involving a more standard notion of transference (26b).

(26)   a.   flor 'flower' > flor-ec-e 'to get flowers', hierba 'grass' > herb-ec-e 'to get grass', hoja 'leaf' > hoj-ec-e 'to get leaves', pimpollo 'rosebud' > pimpoll-ec-e 'to get rosebuds'
       b.   emplaste 'poultice' > emplast-ec-er 'to put poultice somewhere', favor 'favour' > favor-ec-e 'to give an advantage'

What is crucial for the purposes of my analysis is that the only types of denominal formations with *ec-e* beyond the few cases of change of state verb denote types of eventualities that crucially involve the notion of path of motion: the verbs either mean to transfer something to some entity through some path, or to obtain something that grows out of the subject, defining a path of motion. As a stem grows from a plant or a tooth grows out of the jaw of an animal, these objects

follow a path of motion that define the event. Remarkably, there were no verbs with this 'growing out of' meaning with -*a*, in parasynthetic or in non-parasynthetic forms.

6.4.1 Change of state formations

My proposal is that (27) corresponds to the structure of the change of state formation with -*ec*-. I am proposing a structure that is perfectly parallel to the one for adjectival bases, with the minimal change that DegP and ScaleP are not present.

(27)

InitP
├─ Init
└─ ProcP   <--- -ec-
   ├─ DP
   └─ Proc
      ├─ Proc
      └─ PathP
         ├─ Path
         └─ PredP
            ├─ ~~DP~~
            └─ Pred
               ├─ Pred
               │   *a-/ em-*
               └─ NP
                  ├─ N
                  └─ √1858
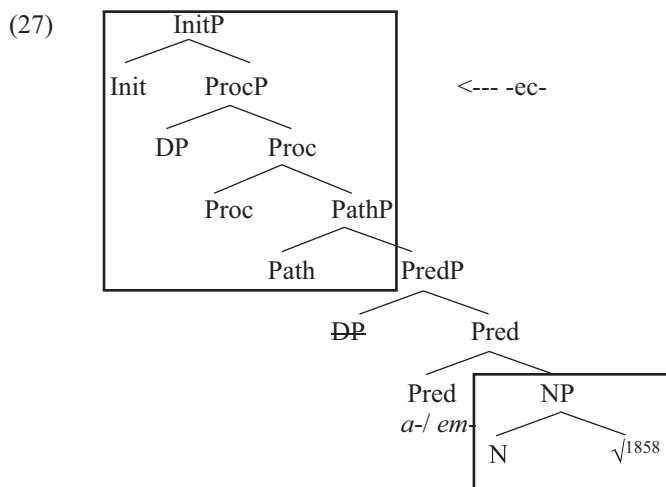
This structure deserves two comments that are related. The first one has already been advanced in §6.2: the aspectual properties of denominal verbs of change of state with this suffix suggest that the measure of change is not restricted to the sharp yes/no boundary set by the descriptive properties of a noun. Hence, I propose the presence of a path of motion that gives extension to the process whereby the internal argument acquires the properties defined by the base.

However, in principle the noun does not provide a scale that can be taken to match the path of change defined by PathP within the verbal structure. For this reason, I propose, the verbalisation builds its meaning from the formal quale of the noun in the base, through a significant and prototypical property of the entity that is used to measure the change itself. In the case of *noche* 'night' and *tarde* 'evening', that property is darkness. I propose that in a structure like (27), the Path matches in this case the 'dark' property of the noun in the base, obtained to differentiate the time period that is called 'night' or 'evening' from others like 'morning' or 'day'. In consequence, the verb *anochecer* can be used metaphorically to mean *oscurecer* 'to darken': given that the noun itself does not have a scale and

that the suffix incorporates a Path, the scale interpretation is satisfied only through the properties associated to the noun in its formal quale.

(28)   Anocheció poco a poco.
       a-night-ec-ed little by little
       'It got darker and darker'

In conclusion, it seems possible to speculate that the very low number of denominal change of state verbs with *-ec-e* follows from the suffix incorporating a PathP that finds no match on a scale when the base is nominal; the few cases that are attested must use the qualities related to a prototypical view of the base to postulate a gradable property that can be measured through change on a path.

A second comment that (27) deserves has to do with the type of prefix used. As we saw in §6.3, deadjectival verbs with *-ec-e* never contain the prefix *a-*, and overwhelmingly the prefix used is *en-*, with a handful of *re-* cases. The exceptionality of the denominal change of state formations comes reinforced by the fact that the most frequent verbs in fact have *a-*, such as *anochecer*, *atardecer* and – if segmented – *amanecer*.

This triggers the question of what actually makes *en-* the default prefix in the case of parasynthesis with *ec-e*; remember that with verbs in *-a*, the prefixes *a-* and *en-* were both productive. My proposal is that this is another effect of the presence of a path head in the structure of this verbal suffix, only that in this time indirect. As can be seen in (27) and (22) previously, in my analysis the cases where the prefix will be present (as a PredP) are always instances where PredP is introduced as a complement to Path; remember that verbalisations using the theme vowel *-a* never contained PathP in my analysis. My proposal is that *en-* is the default spell out of Pred in the context where it is selected by Path, as in (46).

(29)   Pred ---> en-/[Path [Pred _____ . . .

The cases where the prefix involved is *re-* or, even more rarely, *a-* should be taken as historical accidents (see Serrano Dolader 1995, in fact, for the case of the *a-* verbs) that are preserved in contemporary Spanish as idiosyncratic cases only to the extent that the verbs are frequent enough to escape the general rule in (29). I propose that the exceptional manifestation of the prefix is due to a spell out rule more specific than (29) which takes into account the exponent used for the base.

(30)   a.   Pred – > a-/[Pred _____ [noch-]]
       b.   Pred – > re-/[Pred _____ [crud-]]

6.4.2 Transfer verbs, parasynthetic

Most denominal verbs in *-ec-e* are, however, transfer verbs, as was seen in the list in (40) previously. Interestingly, in contrast to verbs in *-a*, the mass or count nature of the base is not decisive for them to allow or reject an atelic interpretation. Some verbs built from count nouns easily get an atelic reading (31).

(31) a. El niño en-dent-ec-i-ó durante las siguientes semanas.
          the child in-tooth-ec-ThV-ed for the following weeks
      'The child got one tooth after the other during the following weeks'
      b. La planta en-tall-ec-i-ó durante las siguientes semanas.
          the plant in-stem-ec-ThV-ed for the following weeks
      'The plant sprouted little by little during the following weeks'

    This is unexpected unless, as I propose, the suffix incorporates a PathP that overwrites the bounded or unbounded interpretation that the base imposes. (31) corresponds to count bounded bases where PathP is unbounded and therefore imposes a reading where the transfer must necessarily happen through a period of time (32).

(32) [Proc   [Path$^{\text{unbounded}}$ ... [N$^{\text{bounded}}$]]]

    Note that even if the concept expressed by the nominal base in (31a) tends to appear in collectivities given our world knowledge, nothing in its linguistic manifestation as a verbal base marks it as a plural or a mass. It is true that when a baby gets teeth, those teeth appear in pluralities; the same applies to the callus in the skin of someone, the feathers of a bird or the sprouts of a plant. My claim is however that this plurality interpretation is forced by the verbaliser, which imposes a reading of unbounded transfer with these verbs which coerces the interpretation that there must be more than one of the entities denoted by the base. With a count bounded noun, the unbounded transfer reading can only be obtained by iteration, that is, as an unbounded set of events where the entity gets one tooth, one feather, one callus, etc. Therefore, these verbs are built over nouns that, if count, must be able to appear in pluralities given our world knowledge, so that the iterative reading makes sense in describing a verbal event happening in the real world: they are entities that one obtains in groups.
    The structure that I propose for these verbs is represented in (33). Given that there is only one suffix involved in these formations, and that formally they behave like change of state formations where the relational material is restricted to the functional prepositional layer PredP/pP, I propose that they lack the PP layer and the KP structure that otherwise characterised denominal verbs in Chapter 5, §5.3.

(33)

```
              InitP
            /      \
        Init       ProcP              <--- -ec-
                 /       \
              DP          Proc
                        /      \
                    Proc        PathP
                              /        \
                          Path          pP
                                      /     \
                                    DP        p
                                            /     \
                                          p         NP       <--- mugr-
                                         en-       /    \
                                                 N      √1864
```
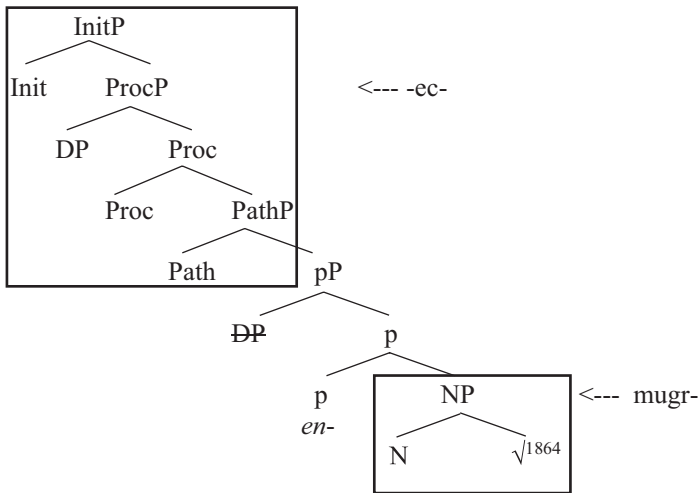
Furthermore, I propose that the interpretation of the base is imposed by the presence of a PathP that is compulsory in the case of verbalisations with this suffix. The idea is that this path must be compulsorily interpreted, and that matches a gradual change of state when the base is adjectival or when the qualia structure of the base noun is at play, as in the few formations that we examined in §6.4.3. In the absence of these interpretations, the path information that the suffix incorporates finds a natural semantic interpretation in a transfer verb where two entities that were otherwise separate come in contact with each other.

I propose that the path is what licenses the typical interpretation of these verbs where the base expresses an entity that grows out of the body of the subject. Even in cases where the nominal base is not a body part, a salient interpretation is that the base noun is obtained by some internal process that makes it grow or be produced by the internal argument. This is the case with *moho* 'mould', and even with *mugre* 'filth', where the most salient interpretation is that the filth is produced by the internal argument itself.

The interesting property of these interpretations where something grows out of the body is that in them the path is defined by the space that the entity that grows covers while coming out of the body. In a standard transfer verb, the path is interpreted as the distance that has to be covered to establish contact between the internal argument and the base, so that the entities start in a situation where they occupy separate positions. In the verbs with *-ec-e*, however, the typical interpretation is that the base noun and the internal argument start being in the same position from the beginning.

I would like to speculate that this, far from being a coincidence, also follows from the presence of PathP in the verbal structure. I would like to suggest that the

presence of Path as a verbal head in the complement of ProcP with *-ec-e* contrasts in term of its interpretation with a transfer structure where the path is inferred from the presence of lexical prepositional layers that define a specific locative relation between the base and the internal argument. Remember that we have proposed that locatum/transfer verbs in *-a* have a structure like (34) (§5.3.4). The crucial difference in the relational structure is the presence of a PP (and KP) layer which defines a particular spatial relation interpreted as the result state; remember that this lexical layer is justified by the range of prefixes that are documented in locatum and transfer structures.

(34)   ProcP

DP   Proc

  Proc   pP

    ~~DP~~   p

      p   PP

        P   KP

          K   NP

            N   √
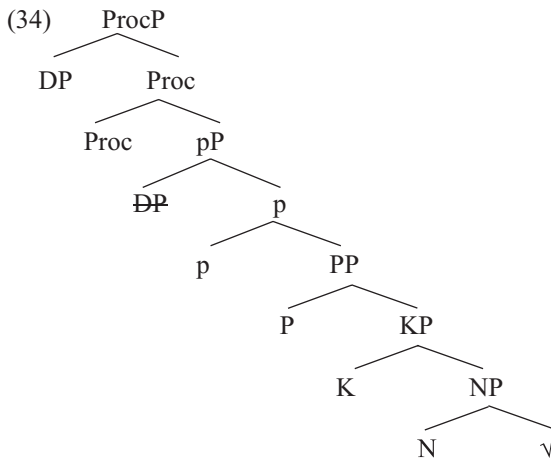
What this structure defines is that at the end of the process there must be a result state where the two entities hold a particular spatial relation. Thus, it logically follows that the state before the process cannot correspond to the same spatial configuration and hence there must be a trajectory that has been followed as a path to explain the change of place. In our structure (33) there is no lexical PP layer, so the end result does not specify any type of locative relation, and this allows the internal argument and the base to be already in contact before the process. The only spatial ingredient that (33) imposes in its interpretation – when the verb is interpreted as transfer – is that there must be some kind of path that is defined by the relation between the internal argument and the base, so that the process that relates them is compatible with a path. This path can then be defined as the trajectory that a body part that grows out of the internal argument follows here, because in (33) there is no requisite that the starting point is that the two entities are not in contact, but there cannot be equivalent parasynthetic verbs in *-a* with the structure in (34) that allow this reading.

6.4.3 *Prefix-less verbs*

There is very little to add for the set of denominal verbs in *-ec-e* which lack a prefix, which is restricted to the small number of verbs repeated here for convenience as (35).

(35) a.   flor 'flower' > flor-ec-e 'to get flowers', hierba 'grass' > herb-ec-e 'to get grass', hoja 'leaf' > hoj-ec-e 'to get leaves', pimpollo 'rosebud' > pimpoll-ec-e 'to get rosebuds'
    b.   favor 'favour' > favor-ec-e 'to give an advantage'

In parallel to prefix-less formations in *-a* and the pairs with and without prefix in *-ec-e*, I propose the structure in (36): note that as in the case of deadjectival verbs, I propose that the pP layer that would emerge as a prefix is substituted here by a ResP layer spelled out as part of the verbaliser.

(36)

```
      ProcP
     /
   DP    Proc
       /
    Proc   PathP          <--- -ec-
          /
       Path    ResP
             /
           DP̶    Res
                /
             R̶e̶s̶   NP        <--- flor-
                   /
                 N    √1869
```
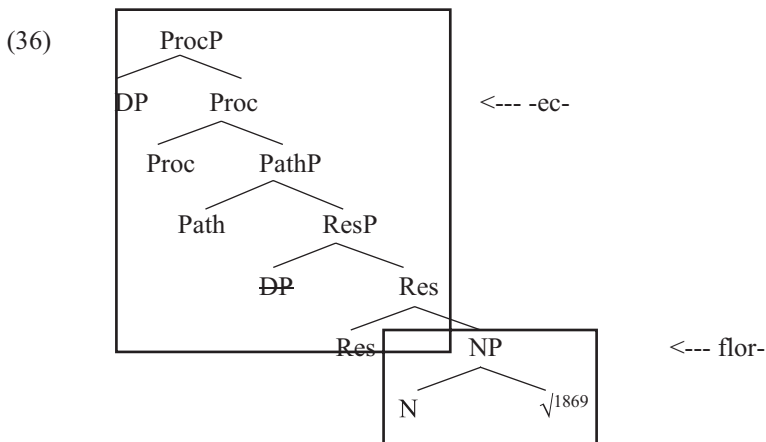
Beyond this, nothing needs to be added to the previous discussion: there is no relational structure, so the interpretation of the verb depends on the conceptual semantics of the base, which in this case is surprisingly homogeneous, denoting parts of the body of plants in almost each single case and with the only exception of *favor* 'favour, advantage'. As in the case of some parasynthetic formations, the bases that are count tend to appear in pluralities in the real world, because the unbounded verbal path requires iteration when applied to the event of getting the count individual objects.

6.5 Does *-ec-* appear in non derived verbs?

So far so good: the properties of verbalisations in *-ec-e* are extremely coherent, and we have seen in §6.2, §6.3 and §6.4 evidence that *-ec-e* contains a path whose main role is to define an extension to change that is independent of the one that

would follow from the boundedness properties of the base, or the prepositional structure, which is impoverished in all cases.

However, we want to acknowledge an uncomfortable complication of our analysis: given inflectional patterns, it could be argued that there are cases of *-ec-e* in non-derived verbs. However, the verbs that are not derived do not display the same aspectual behaviour as the derived verbs that we have studied in the previous sections (Kauffeld 2007). This produces a problem: either these verbs do not contain *-ec-e*, or the information associated to *-ec-e* in these verbs is much vaguer than one would want.

The cases that are candidates to contain the suffix *-ec-e* without being derived from nouns or adjectives can be illustrated with the verb *crecer* 'to grow'. As can be seen later (37), the subjunctive present form of this verb and the 1sg indicative present form display an irregularity that matches the one that *-ec-e* has in cases where it is clearly present, that is, with deadjectival or denominal verbs (38).

(37) a. crezc-a   (*crez-a)
          grow-sbj
      b. crezc-o   (*crez-o)
          grow-1sg
(38) a. en-moh-ezc-a   (*en-moh-ez-a)
          in-mold-EZC-sbj
      b. humed-ezc-o   (*humed-ez-o)
          wet-EZC-1sg

The number of verbs not coming from nominal or adjectival bases that conjugate like (37) is not insignificant, and some of the most frequent verbs in Spanish follow this pattern. The pattern includes accomplishments (39a), activities (39b), achievements (39c) and states (39d).

(39) a. acaecer 'to happen', acontecer 'to happen', guarnecer 'to decorate, to garnish', obedecer 'to obbey',
      b. crecer 'to grow', estremecer 'to shudder, to shake', guarecer 'to protect', resplandecer 'to shine',
      c. aparecer 'to appear', desvanecer 'to vanish', fallecer 'to die', fenecer 'to die', nacer   'to be born', ofrecer 'to offer'
      d. apetecer 'to fancy', carecer 'to lack', complacer 'to satisfy', padecer 'to suffer', parecer 'to seem', merecer 'to deserve', permanecer 'to remain', pertenecer 'to belong', prevalecer 'to prevail'

In addition to this, the verbs *conocer* 'to know', *nacer* 'to be born', *pacer* 'to graze', *placer* 'to please' and *yacer* 'to lie' also follows the pattern, even though the ending is not *-ec-e*: *conozco* 'I know'/*nazco* 'I am born' (*conozo, *nazo*), *conozca* 'I would know'/*nazca* 'I would be born' (*conoza, *naza*); *yacer* allows other irregular solutions in addition to the relevant one: *yazco/yazgo*. In order to unify these cases with *-ec-*, one would have to postulate a root ending in a vowel

and a process of vowel deletion that removes /e/ from the suffix (e.g., *conoece > *conoce*). This solution that involves segmenting *-ec-* in contexts where only the *-c-* is visible is quite problematic, however, when one notices that all verbs ending in *-ducir* (*conducir* 'to drive', *producir* 'to produce', *reducir* 'to reduce', etc.) also follow the same pattern: *conduzco* 'I drive', not *conduzo. In such cases, in order to identify *-ec-* in the verbs one only has the irregularity pattern, as even the conjugation class of the resulting verbs is different: verbs that are clearly derived with *-ec-* belong to the second conjugation, with *-e* as a Theme Vowel, but these verbs belong to the third conjugation, with *-i*.

The reader probably has already noticed what the problem is if the verbs in (37) and (39) contain *-ec-e*: if we apply the irregularity criterion, the range of verbs that are produced with *-ec-e* includes all aspectual classes, including stative verbs which in principle should lack Proc, and therefore also Path. Thus, if we extend the lexical entry of *-ec-e* in verbalisations to these non-derived cases, the material that the suffix would have to be related to should be extremely flexible, ranging from cases with Proc, Path and Res as in *guarnecer* 'to decorate' to cases where the suffix should be restricted to InitP as in *apetecer* 'to fancy'. The problem, in a nutshell, is that once we move away from verbs derived from existing bases the verbs that contain *-ec-e* do not form a natural class in terms of their grammatical behaviour, plain and simple. This complicates identifying one lexical entry that unifies the derived and the non derived cases.

Let me explicitly say that I admit that the heterogeneity of the verbs that seem to have *-ec-e* given the irregularity pattern is unexpected in a Neoconstructionist view of morphology. Because the word is not a unit in this system, in principle the irregularity has to be associated to a single exponent, and this would mean that *-ec-* is the same unit in all cases where the irregularity works in the same way.

So what are the possible interpretations or solutions of this pattern of data? One first possibility would be to apply the Superset Principle and Underassociation in a radical way in an attempt to explain the extreme variability in the uses of *-ec-*. As presented in §1.3.4, the Superset Principle allows a lexical entry to be associated to a smaller structure. Given this, if (40) is the lexical entry of *-ec-*, we would have to play with underassociation to derive the four classes.

(40)   [Init [Proc [Path [Res]]]]

However, it is unclear to me how one could obtain the four aspectual classes from (40) just by the Superset Principle: if we allow our system to be flexible enough that the structure in (40) can be manipulated in a way compatible with the four aspectual classes, we should also get the four aspectual classes in derived verbs with *-ec-* coming from adjectival and nominal bases. However, this is not what one finds. Importantly, stative verbs are never the result of a verbalisation from a noun or an adjective in *-ec-*, independently of whether there is parasynthesis or not. Therefore, this solution would overgenerate and make us lose our predictions with respect to the effects that the presence of path has on the structure.

A second option would be to propose that *-ec-* is not the spell out of a verbaliser, but the spell out of an acategorial element that can be adjoined to other heads (spelled out as zero). This would match Lowenstamm's (2015) general view that derivational affixes are acategorial elements – roots – which get adjoined to categorising heads.

This approach would attempt to solve the problem by proposing that *-ec-* is never directly associated to a specific verbal head; it might attach to Init, Proc or Res; importantly, it should also be able to attach to Path in the contexts where there is a nominal or adjectival base. In this account, Path is necessary in derived verbs for some independent reason to be clarified, but *-ec-* does not include it as part of its spell out: it is just an element that adjoins freely to other heads.

However, the challenge of this approach is quite obvious: if *-ec-* is an acategorial element we should expect it to attach also to nominal and adjectival categorisers, resulting in formations where *-ec-* builds adjectives or nouns. However, this does not happen, and *-ec-* is restricted to verbal formations.

The solution that I propose for verbs like *crecer* 'to grow' is not elegant, but I think respects more the hardcore facts than the alternative approaches that I just sketched. I propose that the irregularity displayed by verbs ending en *-ece* is triggered by a phonological context, and it is not linked to a specific lexical item like the verbaliser *-ec-*. Thus, being irregular like -ec-e does not mean that a verb contains the verbaliser *-ec-e*, but only that it ends in a phonological sequence that produces the context that triggers the irregularity. Thus, only derived verbs can contain *-ec-e* and underived verbs like *crecer* 'grow' do not contain it, even if historically they might come from the same source.

In order to support my view, my starting point is the observation that in the non-derived cases segmenting the *-ec-* element leaves in many cases a morphological constituent that is unlikely to correspond to a root. In (41), the segmented object is not a root in the sense that it is not a possible base to derive adjectives or nouns.

(41)   *aca-ec-e 'to happen', *acont-ec-e 'to happen', *apar-ec-e 'to appear', *apet-ec-e 'to fancy', *car-ec-e 'to lack', *cono-c-e 'to know', *cr-ec-e 'to grow', *desvan-ec-e 'to vanish', *estrem-ec-e 'to shudder', *fen-ec-e 'to die', *guarn-ec-e 'to garnish', *mer-ec-e 'to deserve', *na-c-e 'to be born', *ofr-ec-e 'to offer', *pad-ec-e 'to suffer', *par-ec-e 'to seem', *perten-ec-e 'to belong', *perman-ec-e 'to remain', *preval-ec-e 'to prevail'

In these cases, at best, one can find a nominalisation without *-ec-* but where the base must combine with the theme vowel, showing that the base is only usable as a verb (*apar-ec-e* 'to appear' > *apar-i-ción* 'appearance', *perten-ec-e* 'to belong' > *perten-e-ncia* 'belonging'), or the base might be related to nominal or adjectival formations which would be built with unproductive suffixes (*apet-ec-e* 'fancy' > *apetito* 'appetite'; *mer-ec-e* 'deserve' > *mér-ito* 'merit'). Most of the alleged segmentations in (41) would leave behind elements that would only be claimed to be morphological units because they are the remains of segmenting *-ec-*: *cono-, cr-, aca-, guarn-, na-, ofr-* . . .

My claim is simple: at least in the cases of (41) the suffix *-ec-* should not be segmented, and therefore there is no unit *-ec-* that one expects to be associated to a particular set of verbal heads. The units, the relevant exponents corresponding to the verb, are items like *crec-*, *acaec-*, *guarnec-* or *ofrec-*, which of course diachronically had the relevant suffix but where the contemporary speaker has stopped identifying it as a segmentable unit.

Accepting this fact means accepting that the relevant irregularity presented in (37)-(38) is not linked to one single lexical unit in Spanish: it will not just be a verbaliser exponent *-ec-* that undergoes that particular pattern of irregularity, but one would also have to admit that exponents such as *crec-*, *apetec-*, *ofrec-*, *conoc-*, *nac-*, etc. follow the same type of irregularity.

I propose that the irregularity is triggered by a specific phonological context: verbs ending in the sequence /Vθε/ when the consonant is followed by a non-palatal consonant /a/ or /o/. This context includes any verb derived with the verbaliser *-ec-e*, which satisfies the context, but also verbs whose root ends in the same sequence, like *crecer*.

This approach has two welcome consequences. First, the existence of verbs like *conocer* 'to know' or *nacer* 'to be born', that follow the same irregularity pattern, can be accounted for without extra phonological operations. In them, claiming that *-ec-e* is present forces us to stipulate an *-ec-* form where the vowel /e/ disappears because it is attached to roots ending in vowels (*cono-* and *na-*). Second, this approach explains that in colloquial language verbs ending in /Vθe/ tend to adopt the same irregularity even in cases where the historical origin of the verb does not include Latin *-sc-* and therefore normative grammar does not admit that they are irregular. The verbs *mecer* 'to rock' and *cocer* 'to boil' are the only verbs, next to *hacer* 'to do', which satisfy the phonological context (/Vθe/) and in normative grammar should be treated as regular (42).

(42)   a. mez-o   (normative Spanish)
          rock-1sg
       b. cuez-o   (normative Spanish)
          boil-1sg

However, there are plenty of speakers that treat them also as irregulars in the same way as the other verbs with the same ending: *mezco* and *cuezco* are attested forms, criticised in normative grammars but easy to document (see RAE & ASALE 2005). I believe that the verb *hacer* is protected from this type of irregularity (**hazco*, unattested as far as I know) simply because it has its own more specific irregularity and the verb's frequency prevents speakers from assimilating it to this other class of irregulars.

With this, then, I finish my analysis of verbs in *-ec-e*.

6.6 Conclusions

Thus, to close this chapter: I propose that the *-ec-* affix that is present in verbalisations is not, despite its historical origin, identical to the element that triggers

a /k/ irregularity in many other verbs. The suffix *-ec-* is present with nominal or adjectival bases and is characterised by the property that it spells out a verbal PathP layer which, as we will see, no other verbaliser contains. There is a number of other verbs that historically might have shared the antecedent of this affix, but that currently are treated as undecomposable by speakers.

Once we leave to the side the irregularity and concentrate on the clearly derived cases, the suffix *-ec-* is quite homogeneous in its behaviour. I have argued that it contains a PathP layer as a verbaliser for three reasons: (i) the aspectual behaviour of the formations obtained with it, particularly with nominal bases; (ii) the preference for adjectival bases, where the scale of the adjective allows identification with that Path to measure the change, and (iii) the preference, in denominal cases, for readings involving transference or even growing out, where I have proposed that the path imposes this type of reading.

In terms of spell out, *-ec-* does not spell out any part of the relational structure, but spelling out Res it does allow for an alternation between a structure with Res and a structure where PredP/pP occupies the place of Res and is configurationally equivalent to it. This produces a number of cases where speakers allow a parasynthetic or prefix-less version of the same verb without any substantial change in meaning or grammatical behaviour: the two structures are equivalent, and only differ on whether *-ec-* spells out Res or a prefix is necessary to spell out p/Pred.

Our approach predicts, nonetheless, that some verbal suffixes should be able to spell out (part of) relational structure. This is indeed the case with the three next suffixes that we will examine; we will start with *-ific-a* in the next chapter.

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7 Verbalisations in *-ificar*

7.1 Overview of the chapter

This chapter discusses formations with *-ific-*. As we will see, these verbalisations are characterised with a remarkably stable set of properties: both as denominal and deadjectival formations, they express changes of state or change of location that, in general, can be expressed both causatively and inchoatively.

(1) a.   acid-ific-a
         acid-ify-ThV, 'to make something acid'
    b.   clar-ific-a
         clear-ify-ThV, 'to make something clear'
    c.   intens-ific-a
         intense-ify-ThV, 'to make something intense'
(2) a.   cos-ific-a
         thing-ify-ThV, 'to make something a thing, to objectify'
    b.   escen-ific-a
         scene-ify-ThV, 'to put something on the scene'
    c.   gas-ific-a
         gas-ify-ThV, 'to put gas to something'

From a morphological perspective, the most relevant property of this suffix is that parasynthesis is impossible with it, even though the semantic and syntactic behaviour of the verbalisations show that they have the full relational structure of parasynthetic formations. Our analysis, then, will be based on the size of the suffixal exponent: the absence of parasynthetic verbs follows from the exponent *-ific-* spelling out a large portion of material that includes the full relational structure that introduces the base and which is spelled out as a prefix in the case of parasynthetic verbs.

(3)

ProcP   <--- -ific-

```
                ProcP
              /       \
           DP          Proc
                      /    \
                  Proc      pP
                           /   \
                         DP      p
                               /   \
                              p     PP
                                   /   \
                                  P     KP
                                       /   \
                                      K     NP
                                           /    \
                                          N    √^{1929}
```

-

<-- clas-
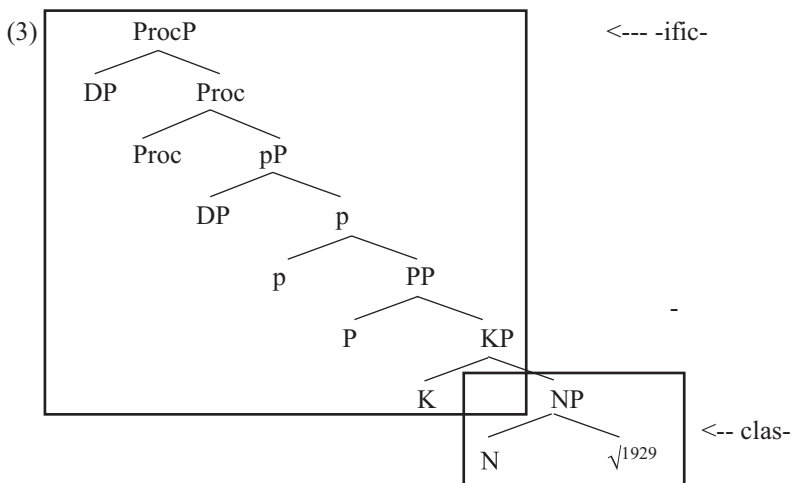
The main difference with respect to verbs with a zero verbaliser and *-a* or with *-ec-* is that these suffixes cannot spell out any part of the relational structure. Absence of parasynthesis with these groups of verbs, then, means that the relational structure is missing or truncated, at a minimum leaving outside the functional prepositional layer PredP/pP, which reflects on a different syntactic and semantic behaviour.

In contrast, *-ific-* never shows up in parasynthesis, irrespective of whether the base is nominal or adjectival. However, the behaviour of this group of verbs produces a systematic meaning and structure where a result state is reached that places the internal argument in a particular situation, as acquiring some properties or as getting in contact with another entity. My proposal is that this behaviour is caused by the syntactic presence of full relational structure, as in (3) previously; the relational structure, however, is spelled out as part of the suffix, so there is no space for a prefix to be introduced. This automatically explains why this suffix is never parasynthetic.

As can be seen in (3), my proposal is that this relational structure is the one corresponding to a noun: pP, not PredP, appears, and there are no layers for scale or degree. I extend this to the cases where the bases are adjectival, which – I propose – with *-ific-* are projected as roots below nominal environments. This means that the change of state semantics is in fact with these verbs codified in a spatial way: the change of state of *clar-ificar* 'to clarify, to become clear' in fact is syntactically represented as 'to put something into the property *clear*', in the same way that *clas-ificar* 'to classify' means 'to put something into a *class*'. Our evidence for this type of analysis includes the different aspectual behaviour of change of state verbs in *-ific-* and the other classes of change of state, the types of adjectives selected and the absence of morphologically complex bases in this case.

The structure of this chapter is as follows. In §7.2 I will analyse the formations that, in principle, have an adjectival base; I will argue that in fact the base in these

formations is configurationally defined as a noun. In §7.3 I analyse denominal formations, and in §7.4 I present the conclusions.

7.2 Deadjectival verbalisations with *-ific-*

The suffix *-ific-* (Pena 1980; RAE & ASALE 2009: §8.19q-u, Krinková 2016, Bohrn 2017) is a Latinate form that was incorporated late to Spanish. Its patrimonial version underwent phonological changes which have blurred the segmentation between base and affixes (*muchiguar* 'to multiplicate' < Lat. *mult-ific-a-re*, cf. also *(a)testiguar* 'to witness' < *test-ific-a-re*), producing a sequence *-iguar* that is not productive in Modern Spanish and therefore we will not segment. As a cultism, it came with a number of verbs belonging to the vocabulary of law, religion and some sciences. In some cases, these verbs are formed in Latin from Latin bases without an equivalent in Spanish, or where the verb is not decomposed and the meaning relation between the base and the suffix is not preserved in Spanish: *molificar* 'to soften', from Latin *mollis* 'soft' (cf. Old Spanish *molle*), *ratificar* 'to ratify' (Lat. *ratus* 'confirmed'), saponificar 'to adopt the texture of soap' (Lat. *sapo* 'soap'), *testificar* 'to testify' (Lat. *testis* 'witness') or *verificar* 'to verify' (Lat. verus 'true'). In some of these cases, there is a change of state semantics, but not always: *testificar* is rather to act as a witness than to become a witness for something.

Let us start with the deadjectival verbalisations.

7.2.1 Main properties

A selection of deadjectival verbalisations in *-ific-* are represented in (5).

(5) ácido 'acid' > acid-ific-a 'to make something acid', amplio 'broad, spacious' > ampl-ific-a 'to amplify', auténtico 'authentic' > autent-ific-a 'to make authentic', cierto 'certain' > cert-ific-a 'to certify', claro 'clear' > clar-ific-a 'to clarify', crónico 'chronic' > cron-ific-a 'to make chronic', denso 'dense' > dens-ific-a 'to make dense', digno 'worthy' > dign-ific-a 'to make something become worthy', eléctrico 'electric' > electr-ific-a 'to electrify', falso 'false' > fals-ific-a 'to make something false', fuerte 'strong' > fort-ific-a 'to make something strong', grato 'pleasant' > grat-ific-a 'to give something pleasant to someone', húmedo 'humid' > humid-ific-a 'to humidify', intenso 'intense' > intens-ific-a 'to intensify', jurídico 'juridical' > jurid-ific-a 'to turn something into a juridical matter', justo 'just' > just-ific-a 'to show that something is fair', lento 'slow' > lent-ific-a 'to slow down', magno 'big' > magn-ific-a 'to make something big', recto 'straight' > rect-ific-a 'to rectify, to make something become correct and straight', simple 'simple' > simpl-ific-a 'to simplify', sólido 'solid' > solid-ific-a 'to solidify', uno 'one' > un-ific-a 'to unify', vivo 'alive' > viv-ific-a 'to make more alive'

As we can see, the group is very homogeneous. All the deadjectival formations denote changes of state, and regularly, the meaning of the verbs is a change of state where the property is applied to the internal argument.

(6)   a.   Juan intens-ific-ó la señal.
            Juan intense-ify-ed the signal
      'Juan made the signal become intense'
      b.   Juan rect-ific-ó el rumbo del barco.
            Juan straight-ify-ed the course of the boat
      'Juan made the course of the boat be straight'

There are two properties of the list in (5) that we want to highlight right away:

a)   There are no parasynthetic formations. The suffix -*ific*- never combines in a parasynthetic pattern, in contrast to verbs taking -*ø-a*, -*ec-e* or (as we will see) -*e-a* or -*iz-a*. However, and despite the absence of a prefix, their syntactic and semantic properties are surprisingly homogeneous.
b)   Among the possible adjectival bases for this suffix, we have for the first time relational adjectives (7). Note that the suffix that characterises the relational adjective (-*ico*) undergoes haplology in the verbalisation.

(7)   crón-ico 'chronic' > cron-ific-a 'to make chronic', eléctrico 'electric' > electr-ific-a 'to electrify', jurídico 'juridical' > jurid-ific-a 'to turn something into a juridical matter', público 'public' > publ-ific-a 'to make something public'

Remember that relational adjectives (see Bosque 1993; Demonte 1999; Fábregas 2007, 2020) are denominal formations with the morphological shape of an adjective that, however, are not gradable, do not associate to scales and do not denote qualities of an entity, but rather denote the relation between one kind of entity and another one. In (8), the relational adjective determines that the issue is related to law, but does not provide any descriptive quality that is related to a scale of values that can be graded.

(8)   un asunto (#muy) jurídico
      a   matter very juridical

This basically means that at least for these cases, the adjectival base – in sharp contrast to the deadjectival verbalisations analysed in Chapters 4, §4.3, and 6, §6.3 – cannot project ScaleP or DegP. Relational adjectives have been analysed as underlyingly nominal predicates in Spanish (see Bosque 2006; Fábregas 2007, 2020), in order to explain why their distribution contrasts so sharply from the one for qualifying adjectives. Fábregas (2020) proposed that relational adjectives should be analysed as NPs with a truncated relational structure which only projects KP (10a), in contrast to qualifying adjectives, which

have also a PP layer giving content to the relation expressed by K, and ScaleP to denote the set of values related to the property (9b). For a relational adjective derived from a noun, K corresponds to the 'adjectival' suffix that combines with the base, as in (9a).

(9) a.   KP   b.   ScaleP
         ╱ ╲   ╱   ╲
        K   NP   Scale   PP
       -ico   ╱   ╲
                                         P   KP
                                              ╱   ╲
                                             K   XP
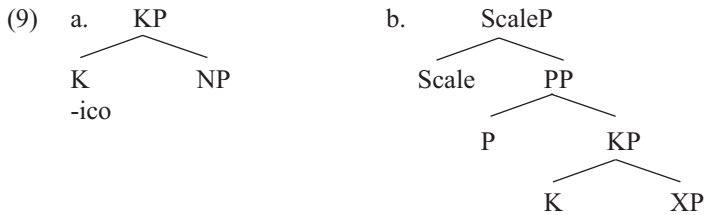
Interestingly, note that -*ific*- in fact triggers systematic haplology of the relational adjective suffix, which is systematically removed from the formations in (7): the morphological material that we can see in the deadjectival verbs for the base is the one associated to the NP layer, without what would correspond to K. In fact, note that in the list (5) none of the verbalisations contains a morphologically complex adjective, in strong contrast to verbs in -*ø-a* and -*ec-e*, where the base could be morphologically complex.

The question that we want to pose at this point is why would -*ific*- be a suffix that, unlike -*ø-a* and -*ec-e*, can combine with relational adjectives, which correspond precisely to structures that minimally consist on a nominal base and the projection that turns the individual into a relation. The answer that we want to give is that, even when the base seems to be adjectival, with this suffix the relational structure that has been projected previously the visible base is the one corresponding to nouns, p – P – K, even for the case of non-relational adjectives. Put simply, the change of state formations in (5) previously correspond to nominal structures where the adjectival base is configurationally a noun which defines a metaphorical region in space. The change of state semantics is actually a locative semantics with this suffix, meaning 'to make X arrive to the space defined by the property A'.

If correct, this difference in structure should reflect in the aspectual behaviour of the verbs. In the next section I will show that this is the case.

7.2.2 *Aspectual and argument structure properties*

In terms of the structures built with these verbalisations, their properties are remarkably homogeneous again. First of all, verbs with -*ific*- are always transitive; none of the deadjectival verbs in the list lacks a structure with a direct object. Secondly, all these verbs have a causative version. In contrast to prefix-less verbs with -*a*, none of these verbs express the state of exhibiting the property, and remember that -*ific*- does not have parasynthetic forms.

What makes these verbs special is their aspectual status, and in particular the absence of some interpretations that we have seen in Chapter 4 are available with

adjectival bases. While all verbs in the group are eventive, their aspectual properties are not the ones expected from deadjectival verbs.

Remember from Chapter 5, §5.2., that Kearns' (2007) prediction with respect to the aspectual behaviour of verbs whose base lacks Scale or Deg is that they should behave as achievements unless the base or the internal argument are masses or pluralities. This is what we find with -ific- verbs, even when the base seems to be adjectival. Consider as illustration the examples in (10) and (11): the *for*-phrase measures a result state, even in pragmatically odd scenarios like (11a), and the *in*-phrase has a delayed event reading.

(10) a.   #El medicamento lent-ific-ó el proceso durante un mes.
                 the medicine slow-ify-ed the process for one month
       'The medicine made the process be slow for one month' (not 'The medicine made the process be slower and slower for one month')
      b.   #El medicamento lent-ific-ó el proceso en un mes.
                 the medicine slow-ify-ed the process in one month
       'The medicine made the process be slow after one month'
(11) a.   #Juan ampl-ific-ó el sonido durante una hora.
                 Juan intense-ify-ed the sound for one hour
       'Juan made the sound intense and the sound stayed intense for one hour'
       (not 'Juan made the sound more and more intense for one hour')
      b.   #Juan ampl-ific-ó el sonido en una hora.
                 Juan intense-ify-ed the sound in one hour
       'Juan made the sound intense after one hour'

If we compare the interpretations obtained with those obtained in Chapter 5, §5.2.1., we can see that these are the same interpretations that one associates to change of state verbs built from noun bases and to locative or transfer verbs – again, when pluralities are controlled for.

(12) a.   El sol a-carton-ó la tela durante una hora.
                 the sun a-cardboard-ed the fabric for one hour
       'The sun made the fabric be rigid for one hour'
      b.   Marta en-terr-ó el tesoro durante una semana.
                 Marta in-earth-ed the treasure for one week
       'Marta put the treasure under ground for one week'
      c.   Marta en-cortin-ó la casa durante una hora.
                 Marta in-curtain-ed the house for one hour
       'Marta hanged curtains on the house for one hour'

This identical aspectual behaviour, unexpected if with -ific- the base is really an adjective with Scale and Deg, suggests that the syntactic structure underlying the apparently deadjectival verbs in (5) is the one for nouns, including PP. We propose that the configuration that corresponds to change of state deadjectival verbs

with *-ific-* is the same one that one obtains with denominal locative and transfer verbs, as in (13).

(13)

```
        ProcP                          <--- -ific-
        /    \
      DP      Proc
             /    \
          Proc     pP
                  /  \
                DP    p
                     /  \
                    p    PP
                        /  \
                       P    KP
                           /  \
                          K    XP        <-- ampl-
                              /  \
                             N   √1929
```
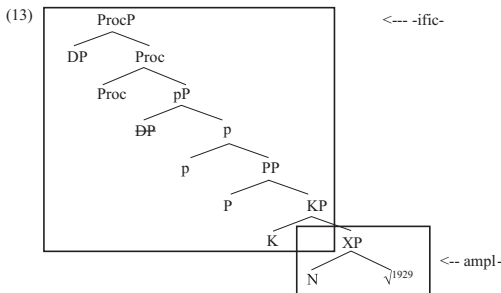
As in the case of locative change of state verbs, pP is configurationally inter-preted as a result state when introduced as the complement of Proc. Thus, the achievement reading is obtained for lack of a path structure that introduces length in the process: the process is minimally the change of state where one arrives to a particular location, one defined by the base property. Note that the presence of pP is what guarantees that the internal argument in Proc corresponds to the entity located in that region and that Init cannot select the base structure, blocking the presence of stative change of state verbs.

My reason for choosing the nominal PP structure over the one that we associ-ated to denominal change of state verbs in Chapter 5 (§5.2.1), consisting only of PredP, is that (13) allows me to explain the systematic haplology of the relational adjective suffix in the presence of *-ific-*, as we have seen in (7). In (13), the rela-tional structure including potentially PP and KP is spelled out by the suffix, so it cannot be taken by the base.

(14)

p	P	K	N	√
		-ico	*jurid-*	
	-ific-		*jurid-*	

The presence of *-ific-* is then predicted to eat up all the material except for the one corresponding to the nominal base, resulting in the disappearance of the *-ico* suffix of the base.

A second advantage of the structure in (13) is that it forces the adjecti-val base to be configurationally treated as a noun. This, I believe, explains certain ambiguities that deadjectival verbs in *-ific-* produce, where the base

semantically is interpreted more as a noun than as an adjective. Consider the verb in (15), which is morphologically derived from the adjective, with -*ico* haplology (16a). The adjective can produce a derived noun where -*ico* is kept (16b).

(15)   a.   electr-ific-a
              electr-ify-ThV
         b.   Juan electr-ific-ó la valla.
              Juan electr-ify-ed the fence
(16)   a.   eléctr-ico
              electr-ic
         b.   electr-ic-idad
              electr-ic-ity

The interesting fact about (15b) is that the natural interpretation of the verb in this context is 'to put electricity to something': in (15b) we interpret that a fence that had no electric current connected to it now has it, or in other words that the fence was made to be in contact with electricity, which is the meaning of a transfer/locatum verb. Thus, although related to a (relational) adjective, the verb can have the meaning of a denominal verb.

This type of ambiguity where the nominal reading of the base emerges even in the absence of the overt nominaliser (16b) that is generally associated to the base, and where the base can be interpreted as a property or as a noun that becomes transferred is precisely what we expect from the proposed structure: while the base is generally a root used in adjectival formations, the configuration is nominal and the semantics is locative. Another relevant example of this nominal interpretation is presented in (17) and (18).

(17)   a.   ident-ific-a
              indent-ify-ThV
         b.   Juan identificó al culpable.
              Juan identified DOM-the guilty
         'Juan identified (=assigned identity to) the culprit'
(18)   a.   idént-ico
              ident-ic
         b.   ident-idad
              ident-ity

Even though, again, the base is presumably the adjectival one through haplology of -*ico*, the meaning of the verb is 'to give or assign an identity to someone' rather than 'to make something identic'; to the best of our knowledge the first meaning is the only one that is available with this verb, and crucially it involves a nominal interpretation of the base despite it corresponding to a (truncated) adjective.

Consider also (19), which comes from the adjective *grato* 'pleasant' but again has a denominal transfer reading, 'to give something pleasant to someone'.

(19)   a.   grat-ific-a
              pleasant-ify-ThV
       b.   Luis gratificó a su empleado.
              Luis pleasant-ify-ed DOM his employee
       'Luis gave something pleasant/rewarded his employee'

In my account, these cases of bases morphologically corresponding to adjectives but where the interpretation is nominal is precisely what is expected.

7.3 Denominal verbalisations with *-ific-*

Let us now examine the verbalisations with bases that are clearly nominal (Rifón 1997; Serrano Dolader 1999; Lavale Ortiz 2007; Krinková 2016). The predominant type of verb built with *-ific-* in combination with nouns is locative verbs, as expected from the proposed structure. The examples in (20) can be glossed as locatum or transfer verbs, while those in (21) allow a locatio gloss.

(20)   bono 'bond' > bon-ific-a 'to give bonds to someone', calcio 'calcium' >
        calc-ific-a 'to give or put calcium', ejemplo 'example' > ejempl-ific-a 'to
        give an example of something', fruto 'fruit' > fruct-ific-a 'to give fruits',
        gas 'gas' > gas-ific-a 'to put gas somewhere', gloria 'glory' > glor-ific-a
        'to give glory to something', miel 'honey' > mel-ific-a 'to give honey or to
        put honey', muerte 'death' > mort-ific-a 'to mortify, to give torment', nido
        'nest' > nid-ific-a 'to put the nest somewhere', noticia 'news' > not-ific-a
        'to give news about something', tarifa 'rate, tariff' > tar-ific-a 'to apply
        a tariff', técnica 'technology' > tecn-ific-a 'to introduce technology into
        something'
(21)   clase 'class' > clas-ific-a 'to put something into classes', dosis 'dose' >
        dos-ific-a 'to distribute into doses', metro 'poetic meter' > metr-ific-a 'to
        put something in poetic meter', plan 'plan' > plan-ific-a 'to put something
        into plans', prosa 'prose' > pros-ific-a 'to put something in prose', verso
        'verse' > vers-ific-a 'to put something in verses', tipo 'type' > tip-ific-a 'to
        put things into a type or common norm'

Admittedly, there is a certain amount of metaphorical information associated to some of these cases: to fructify is not to produce edible fruits in the contemporary use, but to produce any type of nice result; to mortify is not to give death to someone, but to give torment. Among the locatio verbs, placing them in the entity denoted by the base might cause the internal argument also to change some of its properties, as it is the case with *versificar* 'to versify', where a text in prose becomes a poem by having metrical forms added to it.

The second group of denominal verbs with this suffix is pure change of state verbs, here represented in (22).

(22)   beato 'beatified person' > beat-ific-a 'to make a beatified person', cosa 'thing' > cos-ific-a 'to make someone an object', dios 'god' > de-ific-a 'to make someone a god', desierto 'desert' > desert-ific-a 'to desertify', escena 'scene' > escen-ific-a 'to turn something into a dramatised thing', leña 'wood' > lign-ific-a 'to give something the texture of wood', masa 'mass of people' > mas-ific-a 'to turn individuals into a mass of people', mito 'myth' > mit-ific-a 'to turn something into a myth', momia 'mummy' > mom-ific-a 'to mummify', persona 'character, persona' > person-ific-a 'personify, to turn into the character of someone else', piedra 'stone' > petr-ific-a 'to petrify, to turn into the properties of stones', vidrio 'glass' > vitr-ific-a 'to turn something into glass'

Again, a certain degree of demotivation in meaning appears in some formations: *personificar* 'to personify' involves the classical use of *persona* 'mask' as the disguise or mask that an actor would wear on stage in order to represent somebody else. The verb means, then, to become the persona or character of someone else. Sometimes the change involves not just acquiring some of the properties of the entity expressed by the base, but 'becoming N', as in the verbs *miel* 'honey' > *mel-ific-a* 'to turn into honey' and *pan* 'bread' > *pan-ific-a* 'to become bread'.

All these verbs, which constitute the three productive classes of verbs with nominal bases in -*ific*-, share the same set of properties. They are eventive verbs whose aspectual properties match those of locative verbs (§5.3), once the role of pluralities is controlled for.

(23)   a.   La sustancia se vitr-ific-ó durante una hora.
              the substance SE glass-ify-ed for one hour
        'The substance became glass, and stayed like glass for one hour'
        b.   La sustancia se vitr-ific-ó en una hora.
              the substance SE glass-ify-ed in one hour
        'The substance because glass after one hour'
(24)   a.   Luis person-ific-ó a Pedro durante una hora.
              Luis persona-ify-ed DOM Pedro for one hour
        'Luis adopted Pedro's persona, and stayed like that for one hour'
        b.   Luis personificó a Pedro en una hora.
              Luis persona-ify-ed DOM Pedro in one hour
        'Luis adopted Pedro's persona after one hour'

In transfer/locatum verbs, when the base is a mass noun the expected atelic readings emerge just in the case of other locatum verbs (cf. §5.3.3). Verbs like *dosificar* 'to dosify' and *clasificar* 'classify', which tend to take

pluralities and (liquid) masses as internal arguments, are easily interpreted as atelic.

(25) El gobierno gasificó la región durante una semana.
      the government gas-ify-ed the region for one week
      'The government pumped gas into the region for one week'
(26) a.   Luis dosificó el agua durante una semana.
           Luis dose-ify-ed the water for one week
      'Luis was dosifying the water for one week'
      b.   Luis clasificó los discos durante una semana.
           Luis class-ify-ed the albums for one week
      'Luis was classifying the albums for one week'
      c.   ?Luis clasificó ese ejemplar durante una semana.
           Luis class-ify-ed that item for one week
      'Luis put that item in a class, and it stayed into the class for one week'

   With respect to their syntactic behaviour, all the verbs belonging to these three classes are transitive and systematically the internal argument corresponds to the entity that undergoes the change of state, or to the entity that ends up in contact with the object expressed by the base:

(27) a.   Juan notificó a los empleados.
           Juan notified DOM the employees
      'Juan gave the news to the employees'
      b.   Juan tarifó el gas.
           Juan priced the gas
      'Juan assigned a price to gas'

   There is, however, one verb in the group that I want to discuss specifically because it seems to have an unexpected stative meaning. This verb is *significar* 'to mean'. The existence of the noun *signo* 'sign' in Spanish means that this verb is very likely to be decomposed by speakers as in (28).

(28) sign-ific-a
      sign-ify-ThV 'to signify, to mean'

   What makes (28) special is that its meaning does not contain any notion of change of state. The verb could be glossed statively as 'to be a sign for something' or 'to use as a sign for something'. Importantly, this is the only verb that is mainly used as stative in the set of verbs from -*ific*-. However, this verb, as normal change of state verbs in their causative reading, is transitive.

(29) 'Apple' significa manzana en español.
      'apple' means 'manzana' in Spanish

I want to openly admit that my account does not predict that such a verb should exist with *-ific-*. I see one way to accommodate this verb in the analysis, though. My proposal is that this verb is actually eventive, and its stative meaning – no matter how frequent it is – is derived from the eventive interpretation. In this sense, the verb should be glossed as 'to express a sign for something'

First of all, note that there is a meaning of this verb where it is eventive, as witnessed by the availability of the progressive periphrasis. In the subcorpus WEB in Corpus del Español, there is a significant number of cases in the progressive with this verb: almost 200.

(30) a.   Cuando hablo de codeterminación estoy significando que si no hay
            mercado
            when talk.1sg of co-determination am meaning that if not there.is
            market
            no hay valor.
            not there.is value
      'When I talk about codetermination, I want to say that without a market there is no value'
      b.   Semejante mutación cultural está significando un brutal terremoto
            teórico.
            such   mutation cultural is meaning a brutal earthquake theoretical
      'Such cultural mutation means a brutal theoretical earthquake'

In many of these cases, the verb is documented in the first person singular, where the subject is an agentive entity that tries to make some meaning clear and apparent. This meaning can be glossed as 'imply, want to convey', and even the Real Academia dictionary covers it in its second definition, 'to make something know, to declare, to manifest'. My claim is that this is the meaning that derives from the underlying syntactic structure of this verb, where there is a causative component that produces a particular meaning predicated from an entity taken as the internal argument.

I am aware that this is not the usual meaning of the verb, of course. However, this meaning is in fact made available by the decomposition of the verb into a Spanish base and the suffix *-ific-*, and once this decomposition is made, the eventive meaning where an entity keeps or manifests a particular meaning, becoming a sign for that meaning, is expressed. The more usual, although technical, linguistic sense of 'to be a sign for something' is derived from it, but through a stativisation that – I suggest – takes place at the level of grammatical aspect or higher (Jaque 2014), in the form of a generic operator (Krifka et al. 1995) that associates the eventive change of state verb to the interpretation 'this entity always stands for this meaning'. The fact that this use of the verb, the generic *significar*, is by far the most frequent one that is encountered in Spanish is accidental from this perspective. In this approach, (31) should be glossed as '[in this particular set of conditions], 'apple' always stands for the meaning that 'manzana' stands for'.

(31)   'Apple' significa 'manzana' en español.
        'apple' means 'manzana' in Spanish
        "'Apple' always stands for the meaning 'manzana' in Spanish'

This does not block a second route to arrive to this generic meaning, for speakers that have not segmentally decomposed the base *signo* 'sign' in this use: the verb is unanalysed, no *-ific-* exponent is identified by these speakers, and the unanalysed exponent *signific-* corresponds to a primitive stative structure, without Proc and without the relational structure that would produce the change of state meaning.

7.4 Conclusions

In this chapter we have addressed the properties of verbalisations in *-ific-*. The two main properties of this suffix can be summarised as follows: it is the only verbaliser that never participates in parasynthetic schemes, and the properties of the verbs created with it, however, are as systematic and regular as parasynthetic verbs. In particular, we have seen that with adjectival bases the aspectual properties of these verbs are those that are obtained with nominal bases too.

This has led us to propose that the structure underlying these verbs is, syntactically, the one of parasynthetic verbs of the locative type, with a fully fledged relational structure containing p, P and K. This explains their systematic behaviour. What makes the suffix *-ific-* special is that it spells out not only the Proc head, but also the relational structure, which is a locative one with a P layer that involves contact and can be reinterpreted to express that an entity 'arrives to the space' defined by a property when the base corresponds to an adjective. (32) presents the whole structure; we assume that the anticausative version involves not projecting InitP.
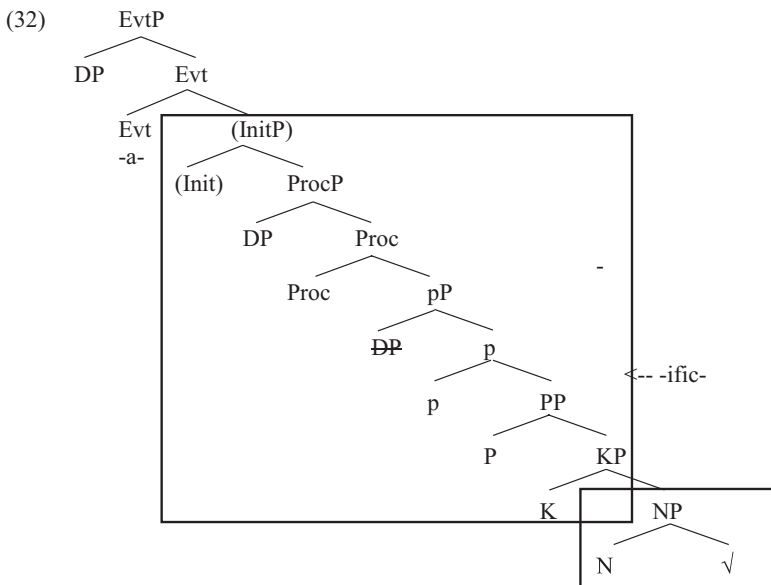
In the next chapter, we will see the case of two affixes that spell out only part of the relational structure, the one corresponding to the functional layer p/Pred, while the PP area is left for prefixes to spell out. This would trigger a pattern where only nominal bases can be parasynthetic, but adjectival ones cannot. Let us examine these cases, starting with the suffix *-e-a*.

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8 Verbalisations in *-ear*

8.1 Overview of the chapter

This chapter presents an analysis of what is probably the best studied verbaliser in Spanish and other Romance languages: *-ear*, where the verbaliser proper is *-e-*. This suffix produces verbs from both adjectives and nouns, although its productivity is higher with nouns. (1) illustrates some formations for deadjectival verbalisations.

(1) a. amarill-e-a
         grey-E-ThV, 'to become grey'
     b. negr-e-a
         black-E-ThV, 'to show a black colour or to become black'

This set is representative of the meanings expressed by the suffix when combined with adjectives: in few cases the suffix expresses a change of state (1a), and it is more frequent that deadjectival formations express the event of exhibiting a property without entailing that it has been acquired during the process (1b). The (1a) type may be telic, but the (1b) case is atelic, as most cases of verbalisations with *-e-a*.

   Without doubt, the biggest set of formations with *-e-a* is the one built over a set of adjectives expressing human properties, also typically used as underived nouns, where the verb expresses the event of acting in a manner typical of that human type (2a). The same reading is frequent with bases that can only be nouns.

(2) a. vagu-e-a
         lazy-E-ThV, 'to act in a lazy manner'
     b. pirat-e-a
         pirate-E-ThV, 'to act as a pirate'

The formations in (2) being the most frequent ones, with nominal bases this suffix also produces a variety of atelic meanings, including instrumental (3a), emission (3b) and performing an activity (3c).

(3) a.   telefon-e-a
           telephone-E-ThV, 'to give a phone-call'
     b.   burbuj-e-a
           bubble-E-ThV, 'to bubble'
     c.   surf-e-a
           surf-E.ThV, 'to practice surf'

There are no stative formations with this suffix, irrespective of the nature of the base, a property that reminds of what we have seen with parasynthetic verbs coming from adjectives.

Beyond this, in European Spanish the suffix never appears in parasynthesis when the base is deadjectival (cf. 1). Parasynthesis is attested only when the base is a noun. Some of the very few cases of nominal parasynthesis with -*e*- are shown in (4).

(4) a.   a-pedr-e-a
           A-stone-E-ThV, 'to hit someone with a stone'
     b.   a-sol-e-a
           A-sun-E-ThV, 'to put something in contact with sunlight'

The pattern just presented places -*e-a* in an intermediate position between -*ec-e*, which allows parasynthesis both with adjectives and nouns, and -*ific-a*, which rejects it in both cases. Our proposal to explain the pattern of data will be that the suffix -*e*- spells out a chunk of structure that includes the functional prepositional layer of the relational domain, corresponding in most cases to pP.

(5)   InitP   <---> -e-

       Init   ProcP

             Proc   pP
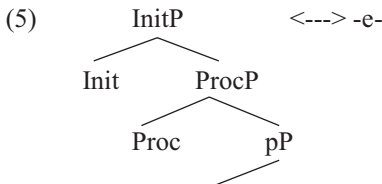
Remember that adjectives spell out the lexical relational layers, which means that with an adjectival base there is no material left for a prefix to spell out even if the whole relational structure is projected. In the case of a noun, (5) predicts that if the lexical prepositional layer PP is present parasynthesis will emerge, as in (4).

In terms of the feature content of the functional layer involved, the atelic nature of most formations with -*e-a* follows in my analysis from the proposal that the functional layer is most often a p^{manner} head – the same that we proposed in Chapter 5, §5.5 for instrumental verbs in -*a* – which cannot be configurationally interpreted as a result state projection, unlike the standard pP layer. In essence, and only with differences in the labels used, this is what Fábregas and Varela (2006) and Oltra-Massuet and Castroviejo (2014) originally proposed for Catalan.

8.2 Change of state formations and atelic quality readings

In contrast to -*ific*-, there are more studies specifically about the verbaliser -*e*-, which produces verbs in -*ear* (Martín García 2007; RAE & ASALE 2009: §8.3–8.5, Oltra-Massuet & Castroviejo 2014,; Mangialavori & Múgica 2019; Batiukova 2021). In this first section we will concentrate on bases that can be classified as adjectival. With adjectival bases there are three main interpretations of the suffix -*e-a*.

The first one, formed in fact by a astonishingly small set of verbs, are change of state verbs of the same type that we saw as the only class in -*ec-e*, -*ific-a* and the deadjectival parasynthetic formations in -*a*.

(6) amarillo 'yellow' > amarill-e-a 'to become yellow', azul 'blue' > azul-e-a 'to become blue', blanco 'white' > blanqu-e-a 'to make white', cesante 'unemployed' > cesant-e-a 'to make someone unemployed', claro 'clear' > clar-e-a 'to become clear', falso 'false' > fals-e-a 'to make something fake', gris 'grey' > gris-e-a 'to become grey', hermoso 'beautiful' > hermos-e-a 'to become pretty', malo 'bad' > mal-e-a 'to make some a bad person', negro 'black' > negr-e-a 'to become black', redondo 'round' > redond-e-a 'to make something round', sano 'healthy, clean' > san-e-a 'to clean up', verde 'green' > verd-e-a 'to become green'

These verbs, when used as change of state verbs, have exactly the same properties as change of state verbs with other suffixes.

Many of these verbs allow a second reading: one where they do not express acquiring the property but they express the event of exhibiting the property. This includes among others *amarill-e-a* 'to show a yellow colour', *azul-e-a* 'to show a blue colour', *clar-e-a* 'to show clearness, lightness', *gris-e-a* 'to show a grey colour', *negr-e-a* 'to show a black colour' and *verd-e-a* 'to show a green colour'. Not all the members of this group meaning 'to exhibit the property' denote colours, however. (7) shows a number of verbs that only have this reading.

(7) bizco 'cross-eyed' > bizqu-e-a 'to exhibit that one is cross-eyed', cojo 'lame' > coj-e-a 'to limp', escaso 'scarce' > escas-e-a 'to be scarce', flaco 'thin, weak' > flaqu-e-a 'to show weakness', flojo 'weak' > floj-e-a 'to show weakness', rojo 'red' > roj-e-a 'to exhibit a red colour', tartaja 'stutterer' > tartaj-e-a 'to stutter', tartamudo 'stutterer' > tartamud-e-a 'to stutter'

These two classes will be the ones that we analyse in this section. The third class (8), that we will analyse in §8.3 below because the bases can be interpreted as nouns, refers to verbs that denote the event of behaving in a manner characteristic of the base.

(8) baboso 'creep' > babos-e-a 'to act like a creep', bobo 'stupid' > bob-e-a 'to act like an idiot', pedante 'pedantic' > pedant-e-a 'to act like a pendant'

8.2.1 *Change of state verbs*

The previous verbs in (6) express changes of state. Most dictionaries associate to these verbs of change of state the nuance that the measure of change is low, that is, that the property is not fully acquired. (9) is for instance the definition of the Real Academia Dictionary, emphasising that the change involved does not make the internal argument completely yellow.

(9) amarillear. Ir tomando color amarillo.
    amarillear. To start getting some yellow colour

This behaviour is the expected one if the base is in the comparative degree (Kearns 2007): as in other cases characterised by a comparative degree base, the atelic reading with *for*-phrases is available (10a) – as well as the result state reading (10b) – and the *in*-phrase has a delayed event reading (10c).

(10) a.   El lienzo se amarilleó durante unos años.
            the canvas SE yellow-e-ed for some years
        'The canvas got more and more yellow for some years'
      b.   Las hojas se amarillearon durante el otoño.
            the leaves SE yellow-e-ed for the fall
        'The leaves got yellow and stayed yellow during the Fall'
      b.   El papel se amarilleó en unos meses.
            the paper SE yellow-e-ed in some months
        'The paper got yellow after some months'

This change of state reading can also be obtained with nominal bases. To the best of my knowledge, there are only five *-e-a* verbs expressing change of state with nominal bases. The most frequent ones are highly demotivated in their conceptual meaning, but as expected from a change of state with a nominal base they only produce telic readings involving achievement interpretations – unless the internal argument is a mass or plurality, as it is always the case with *maltear* 'to make barley into barley malt'.

(11) arco 'arch' > arqu-e-a 'to comb like an arch', bronce 'bronze' > bronc-e-a 'to tan', cabra 'goat' > cabr-e-a 'to make someone angry', malta 'malt' > malt-e-a 'to make barley turn into malt', mosca 'fly, cross' > mosqu-e-a 'to make someone cross'

(12) a.   Pedro cabreó a María durante una hora.
            Pedro goat-e-ed DOM María for one hour
        'Pedro made María angry for one hour'
      b.   Pedro mosqu-e-ó a María en una hora.
            Pedro fly-e-ed DOM María in one hour
        'Pedro made María cross after one hour'

c.   La vara se arqueó durante una hora.
      the rod SE arch-e-ed for one hour
 'The rod bent, and stayed bent for one hour'

As we can see, then, there are no reasons to propose that *-e-a* verbs are special in terms of their aspectual behaviour, despite lexicographic practices like the ones in (9), which emphasise some notion of 'degree that does not count as the standard value'. If anything, one could propose that what underlies this type of behaviour for *-e-a* verbs of change of state is that the base is always comparative and never positive degree; that would explain that the change always goes in the direction of 'becoming more A' without entailing sufficient possession of the property.

In syntactic terms, *-e-a* verbs of change of state do not have any special property either. The change of state is invariably predicated from the internal argument, and the causative-inchoative pairs depend on the same lexical principles as the other cases, with properties that can be conceived as only externally caused rejecting the inchoative member (e.g., *cesant-e-a* 'to make someone unemployed').

Taking stock, the change of state verbs in *-e-a*, even though none of them is parasynthetic, display the same properties as parasynthetic verbs of change of state with *-a* and *-ec-e*: all formations are dynamic, the aspectual properties depend on the degree of the base and systematically all changes are predicated from the internal argument. I therefore propose that *-e-a* involves the same standard structure as for those cases, with the peculiarity that *-e-* spells out the functional layer corresponding to PredP.

(13) a.   EvtP

b.   EvtP

```
          EvtP
         /    \
       DP      Evt
              /    \
          Evt        InitP
          -a-       /     \
              Init       ProcP              <---  -e-
                        /     \
                      DP        Proc
                              /      \
                          Proc        PredP
                                     /      \
                                  DP̶         Pred
                                           /     \
                                       Pred        NP
                                                  /    \      <--- mosc-
                                                 N      ...√^{1829}
```
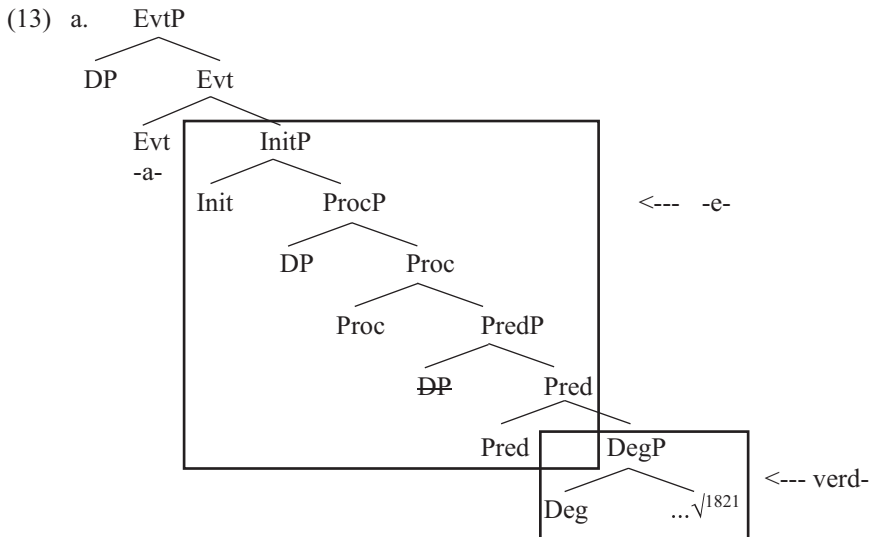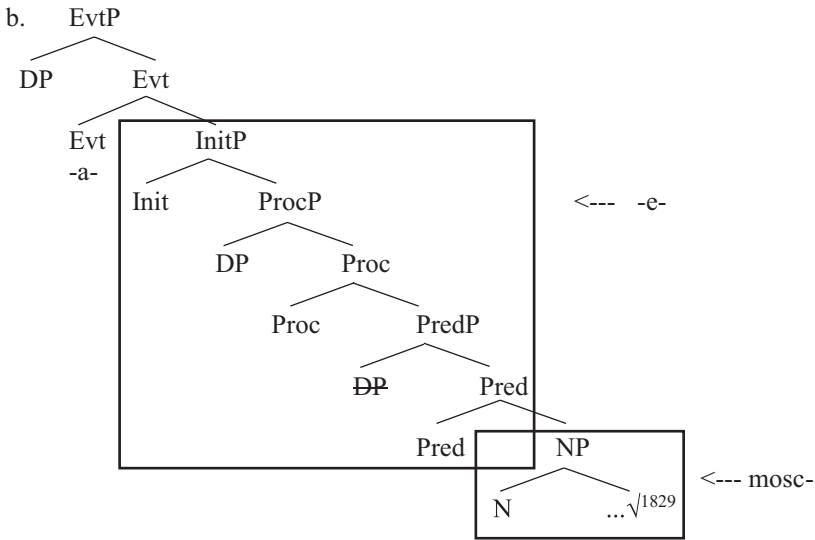
As in the other cases, the causative pair (represented in 13) involves an external agent associated semantically to Init but merged in spec, EvtP; the inchoative member of the pair is the same structure without Init, forcing the argument in spec, EvtP to be identical to the undergoer located in spec, ProcP.

Let us now move to the case of deadjectival verbs where the meaning is 'to exhibit a property in an event'. We will propose that there, the functional prepositional layer should not be identified with PredP but rather to a functional head similar to p^{manner}.

8.2.2 *Property exhibiting verbs*

With -*e-a*, the reading where the event involves exhibiting the property denoted by the base is actually more frequent than the change of state reading; many of the verbs in (6) and all verbs in (7) have that interpretation.

There are two properties that I consider central in analysing these verbs, and setting a baseline for the analysis of -*e-a* more generally. The first one is that these verbs are not stative, even if they don't express change. Take for instance *escaso* 'scarce' > *escas-e-a* 'to be scarce'. Despite the gloss, this verb behaves as eventive with respect to the progressive test and locative modification. In contrast to stative verbs such as *transparent-a* 'to be transparent' (see chapter 4, §4.4.3), this verb allows the progressive, and locative modifiers, which are generally taken as signs that a verb is eventive (Parsons 1990; Maienborn 2005).

(14) a.   La comida está escaseando.
            the food is scarce-e-ing
        'The food is being scarce'

b.   La comida escasea en esta casa.
         the food scarce-e-ing in this house
  'The food is scarce here'

(15)   a.   *El papel está transparentando.
                  the paper is transparent-ing
  Intended: 'The paper is being transparent'

b.   #El papel transparenta en esta habitación.
          the paper transparent-ThV in this room
  Intended: 'When in this room, the paper is transparent'

This eventivity is general to all verbs in the group; when we say something like (16), we say that there is an event of shining, emitting light or blinking where the subject is showing a particular colour, and when we say (17) we say that there is some activity that the subject performs in whose execution one can see the property expressed by the base.

(16)   a.   Este metal verdea, amarillea y azulea según le dé la luz.
                  this metal green-e-ThV, yellow-e-ThV and blue-e-ThV depending it
                  hits the light
  'This metal shines green, yellow or blue depending on how the light hits it'

b.   El trigo está verdeando bajo el sol.
          the wheat is green-e-ing under the sun
  'Wheat is shining green under the sun'

(17)   a.   Juan flojea en la carrera.
                  Juan weak-e-ThV in the race
  'Juan is showing signs of weakness during the race'

b.   Pedro está bizqueando.
          Pedro is cross.eyed-e-ing
  'Pedro is squinting'

It is crucial to note that all these verbs are stubbornly atelic; they lack a result state that can be measured and because of that the for-phrase must always measure the event (18). There is no natural endpoint to the event, and hence in-phrases are marked with them unless they get a delayed event reading.

(18)   a.   La luz azuleó durante unos minutos.
                  the light blue-e-ed for some minutes
     'The light shined blue for some minutes'

b.   Pedro flaqueó durante unos minutos.
              Pedro weak-e-ed for some minutes
  'Pedro showed signs of weakness for some minutes'

c.   Luis cojeó durante un mes.
              Luis lame-e-ed for one month
  'Luis limped for one month'

This contrasts sharply with the verbs in §8.2.1 previously, where the PredP is configurationally interpreted as denoting a result state which telicises the event. It is reminiscent, on the other hand, to the behaviour of instrumental verbs in §5.5 in chapter 5.

These verbs also have the property that they are unergative, that is, they are transitive verbs where the subject behaves like an external argument. This can be shown with the usual tests, such as the impossibility of having the subject in an absolute participle construction or having a postverbal bare subject.

(19) a. *cojeado Juan
           limped Juan
       Intended: 'Once Juan had limped (enough)'
     b. *Tartamudean niños.
           stutter children
       Intended: 'Some children stutter'

These verbs are normally intransitive, and the subject is interpreted as a tele-ological agent or initiator in the sense that they are the entity whose internal prop-erties make the event exhibit those properties, which are invariably predicated from them.

Let us now move to the proposal. I propose to treat these cases on a par with the structure proposed in (13) for change of state verbs, with one minimal modi-fication: the prepositional functional layer here is not a PredP that can be reinter-preted as a result state, but a pP corresponding to manner, exactly as I proposed for instrumental verbs. (20) reminds the reader of the structure for a verb like *a-cuchill-a* 'to use the knife on something' (§5.5.1).

(20)

```
         ProcP
        /     \
      DP      Proc
             /    \
          Proc     pP
           -a     /   \
                D̶P̶     p
             the floor  /  \
                       p    ┌──────────┐
                    [manner]│   NP     │  <--- cuchill-
                            │  /  \    │
                            │ N    √1827│
                            └──────────┘
```
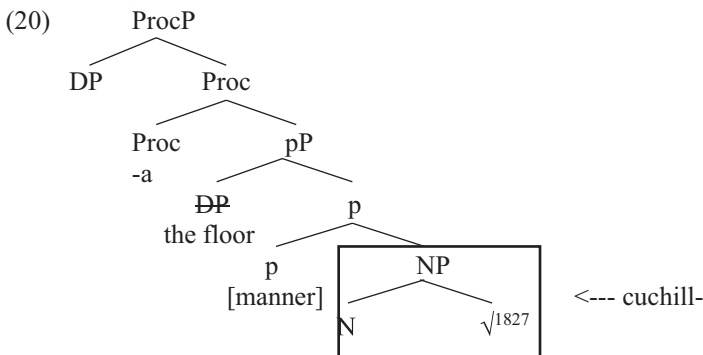
In (20) I propose a functional preposition corresponding to manner, where the base is a noun that defines some particular way of performing an action. The specifier of pP is the entity which receives the manner, and that ends up being

the affected entity as the specifier of ProcP. The manner information contained in the functional prepositional layer is what prevents it from being interpreted as a result state, which licenses the atelic reading of the event – the agent uses the knife on the floor for an unbounded period of time.

My proposal is that the class of atelic verbs with -*e-a* that we have just examined, and as we will see all denominal formations, reflect the structure in (20) also, where the functional prepositional layer should be considered a manner functional head and not a standard PredP that defines a change of state. In fact, the cases that we have discussed in §8.2.1 above with a change of state semantics are a minority among verbs ending in -*e-a*. I propose that -*e*- is defined as spelling out a functional prepositional layer that is adjacent to Proc, and that the lexical entry of -*e*- underspecifies whether this functional layer is Pred or p[manner], although the vast majority of formations with -*e*- contain the latter.

As the reader has already understood, this is in essence Oltra-Massuet and Cas-troviejo's (2013, 2014) analysis of Catalan -*ejar*, which is the Catalan cognate of -*e-a*. Building on a basic structure proposed in Fábregas and Varela (2006), Oltra-Massuet and Castroviejo (2013, 2014; henceforth OM&C) argue that (21) is the structure of the suffix -*ejar*: a v head that selects a prepositional complement corresponding to manner – they propose some variations on this structure, but in essence they share the property that the PP structure does not define a result state.

(21)

```
            vP
          ┌──┴───┐
         v     PᵐᵃⁿⁿᵉʳP
              ┌───┴───┐
             DP       P
                    ┌─┴──┐
                    P   BASE
```
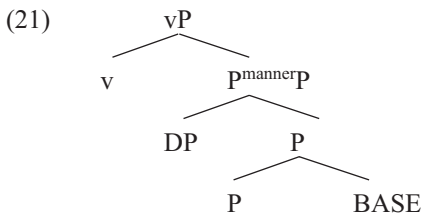
Some of the differences between OM&C's approach and mine are merely nota-tional: these authors take v to be a placeholder for different flavours of eventuali-ties, and they do not decompose prepositions in lexical and functional layers. Let me concentrate on the two differences.

The first one is that OM&C's place in the specifier of p[manner] the entity that controls the manner in which the event is performed, and that later on becomes the external argument of the event. I do not follow them in this aspect of the analysis. On a par with instrumental verbs, I propose that the specifier of p[manner] is the entity that is affected by the manner in which the event is being performed, not necessarily the entity that controls that manner. From spec, pP, that entity moves to spec, ProcP, where it becomes the undergoer that experiences the event per-formed in that particular manner.

(22)

```
              ProcP                    <---- -e-
             /     \
          DP        Proc
                   /    \
                Proc     pP
                        /   \
                      D̶P̶     p
                            /   \
                           p    BASE
                        [manner]
```
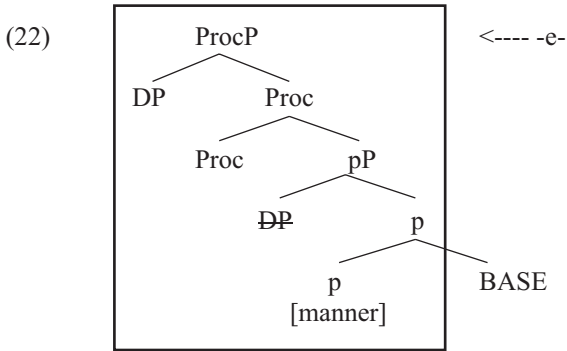
This means that, unlike OM&C, I am not deriving the unergative nature of these verbs from a difference in configuration with respect to the change of state verbs in §8.2.1. My way of deriving the unergative nature of these verbs is through the semantics of p[manner]. The presence of a manner forcefully requires an entity that initiates the event and controls its progression, which forces InitP to be merged in the structure. Unlike the case of change of state verbs, where if the change can be produced by the internal properties of the undergoer InitP is not merged, the presence of a manner means that the external argument in EvtP must be interpreted as an initiator who controls the event so that it is performed in a particular manner.

(23)

```
          EvtP
         /    \
       DP      Evt
              /    \
           Evt      InitP
           -a-     /     \
                Init      ProcP            <--- -e-
                         /     \
                       D̶P̶       Proc
                               /    \
                            Proc     p^manner P
                                    /   \
                                  D̶P̶     p
                                        /   \
                                       p    BASE
```
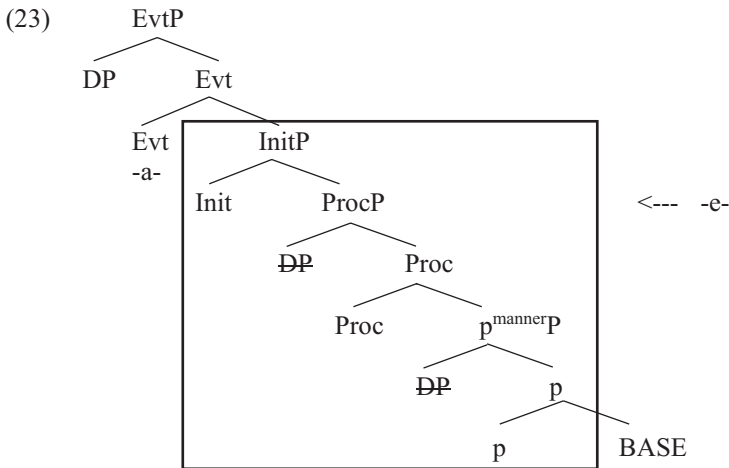
Being unergative means in my analysis only that InitP must be present and that the verb is intransitive because, as represented in (23), the argument that originates in spec, pP moves to spec, ProcP and then to spec, EvtP. In other

words, in my proposal an unergative verb in -e-a is a verb where the manner in which the external argument controls the event does not affect any other participant except for the external argument itself. Take, as an illustration, the sentence in (24).

(24) Juan cojea.
      Juan lame-e-ThV
      'Juan limps'

According to (23), (24) means that Juan initiates an event due to its internal properties – he has some problem in the leg – and Juan also undergoes the effects of that event that is performed in a manner that also affects him.

What is important in the structure (23) is that I open up for the possibility that these manner verbs are transitive instead of unergative. For that I only need a situation where the entity that controls the manner in which the event is performed directs that event towards another entity that experiences that particular manner. This situation is extremely frequent in the manner verbs expressing behaviour, by far the most frequent class with -e-a, which we will study in the next section. I admit that the situation is less frequent with the verb that are glossed as 'exhibiting a property' which I discuss here, but I propose that the reason is that the type of property that defines the manner in such cases is not a behavioural one, and therefore it is more difficult to conceive it as affecting other individuals different from the entity that has those properties.

My proposal, then, is that -e- is characterised by spelling out a functional prepositional layer which can be PredP or pP.

(25)   InitP
         ╱   ╲
      Init   ProcP
             ╱   ╲
          Proc   Pred/pP
           -a-   ╱
               Pred/p
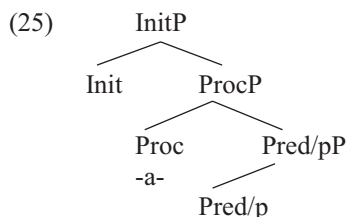
In the second case, which is by far the most frequent one, p corresponds to manner, the lexical prepositional layers are missing and the interpretation is atelic. The presence of Init is compulsory when p[manner] is present, because manners need to be controlled by initiators.

As in the case of -ific-, I am proposing that adjectival bases combine with heads that generally manifest prepositional structure with nouns; even though the base is an adjective, my claim is that in these cases the label used by far with more frequency is little p. Let me elaborate on the consequences of this claim.

First of all, as noted repeatedly in the literature, -e-a is much more productive with nouns than with adjectives (Beniers 2004; RAE & ASALE 2009: §8.3). This

follows directly if the structure that *-e-a* spells out is almost always a p[manner], to the extent that p is the label that introduces nouns and not adjectives.

Secondly, note that the vast majority of the adjectival bases in this category of 'exhibiting property A' can also double as nouns through conversion: this is the case of all colour adjectives, which are very frequent in this class, as well as adjectives expressing lack of a property such as *tartamudo* 'stutterer' or *cojo* 'lame'. To the best of my knowledge the only adjectival base in the group that is not used as a noun is *escaso* 'scarce'. I do not think that this is an accident, and I believe that it should be taken into account in the analysis, which I do by proposing that p[manner] is present in almost all formations with *-e-a*. As for the two cases where the base cannot be a noun, I speculate that maybe they are introduced as roots and not nouns in the relevant formations – none of them is morphologically complex.

Finally, however, I would like to make a clarification. What makes the entry of *-e-* special is not that Pred and p are both considered. Note that, as repeatedly discussed in chapters §4, §5 and §6, Pred and p are in principle identical heads when they express a stative relational situation. What makes *-e-* special is that this functional relational head requires two flavours, a plain one which is configurationally interpreted as a result and a manner one which must be interpreted as defining properties of how the process takes place. My provisional claim in this monograph is that manner can only be expressed as p, a nominal relational head, not as Pred, its equivalent in the adjectival domain. However, I do not exclude that a more detail investigation of the notion of manner and its manifestation across predicates in different languages would lead us to the conclusion that the [manner] head can also be manifested as Pred, further unifying relational structure in nouns and adjectives.

Let me however leave these speculations here and move to the biggest class of verbalisations with *-e-a*.

8.3 Manner of behaving verbs

The most frequent type of verbalisation with *-e-a* is one where the base is interpreted as a particular way of behaving, and the verb denotes an atelic dynamic event where this behaviour is exhibited. The bases such defined have as a common denominator that they represent concepts which can define attitudes, procedures and qualities used to characterise how events are performed. Most define types of humans and animals – see (26), where some of the bases can also be used as adjectives.

(26)   alcahuete 'go-between' > alcahuet-e-a 'to act like a go-between', azacán 'slave' > azacan-e-a 'to act like a slave', bruja 'witch' > bruj-e-a 'to act like a witch', buitre 'vulture' > buitr-e-a 'to act like a vulture', cacique 'small chief' > caciqu-e-a 'to act like a small chief', caracol 'snail' > caracol-e-a 'to move like a snail', capitán 'captain' > capitan-e-a 'to act like a captain', chalán 'business shark' > chalan-e-a 'to act like a business shark', chorizo 'thief' > choriz-e-a 'to act like a thief', chusma 'rabble' > chusm-e-a 'to

act like rabble', comadre 'female friend' > comadr-e-a 'to act like a friend among women', compadre 'male friend' > compadr-e-a 'to act like a friend among males', cotorra 'parrot' > cotorr-e-a 'to talk a lot', culebra 'snake' > culebr-e-a 'to move like a snake', escarabajo 'beetle' > escarabaj-e-a 'to act like a beetle', gallo 'cock' > gall-e-a 'to act conceited', ganso 'goose' > gans-e-a 'to act like a goose', garrapata 'tick' > garrapat-e-a 'to scribble', gato 'cat' > gat-e-a 'to move like a cat', gaucho > gauch-e-a 'to act like a gaucho', grajo 'rook' > graj-e-a 'to make the sound of the rook', hormiga 'ant' > hormigu-e-a 'to act like ants', lechuza 'owl' > lechuc-e-a 'to eat like an owl', mariposa 'butterfly' > maripos-e-a 'to act like a butterfly', baboso 'creep' > babos-e-a 'to act like a creep', bobo 'stupid' > bob-e-a 'to act like an idiot', charlatán 'chatterbox' > charlatan-e-a 'to talk a lot', cho-cho 'senile' > choch-e-a 'to act senile', chulo 'arrogant' > chul-e-a 'to act arrogantly', coqueto 'flirty' > coquet-e-a 'to act flirty', cotilla 'gossipy' > cotill-e-a 'to act gossipy', curioso 'nosy' > curios-e-a 'to act nosy', discreto 'wity, intelligent' > discret-e-a 'to act wity', español 'Spanish' > español-e-a 'to act as a typical Spaniard', fanfarrón 'loumouthed' > fanfarron-e-a 'to boast', felón 'treacherous' > felon-e-a 'to act like a treacherous person', fisgón 'nosy' > fisgon-e-a 'to act nosy', galante 'gallant' > galant-e-a 'to woo', gallardo 'valiant' > gallard-e-a 'to act with grace', gamberro 'bully' > gamberr-e-a 'to act like a bully', gandul 'lazy' > gandul-e-a 'to act lazy', gitano 'gipsy' > gitan-e-a 'to act as a stereotypical gipsy', glotón 'glutton' > gloton-e-a 'to act like a glutton', golfo 'lout' > golf-e-a 'to act like a lout', guarro 'filthy' > guarr-e-a 'to act like a filthy person', haragán 'lazy' > hara-gan-e-a 'to act lazy', holgazán 'lazy' > holgazan-e-a 'to act lazy', llorica 'crybaby' > lloriqu-e-a 'to act like a crybaby', mangón 'bossy' > mangon-e-a 'to act bossy', maricón 'gay' > maricon-e-a 'to act like a stereotypi-cal gay', marrano 'filthy' > marran-e-a 'to act filthy', pedante 'pedantic' > pedant-e-a 'to act like a pendant', rácano 'stingy' > racan-e-a 'to act like a stingy person', regalón 'spoiled person' > regalon-e-a 'to act like a spoiled person', remolón 'lazy' > remolon-e-a 'to act like a lazy person', tacaño 'stingy' > tacañ-e-a 'to act like a stingy person', tonto 'silly' > tont-e-a 'to act flirty', triste 'sad' > trist-e-a 'to act sadly', vago 'lazy' > vagu-e-a 'to act lazy'

Note that most of these bases involve negative properties, following a tendency already noted in Fernández Lagunilla (1983) for adjectives that can be categorised as nouns. There is a smaller group of manner verbs whose base is an object which has some property that can be used to define a particular type of behaviour:

(27)   balanza 'scales' > balanc-e-a 'to move like a scale', baraja 'deck of cards' > baraj-e-a 'to shuffle', brújula 'compass' > brujul-e-a 'to look for something as a compass moves', campana 'bell' > campan-e-a 'to move like a bell', cascabel 'sleigh bell' > cascabel-e-a 'to move or sound like a sleigh bell', centella 'spark' > centell-e-a 'to glitter, to shine like sparks', jaspe 'jasper' >

jasp-e-a 'to speckle', marzo 'March' > marc-e-a 'to be like the weather in March', mayo 'May' > may-e-a 'to be warm and nice as the weather in May', mimbre 'wicker' > mimbr-e-a 'to move flexibly like wicker'

As can be seen, manner of movement is a frequent interpretation, perhaps because manner of movement is one of the prototypical atelic classes of verbs (Levin 1993).

My proposal for these verbs is identical to the one I proposed for the ones that denote exhibiting a property during the running time of an event. In my view, the only difference between the verbs in §8.2.2 above and these behaviour verbs is that the bases express entities that can be used to define ways of acting, so that exhibiting that property is easily interpretable as a way to conduct oneself. I therefore propose the structure in (28) for these verbs.

(28)
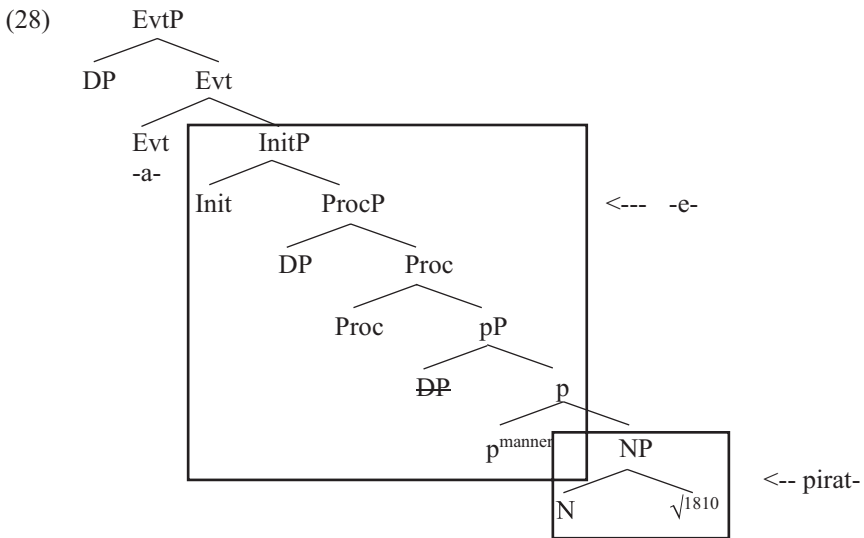
(28) represents the structure with two distinct DPs, and corresponds to the transitive construal of behaviour verbs (29), which is frequent with verbs such as *putear* 'to fuck with someone', *chulear* 'to make fun of', *piratear* 'to act as a pirate', *pastorear* 'to act as the shepherd of someone' or *guarrear* 'to act filthy with something', all of which assign accusative to the internal argument.

(29) Pilar chuleó a su novio.
      Pilar cocky-e-ed DOM her boyfriend
      'Pilar made fun of her boyfriend'

In (29), the external argument initiates and controls an event which is performed in a manner associated to 'cocky', that affects a boyfriend, who becomes the undergoer as an argument of ProcP. Many other verbs allow a second argument, but one that is introduced prepositionally, typically with the preposition *con* 'with'. I take the origin of this argument to be the same as in (30), with the difference having to do with case assignment and therefore orthogonal to the argument structure of the predicate: *tontear* 'to flirt' or *fanfarronear* 'to act boastful, for instance, do not assign accusative to the internal argument and therefore use prepositions.

(30)   Manolo tontea con Clara.
        Manolo silly-e-YhV with Clara
        'Manolo flirts with Clara'

Finally, it is worth emphasising that what is crucial with these verbs is the manner component. Unlike stative property verbs like many of those analysed in §4.4.3 and §5.2.2.2, what these verbs denote is not 'to be N/A', but 'to act in a manner that is typical of N/A'. For instance, *padrear* 'to behave as someone's father' does not entail that the subject is the father of someone, and does entail that the subject acts with someone as expected from a father; similarly, *capitanear* 'to behave as the captain' can be truthfully predicated from people that are not the captain but act as one.

8.4 Instrumental readings and other less frequent readings

My proposal for the verbaliser *-e-a* is that it spells out, differently from other affixes seen so far, a pP layer that involves manner and is directly selected by Proc. In contrast to *-ific-a*, it does not spell out the lexical prepositional layer PP, which has clear consequences when the base is a noun. With a nominal base one expects to find parasynthetic cases, which are instances where the PP layer is present and the prefix has to spell it out. This is confirmed: with this suffix I am aware of three prefixes that are involved in parasynthesis (31).

(31)   a.   lanza 'spear' > a-lanc-e-a 'to hit with a spear', palo 'stick' > a-pal-e-a
             'to hit someone with a stick', piedra 'stone' > a-pedr-e-a 'to stone',
             porra 'club' > a-porr-e-a 'to hit something bluntly', saeta 'arrow' >
             a-saet-e-a 'to shoot arrows at something', sol 'sun' > a-sol-e-a 'to
             expose something to sunlight'
        b.   señor 'lord' > en-señor-e-a 'to take a territory as lord'
        c.   letra 'letter' > de-letr-e-a 'to spell out'

The existence of these denominal parasynthetic verbs means also, by implication, that with nominal bases the absence of a prefix must mean that the lexical PP layers are missing – as in the nominal base cases in §8.3 above. As in the case of denominal prefix-less verbs in *-a* and *-ec-e*, this means that the conceptual

semantics of the base will be crucial in determining the meaning and that we should expect a broader range of readings than with *-ific-a* and the parasynthetic cases. In the case of *-e-a*, however, this range of readings should be nuanced by the compulsory presence of a p[manner] layer which, as we will argue, determines crucial aspects of the aspectual behaviour of the verb and restricts the syntactic relations accordingly.

Let us first start examining the prefix-less cases where the PP layer is missing (§8.4.1-§8.4.4), and examine the parasynthetic cases in the last subsection here, §8.4.5.

8.4.1 Instrumental readings

The prediction of our analysis is that the instrumental reading should be the second most frequent one with *-e-a* in the absence of prefixes when the base used is a noun, and I believe that this prediction is confirmed. Sharing an internal configuration with parasynthetic instrumental verbs (Chapter 5, §5.5) means that a configuration like the one that we have proposed should prioritise this reading, particularly when the base is an object defined as an artifact that has a telic quale that defines its function. (32) shows some of the clearest cases.

(32)   arcabuz 'riffle' > arcabuc-e-a 'to use a riffle', arpón 'harpoon' > arpon-e-a 'to hit with a harpoon', balde 'bucket' > bald-e-a 'to remove water with buckets', banderilla > banderill-e-a 'to hurt with a banderilla', baqueta 'drumstick' > baquet-e-a 'to make music with drumstick', bate 'bat' > bat-e-a 'to hit with a bat', bomba 'pump' > bomb-e-a 'to use a pump', campanilla 'bell' > campanill-e-a 'to make sound with bells', cencerro 'bell' > cencerr-e-a 'to make noise with a bell', chancleta 'flip-flop' > chanclet-e-a 'to walk with flip-flops', chat > chat-e-a 'to use a chat', email > email-e-a 'to use the email', escáner 'scanner' > escan-e-a 'to use a scanner', estoque 'sword' > estoqu-e-a 'to hurt with the sword', fax > fax-e-a 'to use a fax', hacha 'axe' > hach-e-a 'to cut with an axe', hisopo 'sprinkler' > hisop-e-a 'to use the sprinkler', hurón 'ferret' > huron-e-a 'to hunt with a ferret', machete 'machete' > machet-e-a 'to hit with a machete', manta 'blanket' > mant-e-a 'to throw people up using a blanket', martillo 'hammer' > martill-e-a 'to hammer', monitor 'monitor' > monitor-e-a 'to monitor', navaja 'knife' > navaj-e-a 'to hit with a knife', olfato 'smell' > olfat-e-a 'to use the smell sense', palanca 'lever' > palanqu-e-a 'to use a lever', pandereta 'tambourine' > panderet-e-a 'to play the tambourine', paráfrasis 'paraphrase' > parafras-e-a 'to use a paraphrase', sable 'sword' > sabl-e-a 'to use a sword', sonda 'probe' > sond-e-a 'to probe', tacón 'heel' > tacon-e-a 'to make noise with the heel', tecla 'key from a keyboard' > tecl-e-a 'to type', teléfono 'telephone' > telefon-e-a 'to use the phone', tijera 'scissors' > tijeret-e-a 'to cut with scissors', torpedo 'torpedo' > torped-e-a 'to hit with torpedos', tractor 'tractor' > tractor-e-a 'to use tractors on a land', trapo 'ruggs' > trap-e-a 'to clean with ruggs', vara 'rod' > var-e-a 'to hit with a rod', voz 'voice' >

voc-e-a 'to call by using your voice', zapato 'shoe' > zapat-e-a 'to make noise with shoes'

As can be seen, as in the parasynthetic -*a* verbs in §5.5, the bases are typically instruments, with a preference for tools and weapons, or objects that are used as instruments in some stereotypical actions, such as *hurón* 'ferret', that is used as an instrument in some hunting practices. Clearly, the resulting events express different manners of performing some action, such as hitting or hurting others, making noises, communicating, etc.

As expected from our analysis, these verbs must be agentive. One interesting minimal pair is the one formed by *olfato* 'smell' > *olfatear* 'to sniff' and *oler* 'to smell': the first is derived by -*e-a* and is an instrumental/manner verb, so it must be agentive and dynamic; the second is a stative verb whose subject is an experiencer or a patient.

(33) a. El perro olfateó al entrar en la habitación.
           the dog smell-e-ed when coming in the room
        'The dog sniffed when it came into the room'
      b. El perro huele algo podrido.
           the dog smells something rotten
      c. El perro huele mal.
           the dog smells badly

There is a second well-defined class of instrumental verbs where the base is the body part of animals or humans and the event interpreted either as moving that body part or as a typical action that is performed with it: the lips are associated to kissing, the stomach to digesting, etc.

(34) aguijón 'sting' > aguijon-e-a 'to hit with a sting', ala 'wing' > alet-e-a 'to fly with the wings', boca 'mouth' > boqu-e-a 'to open and close the mouth', brazo 'arm' > brac-e-a 'to move the arms in swimming', cabeza 'head' > cabec-e-a 'to move one's head', codo 'elbow' > cod-e-a 'to nudge', cola 'tail' > col-e-a 'to move the tail', cuerno 'horn' > corn-e-a 'to hit with the horns', gamba 'leg' > gamb-e-a 'to dance', hocico 'snout' > hociqu-e-a 'to move the soil with the snout', morro 'lips' > morr-e-a 'to kiss', ojo 'eye' > oj-e-a 'to have a quick look', paladar 'palate' > palad-e-a 'to feel the taste', palma 'handpalms' > palm-e-a 'to pat, to clap', párpado 'eyelid' > parpad-e-a 'to blink', pata 'leg' > pat-e-a 'to kick', pestaña 'eyelash' > pestañ-e-a 'to blink', rabo 'tail' > rab-e-a 'to move the tail', tripa 'stomach' > trip-e-a 'to eat too much', zanco 'long legs' > zanqu-e-a 'to walk with big steps'

In other cases, the base is not properly an instrument, but under p[manner] it is an entity that is used to define a stereotypical action where it is involved, and where it is used as the means or instrument to achieve a goal.

In my analysis, what defines the base as an instrument is the presence of a p[manner] layer that -*e-a* spells out. This explains that non nominal bases can also

be introduced – perhaps previously nominalised – as bases and still be interpreted as instruments. The series in (35) has different bases which, in the meaning of the verb, are rather interpreted as terms or words that people use. Their instrumental interpretation is clear.

(35)   cec-e-a 'to use c instead of s', ses-e-a 'to use s instead of s', vos-e-a 'to use vos as a pronoun', usted-e-a 'to use usted as a pronoun', tut-e-a 'to use tú as a pronoun'

   The first two verbs in (35) are clearly onomatopoeic, and still they function as bases for -e-a because the p[manner] layer forces an interpretation where they designate a manner of talking. It is frequent, in fact, that this suffix combines with onomatopoeic bases to denote manners of sounding or talking: the set in (36) presents a partial list.

(36)   balbuc-e-a 'to stummer', berr-e-a 'to bellow', bisbis-e-a 'to whisper', borbot-e-a 'to make bubble sounds', chachalaqu-e-a 'to talk loudly and a lot', cuchich-e-a 'to whisper', gorgot-e-a 'to gurgle', repiquet-e-a 'to sound like a bell', ronron-e-a (runrun-e-a) 'to purr', sis-e-a 'to hiss', tarar-e-a 'to hum', tintin-e-a 'to jingle', traquet-e-a 'to rattle'

8.4.2 Locative

The absence of a lexical PP layer with prefix-less denominal verbs in *-e-a* predicts that it should also produce verbs where the base has a locative semantics. However, in contrast to verbs in *-a* or *-ec-e* that lack a prefix, the presence of p[manner] is expected to play a role, which I believe is found in two typical properties of the resulting verbalisation: in some cases the verb does not simply denote locating an entity in contact with another, but also implies that the locative relation is a manner of fulfilling a function that defines some type of activity. Secondly, the atelic component imposed by the [manner] component that prevents the pP to define a result stay is manifested either as staying in that location for some time or through a habitual interpretation of the locative relation.

   In the following verbs, the base can be interpreted as a location, but one that involves either treating the internal argument in a particular way (e.g., *hambre* 'hunger' > *hambrear* 'to force someone into a precarious economic situation where one suffers hunger') or where the location must have some function (*aire* 'air' > *air-e-a* 'to expose something to clean air').

(37)   aire 'air' > air-e-a 'to expose to clean air', fuego 'fire' > fogu-e-a 'to expose to fire so that one gets used to it', flanco 'sides in a battle' > flanqu-e-a 'to put on the sides so that they protect something', fondo 'bottom' > fond-e-a 'to anchor a boat to the bottom', hambre 'hunger' > hambr-e-a 'to reduce to poverty', horno 'oven' > horn-e-a 'to cook in the oven', saco 'sack' >

saqu-e-a 'to put stolen things in a sack, to sack', terraza 'terrace' > terrac-e-a 'to eat and drink in bars and restaurants with a terrace', ventana 'window' > ventan-e-a 'to move to the window to see what is happening', viento 'wind' > vent-e-a 'to expose clothes to the wind'

In other cases, the locatio obtained is typically iterative (*buzón* 'mailbox' > *buzon-e-a* 'to put propaganda in mailboxes', *sopa* 'soup' > *sop-e-a* 'to put bread into the soup in order to eat it') or it has a durative component where one stays in that location modifying its way of acting (*verano* 'summer' > *veran-e-a* 'to spend the summer holidays'). I am aware of only one case (*lado* 'side' > *lad-e-a* 'to move an object so that it is oriented to one side') where the function is not clear, although that verb can be interpreted as a manner of presenting or exhibiting an object.

There are also a few cases where the location that results involves dividing some object into parts or making small units out of a mass; in both cases, the verbs count as denoting manners of dividing or grouping objects, and the reading is atelic through iteration:

(38)   filete 'fillet' > filet-e-a 'to divide meat into fillets', grano 'grain' > gran-e-a 'to divide gunpowder into grain units', tabla 'board' > tabl-e-a 'to divide wood into board chunks', trozo 'piece' > troc-e-a 'to divide something into pieces'

We saw that in the absence of PP layers and a result component, the locatio reading might involve following a path (§5.3.5) or defining a particular orientation that does not result in a definite location. With this suffix that reading also emerges naturally, because p[manner] blocks the resultative interpretation.

(39)   banda 'side' > band-e-a 'to go from one side to the other', barlovento 'windward' > barlovent-e-a 'to cruise in the direction of the wind', calle 'street' > callej-e-a 'to walk along streets without a purpose', campo 'field' > camp-e-a 'to walk in the fields', contorno 'silhouette' > contorn-e-a 'to follow the silhouette of an object', plano 'flat surface' > plan-e-a 'to glide', silueta 'silhouette' > siluet-e-a 'to follow the silhouette', zigzag > zigzagu-e-a 'to follow a zig-zag route'

In locatum and transfer verbs we find the same properties: iteration and/or a definite function that takes precedence over the locative interpretation. There are plenty of cases where adding the object to the internal argument in fact expresses a particular function, as in *traje* 'suit' > *traj-e-a* 'to put on a suit to look more elegant'. In *chaqueta* 'jacket' > *chaquet-e-a* the verb means 'to change jacket', in the sense of 'to change ideological adscription' (*cambiar de chaqueta*) and is rather a verb expressing a manner of acting than a verb involving dressing with a piece of clothing. Similarly, *bache* 'pothole' > *bach-e-a* 'to fill potholes' does not simply involve putting something inside a pothole, but rather to fill them so that

they disappear. moreover, the majority of cases involves nominal bases that are already instruments or other entities that have a function:

(40)   acicate 'incentive' > acicat-e-a 'to give an incentive to someone', bajo 'bass music' > baj-e-a 'to add bass to a musical composition', coz 'kick' > coc-e-a 'to kick', contrapunto 'counterpoint' > contrapunt-e-a 'to add the counterpoint to a musical composition', coro 'choir' > cor-e-a 'to add a choir to some music or declaration', masaje 'massage' > masaj-e-a 'to give a massage', puente 'bridge' > puent-e-a 'to add a bridge between two things'

In other cases, the base is not necessarily and instrument but the transfer or locatum verb has a distinct iterative meaning: *mensaje* 'message' > *mensaj-e-a* 'to send messages', *mota* 'spot' > *mot-e-a* 'to add spots', *parche* 'patch' > *parch-e-a* 'to add patches to some fabric', *ribete* 'edging' > *ribet-e-a* 'to add edgings to a clothing object', *veta* 'seam, vein' > *vet-e-a* 'to add seams or veins'.

To the best of my knowledge in European Spanish there is only a small number of *-e-a* verbs involving transfer where there is no sense of iteration or the base is interpreted as an instrument that defines a manner of acting or performing an event. I note, however, that all these have mass bases which license an atelic reading.

(41)   color 'colour' > color-e-a 'to add colour', gas 'gas' > gas-e-a 'to throw gas to someone', laca 'lacquer' > laqu-e-a 'to lacquer', sombra 'shadow' > sombr-e-a 'to add shadows to a drawing'

8.4.3 Emission verbs

Another class of verbs that has been highlighted in the literature with *-e-a* is emission verbs. This class, which I propose to treat as related to locative verbs, is illustrated in (42).

(42)   baba 'saliva' > bab-e-a 'to drool', burbuja 'bubble' > burbuj-e-a 'to bubble', chispa 'sparkle' > chisp-e-a 'to sparkle', chorro 'stream' > chorr-e-a 'to drip', destello 'sparkle' > destell-e-a 'to sparkle', espuma 'foam' > espumaj-e-a 'to produce foam', gargajo 'phlegm' > gargaj-e-a 'to produce phlegm', gota 'drop' > got-e-a 'to drip', humo 'smoke' > hum-e-a 'to smoke', lágrima 'tear' > lagrim-e-a 'to tear up', llama 'flame' > llam-e-a 'to blaze', moco 'mucus' > moqu-e-a 'to produce mucus'

In order to understand why this class appears with *-e-a*, it is relevant to compare them with verbs in *-ec-e* that involve the event of having something growing out of one's body, as *flor* 'flower' > *flor-ec-e* 'to bloom'. In both cases, the absence of a PP layer is what makes the emission reading possible, because in neither case there is the implication that the two objects must end up as being in contact or in any specific locative relation. This is what makes it possible to talk about drooling without making any claim about whether the saliva is at the end still in contact

with the subject or not, in the same way that one can talk about blooming without claiming that the flowers must be at a different location at the beginning and at the end of the process.

The difference is that with *-ec-e* there is a path component and therefore the event must be interpreted as creating a path, the one defined by the entity that grows out of the subject. With *-e-a* there is no path, and this allows the base noun to flow out of the subject without having to keep in contact with it, or define an extended trajectory which connects with the subject. In other words, the absence of a path component and the absence of a PP layer that defines the end location of the base noun with respect to the subject is what makes *-e-a* the best suffix to express emission meaning. Emission minimally requires the entity to flow out of the subject, and it does not matter where it ends or whether it stays in contact or not with the subject.

Moreover, *-e-a* has an atelic meaning without a result state because of the p[manner] directly combined with Proc. This also makes it the best candidate to express emission, to the extent that emission verbs are atelic, do not presuppose results and tend to express durative or iterative events where some entity flows out of another (Levin 1993). As we will see in the next chapter, *-iz-a* involves a result state, and that is not directly compatible with the semantics of an emission verb.

Thus, my claim is that *-e-a* includes a good number of emission verbs simply because the notion of emission is more compatible with atelic verbs which do not specify the end locative relation between the emitted object and its source, and this corresponds closely to the internal structure of *-e-a*. There is no special syntactic configuration for emission verbs, which are unergative, and can be treated on a par with the rest of verb classes in *-e-a* where the complement of Proc is p (43). The rest of the job is done by having bases whose conceptual semantics refers to substances that are known to come from inside the body of living creatures, or entities that emerge from them as sound or light. See also Oltra-Massuet and Castroviejo (2014), who I think make a similar claim except that they do not postulate the [manner] component for these verbs.

(43)
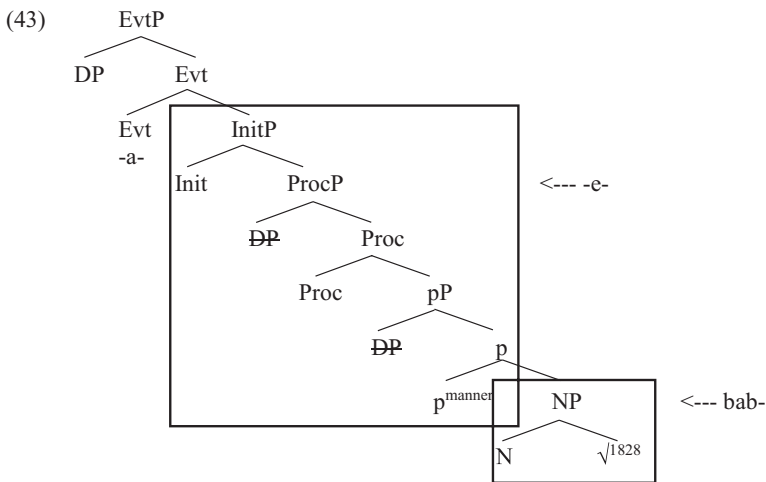
Like a good number of the other manner verbs in -*e-a*, the verb is intransitive because the notion of emission is not easily conceptualisable as being directed to other entities.

In a way, by keeping the same p[manner] as in the other cases, I am claiming that these verbs are verbs denoting different ways of emitting something, and are more defined by the way in which some entity acts when emitting it than by what one emits. I believe that this prediction is fulfilled: many of these verbs are satisfied in their meaning even if what one emits is not necessarily the substance in the base. *Babear* 'to drool' is used also to express the behaviour of someone that admires or loves someone else so much that loses control over his actions, and *chispear* 'to sparkle' is also commonly interpreted as involving a thin rain, where there are no sparkles but what is relevant is that the emission is light and done with little energy, in contrast to *chorrear* 'to drip', which involves an emission that is more robust. As for *moquear* 'to produce mucus', it can be applied to the aftermath of having cried a lot, as a translation to 'sniffle', where one in fact does not let the mucus flow out of the nose, but is acting in a defined way.

8.4.4 Other activity readings

The p[manner] layer makes -*e-a* the best candidate also when it comes to building verbs that denote the event of participating iteratively or habitually in different types of activities that can define to a bigger or smaller extent the personality of the external argument.

The following set of verbs involves participating in activities that allow us to deduce relevant properties of the character of the subject that can be used to define particular types of behaviours in the relation between human beings.

(44)   alarde 'ostentation' > alard-e-a 'to show off', broma 'joke' > brom-e-a 'to joke often', cháchara 'small talk' > chachar-e-a 'to chat', chantaje 'blackmail' > chantaj-e-a 'to blackmail', chapuza 'botched job' > chapuc-e-a 'to work badly', discurso 'speech' > discurs-e-a 'to talk to others as one gives a speech', fantasía 'fantasy' > fantas-e-a 'to imagine too much', flirt > flirt-e-a 'to flirt', homenaje 'homage' > homenaj-e-a 'to honor', lisonja 'flattery' > lisonj-e-a 'to flatter', matraca 'trouble, nuisance' > matraqu-e-a 'to annoy others', mueca 'facial gesture' > muequ-e-a 'to make faces', párrafo 'paragraph' > parraf-e-a 'to talk too much, with too many words', sermón 'sermon' > sermon-e-a 'to lecture others', trampa 'trick' > tramp-e-a 'to cheat'

Clearly, the previous list involves typical types of behaviour that are more or less closely connected with the concepts expressed by the bases. In other activity readings the manner component is not easy to identify, but what is preserved is the atelic aspect of the verb – also present in (44) – which expresses an activity

independently of whether the base noun is bounded or not. Frequently, this means that the event is interpreted iteratively, as involving a repetition in the behaviour.

(45) banquete 'banquet' > banquet-e-a 'to participate in banquets', borrón 'smudge' > borron-e-a 'to write with smudges', garabato 'scribble' > gara-bat-e-a 'to make scribbles', guerra 'war' > guerr-e-a 'to participate in many battles', gorgorito 'trill' > gorgorit-e-a 'to trill with the voice', labor 'work' > labor-e-a 'to work repeatedly', milagro 'miracle' > milagr-e-a 'to make miracles', novela 'novel' > novel-e-a 'to write novels', pachanga 'party' > pachangu-e-a 'to participate in parties', piropo 'catcall' > pirop-e-a 'to cat-call', plan 'plan' > plan-e-a 'to make plans', pleito 'lawsuit' > pleit-e-a 'to participate often in lawsuits', parranda 'party' > parrand-e-a 'to party often', reportaje 'report' > reportaj-e-a 'to work as a journalist specialised in reports', siesta > sest-e-a 'to sleep siesta', sílaba 'syllable' > silab-e-a 'to pronounce something separating each syllable'

In verbs like *gol* 'goal' > *gol-e-a* 'to score' and *golpe* 'blow' > *golp-e-a* 'to hit' speakers differ almost individually with respect to how much the repetition mean-ing must be involved. In the first case, dictionaries tend to specify that the iterative meaning 'to score repeatedly' is preferred among speakers, while in the second case the verb is classified as a semelfactive verb whose present form is typically interpreted as a succession of hits (Dowty 1979).

In some cases, the frequent repetition associated to verbs like those in (44) allows us to classify the subject as having a particular job or participating in a specific activity, such as *novelear* 'to write novels' or *reportajear* 'to write jour-nalistic report'. Sometimes, however, the base already expresses a particular type of activity or general practice, involving hobbies and other notions, so that the resulting verb expresses a particular manner of acting that is defined by the rules and conventions of that activity. These verbs require a participation in the event that is frequent enough to define it as characteristic of the subject.

(46) bricolaje 'do-it-yourself' > bricolaj-e-a 'to do housework oneself', cam-balache 'swap' > cambalach-e-a 'to participate in a swap event', cancan > cancan-e-a 'to dance cancan', estraperlo 'black market' > estraperl-e-a 'to participate in black market', marcado 'commerce' > mercad-e-a 'to trade', rap > rap-e-a 'to make rap music', rocanrol 'rock and roll' > rocanrol-e-a 'to make rock and roll music', rumba 'rumba' > rumb-e-a 'to dance rumba', surf 'surfin' > surf-e-a 'to surf', tango > tangu-e-a 'to dance the tango'

8.4.5 *Parasynthetic verbs*

In all the previous cases, there is no PP layer in the structure I propose, explain-ing that there is no prefix because all the relational structure present is spelled out by the suffix. However, we have also parasynthetic verbs that in my analysis

involve the projection of a PP layer that is spelled out by the prefix (cf. 31 above, repeated here as 47). The list of verbs in *-e-a* that are parasynthetic is in fact quite rich.

(47) a.   lanza 'spear' > a-lanc-e-a 'to hit with a spear', palo 'stick' > a-pal-e-a 'to hit someone with a stick', piedra 'stone' > a-pedr-e-a 'to stone', porra 'club' > a-porr-e-a 'to hit something bluntly', saeta 'arrow' > a-saet-e-a 'to shoot arrows at something', sol 'sun' > a-sol-e-a 'to expose to the sun'

b.   señor 'lord' > en-señor-e-a 'to take a territory as lord', perro 'dog' > a-perr-e-a 'to tire someone'

c.   letra 'letter' > de-letr-e-a 'to spell out'

d.   buche 'crop' > a-buch-e-a 'to boo', carro 'cart' > a-carr-e-a 'to carry'

Here we have contact verbs, generally involving violent events (47a), change of state verbs (47b), separation verbs (47c) and even some verbs that can be interpreted as instrumental (47d).

The biggest class is the one in (47a), which shares the property that the base and the internal argument must enter in contact, generally involving 'hitting someone with the base'. The list can actually be increased with other formations that express violent contact: *bofetada* 'slap' > *a-bofet-e-a* 'to slap repeatedly', which does involve some degree of allomorphy of the base, and more neologisms can be made from that pattern, involving a weapon or tool that comes in violent contact with other objects. I would include in this set also the verb *par* 'pair, couple' > *a-par-e-a* 'to pair an animal with another one', which also involves the notion of contact between two entities.

This case is unproblematic in my analysis: I propose that the a- prefix visible in such cases is the P that denotes contact between the boundaries of the two objects, something that obviously satisfies the meaning of 'hitting' in the vast majority of verbs, and that also allows the meaning of 'exposing something to sunlight' on the reasonable assumption that the sunrays are taken to be by extension the boundaries of the sun. (48) represents only the lower part of the structure.

(48)

```
        ...pP                 <----- -e-
       /     \
     DP        p
            /     \
           p       PP
                  /    \
                 P       KP        <--- pal-
                 a-     /    \
                      KP      NP
                           /      \
                          N       √1816
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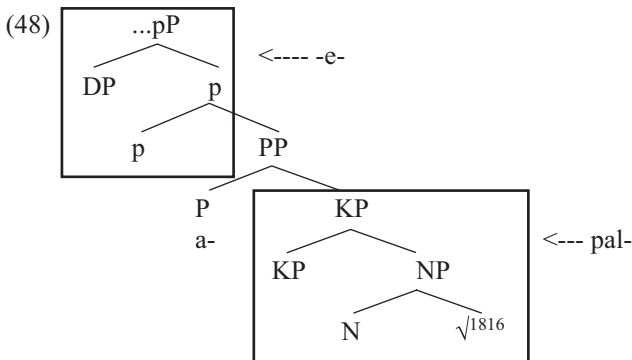
In the case of (47b) – the only such verb to the best of my knowledge – the compositional meaning is less straightforward to obtain, but I propose that its locative meaning is preserved: (47b) generally involves, as in (49), to act as the lord of a particular region; I propose that the relation between the internal argument and the base is locative, and that P specifies that relation indicating that the lord is generally in the land that it rules.

(49)   El rey se enseñoreó de aquellos territorios.
       the king SE in-lord-e-ed of those territories
       'The king acted as lord of those territories'

Similarly, I propose for the unique verb in (47c) that the prefix *de-* expresses a separation component which is used to specify that the event in question involves extracting each letter from the word and pronouncing it independently, by iteration; perhaps not by chance the English translation requires the particle *out*.

(50)   Juan deletreó esa palabra.
       Juan de-letter-e-ed that word
       'Juan spelled out that word'

8.5 A note on the relation of *-e-a* with verbal interfixes

For reasons of space and given that the focus of this monograph is on processes that create verbs from other bases I will not provide an analysis of the so-called interfixes underlined in (51; Lázaro Mora 1999; Portolés 1999; see Grandi 2008 for Italian). However, a few comments are in order given that they systematically combine with *-e-a*.

(51)   cant-a 'sing' > cant-<u>urr</u>-e-a 'to hum', bes-a 'kiss' > bes-<u>uqu</u>-e-a 'to smother
       with kisses', corr-e 'run' > corr-<u>et</u>-e-a 'to run around', tir-a 'throw, shoot' >
       tir-<u>ot</u>-e-a 'to shoot repeatedly at', com-e 'eat' > com-<u>isqu</u>-e-a 'to nibble'

These affixes combine with bases that are already verbs, and are generally described as introducing the notion that the event happens in an incomplete, iterative or irregular manner – hence, atelic notions (cf. Lázaro Mora 1999). They are clearly affixes that are related to specific manners of executing the general events that their bases denote: to hum is a particular way of singing where one does not complete any particular song, and hence denotes an activity, and to nibble is a particular way of eating which again does not consume the object that is eaten.

While I will not analyse or describe these affixes in full, I bring them up because the manner notion that is associated to them is an additional confirmation that *-e-a* is closely related to manners that build atelic events, to the point that the presence of affixes that are related to this meaning virtually forces the presence of *-e-a* and precludes suffixes like *-a*, *-ec-e*, *-ific-* and *-iz-a*. One can preliminarily speculate

that these interfixes should be considered affixes that select specific roots, below the point of insertion of the verbalisers, and which must be selected by p[manner]; treated in this way (52), the presence of this suffix would follow from the same premises that we have set in the analyses presented in this chapter.

(52)
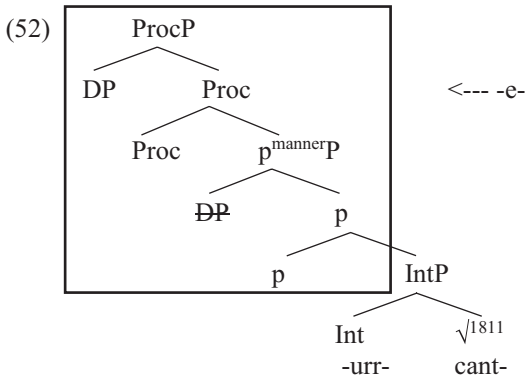
However, beyond mentioning that the role of verbal interfixes support the analysis of *-e-a* as a suffix that spells out a manner component, I have little to say at this point about these elements, which I leave for further study.

8.6 Variation, *-e-a* and *-a*

Before finishing this chapter, I want to address the existence of what seems to be a process of diachronic change that affects verbs ending in *-ear*. In recent years, a large number of neologisms involving *-ear* has been documented, in particular in American Spanish, although European Spanish has adopted many of these formations too. (53) illustrates this class of verbs.

(53)   bann-e-a 'to ban', boicot-e-a 'to boycott', carr-e-a 'to carry someone in a video game', cast-e-a 'to cast someone in a film role', chequ-e-a 'to check', cliqu-e-a 'to click', delet-e-a 'to delete', flash-e-a 'to flash, reset-e-a 'to reset', sampl-e-a 'to sample', test-e-a 'to test', tuit-e-a 'to tweet', whatsapp-e-a 'to whatsapp'

In the previous list, it is obvious that these verbs are loanword adaptations of English verbs, which have added *-e-a* to adapt them to Spanish. Their interesting grammatical property is that this group of verbs does not have the aspectual restrictions that the rest of verb classes in *-e-a* examined in this chapter have: they can be telic, they do not need to involve manners and they are not unergative. Everything is possible within the set of loanword verbs adapted with *-e-a* in Spanish, also in European varieties. Moreover, these verbs have a semantic and syntactic behaviour similar to the non parasynthetic *-a* verbs studied in §5.6.1, which are

creation or activity verbs with nominal bases designating the result objects or the activity performed. What is going on here?

The American variety is generally described as one where *-e-a* is becoming the default verbaliser (Morales Pettorino et al. 1969; Lang 1990; Beniers 2004; RAE & ASALE 2009: §8.3–8.5, Bohrn 2017, among many others), with a much higher degree of productivity than in European Spanish, where *-a* seems to be the default form that allows the highest number of verbal classes. The question that we have to ask ourselves is what means in a variety to become the default verbaliser.

My proposal is the following: the ending *-e-a* in (53) above is homophonous to the *-e-a* suffix that has been studied in this chapter, but corresponds to a different underlying syntactic configuration which does not have p[manner]. In particular, I propose that this *-e-a* form that appears in neologisms, often to adapt English loanwords, follows the syntactic structure in (54).

(54)

```
          ProcP
         /     \
      DP         Proc
               /      \
          Proc   ┌───────────────┐
          -e-    │     NP        │
                 │    /   \       │
                 │  N      √1769  │
                 └───────────────┘
```
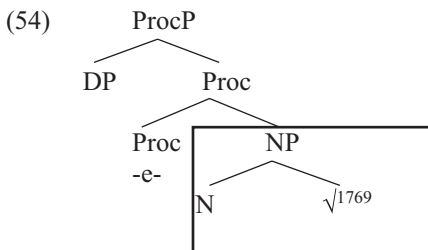
In other words: I propose that this *-e-a* sequence is identical to prefix-less *-a* verbalisations like the ones in §5.2.2, §5.3.5, §5.4.2, §5.5.2 or §5.6, with only a difference in spell out: instead of spelling out the verbal layer as ø, as it was the case with these verbs, this part is spelled out with /e/. It is perhaps not an accident that the default epenthetic vowel in Spanish is /e/, and is frequently used in loanword adaptation from English, as in (55).

(55)   standard > e̱stándar

If this account is on the right track and the *-e-a* sequence identified in these loanwords corresponds to the syntactic structure of the default verbaliser, the prediction I am making is that in the varieties that use this *-e-a* as the default verbaliser there should be parasynthetic verbs with adjectival bases that use *-e-a*. The reason is that the *-e-* element in this suffix only spells out verbal heads, so if PredP is present with an adjectival head a prefix will have to be used to spell Pred out. This prediction is borne out. In relation to this, RAE & ASALE (2009: §8.5c) documents one verb that in American Spanish is used with parasynthesis even if the base is adjectival; remember that my analysis precludes *-e-a* verbs from being parasynthetic with an adjectival base.

(56)   claro 'clear' > a-clar-e-a 'to become clear'

(56) is used in Colombia; the same section documents two more cases (*redondo* 'round' > *arredondear* and *malo* 'bad' > *amalear*) that I have been unable to document in corpora, and where I lack geographical information. I propose to associate the structure in (57) to this verb, with the default -e-a form where /e/ spells out what in other varieties is a ø verbaliser.

(57)

```
          ProcP
       ┌────┴────┐
      DP        Proc
             ┌───┴────┐
           Proc     PredP
           -e-    ┌───┴────┐
                 D̶P̶      Pred
                      ┌───┴────┐
                    Pred    DegP          <--- clar-
                    a-    ┌───┴────┐
                        Deg    ScaleP...
```
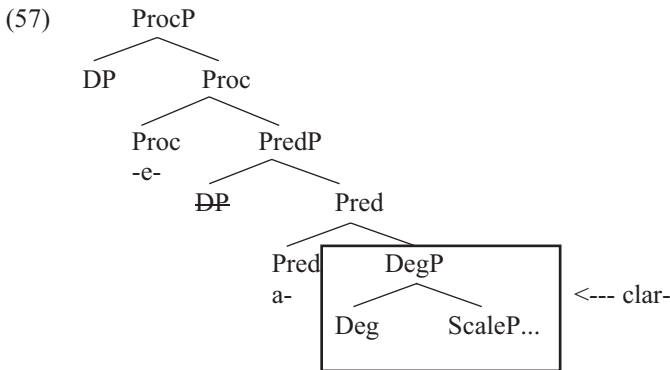
This proposal means, plain and simple, that the verbaliser that sounds -e- in Spanish actually corresponds to two distinct affixes, where the homophony is due to the nature of /e/ as the default vowel in Spanish.

(58) a. Manner/atelic -e-a, which spells out p[manner]
      b. Default -e-a, where -e- is an epenthetic vowel spelling out an otherwise ø verbaliser

The verbaliser that has been discussed in §8.3-§8.5 above is (58a), but there is room for a second verbaliser that is only homophonous to it and that is more or less productive depending on the variety, but seems to be general in adapting loanwords from English.

One could perhaps speculate that the origin of the verbaliser in (58b) as a default element might be related to the existence of the small set of change of state predicates in -e-a that were discussed in §8.2 above: marked as infrequent as they are, the existence of these verbalisations – presumably stored in Contemporary Spanish – might have been part of the trigger that has led some speakers to postulate a second -e-a sequence which can be productively used in telic predicates, and this -e-a sequence has become the default verbaliser in some varieties. Reasons of space prevent me from discussing this issue further; in order to explore this default affix in detail, this monograph should get much deeper into dialectal variation than it does, specifically to check the extension of this verbaliser and what type of correlations between verb types are attested with it.

I conclude this chapter here and move to the last verbaliser that will be examined in this monograph, -iz-a.

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9 Verbalisations in *-izar*

9.1 Overview of the chapter

This chapter discusses the suffix *-iz-*, which as we will see has a lot of parallelisms in terms of its morphological make up with the suffix *-e-* that was discussed in the previous chapter, but whose range of readings is much broader and less regular. This suffix is productive both with adjectives (1) and nouns (2), although with adjectives it takes as bases a high number of relational adjectives, which can be considered typical with this affix. With adjectives, *-iz-* typically produces verbalisations that represent change of state, with a strong tendency towards a telic construal; this is one of the biggest differences with *-e-*.

(1) a. peaton-al-iz-a
         pedestrian-adj-IZ-ThV, 'to make a road a pedestrian road'
     b. privat-iz-a
         private-IZ-ThV, 'to privatise'
     c. sal-in-iz-a
         sal-ine-IZ-ThV, 'to make something saline'

   There are no cases of parasynthesis in the deadjectival formations, as with *-e-*. With respect to the denominal verbalisations, the suffix tends to produce dynamic verbs, but also allows stative formations (2b) and has an extremely high range of readings that are reminiscent of those that are obtained with *-a* formations. Remember that *-e-a* does not produce stative verbs.

(2) a. oscar-iz-a
         Oscar-IZ-ThV, 'to give someone an Oscar'
     b. simbol-iz-a
         symbol-IZ-ThV, 'to symbolise'
     c. desert-iz-a
         desert-IZ-ThV, 'to turn something into a desert'
     d. vandal-iz-a
         vandal-iz-ThV, 'to act like a vandal with something'

As in the case of -e-, -iz- allows parasynthesis only with nominal bases.

(3) a.   a-terr-iz-a
            A-land-IZ-ThV, 'to land'
      b.   en-tron-iz-a
            in-throne-IZ-ThV, 'to put someone on the throne, to make someone a
            king'
      c.   en-coler-iz-a
            in-wrath-IZ-ThV, 'to make someone angry, to put wrath into
            someone'

Next to a number of spell out particularities, the challenge in analysing this suffix is that its behaviour shows that it includes the functional prepositional layer, precluding adjectival bases from showing parasynthesis, at the same time that it does not restrict the range of readings as much as -ec-e, -ific- or -e-. Our proposal to solve this issue will be that the suffix only specifies that its lower element is a relational head with stative semantics. This makes -iz- compatible with structures that contain p, Pred and Res.

Our analysis of this suffix will be parallel to the one proposed for -e-, with the minimal difference that this suffix includes in its spelled-out material a highly underspecified functional stative head which we will represent as Wood and Marantz' (2017) iotta head.

(4)   InitP
      /   \
   Init   ProcP
            /   \
          DP   Proc
                  /   \
               Proc   ιP
                         /   \
                      Res   ι

                              ι
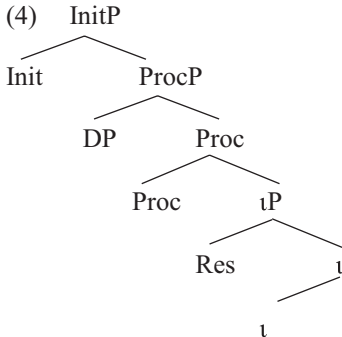
Similarly to -e-, (4) guarantees that prasynthesis will never emerge with adjectival bases. However, as the relational head is underspecified in its lexical entry, -iz- will be able to spell out structures with PredP, triggering change of state verbs, with pP, triggering different participant readings of noun bases, with p[manner], and also with ResP. This explains the broad range of readings of -iz-. The stative formations with this suffix are simply a product of the syntactic structure not projecting Init or Proc and just merging a Res head which, by the Superset Principle, the suffix -iz- can spell out.

(5)

```
        ResP                    <--- -iz-
       /    \
     Res   PredP
           /    \
        Pred    NP            <-- simbol-
               /  \
              N   √1791
```
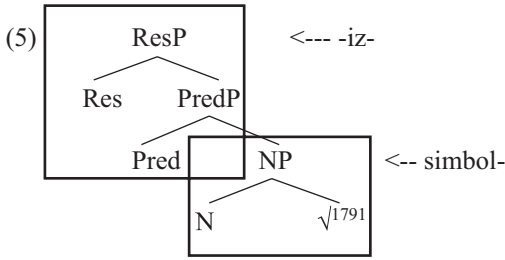
Finally, the few parasynthetic formations, all of them from nouns, involve projection of the lexical prepositional part; again, as in the case of *-e-*, we will see that these are conceptually well-defined and are only productive in certain processes of movement.

(6)

```
           ProcP                 <--- -iz-
          /     \
        DP      ProcP
               /     \
            Proc      pP
                     /   \
                   ~~DP~~  p
                         /  \
                        p   PP           <-- terr-
                           /   \
                          P    KP
                          a-  /   \
                             K    NP
                                 /   \
                                N   √1834
```
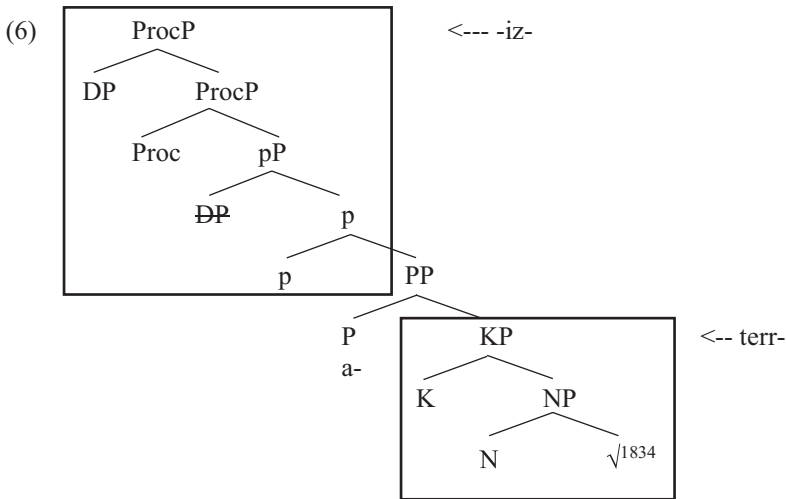
9.2 Deadjectival formations

The suffix *-iz-* historically is considered a cultism that becomes productive in Spanish around the 15th Century, even though some of its formations where already attested in the Middle Ages (Pharies 2002). Coming from the Greek *-ízein*, through Late Latin *-iza:re* (RAE & ASALE 2009: §8.10), it is considered the cultism whose patrimonial version is *-e-a*, with which in our analysis it shares some lexical properties. This suffix has been studied in some detail in several monographic works (Rebollo Torío 1991; Pena 1993; Rifón 1997; Múgica 2006; Martínez Linares 2012; Lavale Ortiz 2013; Fábregas 2015; Batiukova 2016, 2021) that emphasise the broad range of readings that it produces. Let us present the main facts with adjectival bases.

9.2.1 Change of state formations

The vast majority of formations with *-iz-* denote change of state verbs with the regular properties already noted in chapter 4, §4.2-§4.3: dynamic events where the internal argument undergoes a change of state and which can undergo the causative-inchoative alternation, only restricted by the conceptual semantics of the base. The most frequent type of adjective used as a base is relational adjectives, illustrated in (7). Note that adjectives denoting geographical origin are particularly frequent here.

(7) adverbial > adverbial-iz-a 'to make an adverb', africano 'African' > africanizar, alcalino 'alkaline' > alcalin-iz-a 'to make alkaline', antropomórfico 'anthropomorphic' > antropomorf-iz-a 'to anthropomorphise', árabe 'Arab' > arab-iz-a 'to arabise', arcaico 'archaic' > arca-iz-a 'to make archaic', automático 'automatic' > automat-iz-a 'to automatise', castellano 'Castilian' > castellan-iz-a 'to make Castilian', catalán 'Catalan' > catalan-iz-a 'to make Catalan', central 'central' > central-iz-a 'to centralise', civil > civil-iz-a 'to civilise', colectivo 'collective' > colectiv-iz-a 'to collectivise', comercial 'commercial' > comercial-iz-a 'to commercialise', conceptual 'conceptual' > conceptual-iz-a 'to conceptualise', constitucional 'constitutional' > constitucional-iz-a 'to constitutionalise', contextual 'contextual' > contextual-iz-a 'to contextualise', corpóreo 'bodily' > corpore-iz-a 'to turn into a body', criminal > criminal-iz-a 'to criminalise', criogénico 'cryogenic' > criogen-iz-a 'to cryogenise', cristiano 'Christian' > cristian-iz-a 'to Christianise', digital > digital-iz-a 'to digitalise', divino 'divine' > divin-iz-a 'to deify', económico 'economic' > econom-iz-a 'to economise', eléctrico 'electric' > electr-iz-a 'to excite', erótico 'erotic' > erot-iz-a 'to erotise', escolar 'school-related' > escolar-iz-a 'to school', español 'Spanish' > español-iz-a 'to make Spanish', estatal 'national' > estatal-iz-a 'to nationalise', estéril 'sterile' > esteril-iz-a 'to sterilise', europeo 'European' > europe-iz-a 'to make European', extranjero 'foreign' > extranjer-iz-a 'to make foreign', gallego 'Galician' > gallegu-iz-a 'to make Galician', germano 'Germanic' > german-iz-a 'to germanise', homogéneo 'homogeneous' > homogene-iz-a 'to homogenise', industrial > industrial-iz-a 'to industrialise', italiano 'Italian' > italian-iz-a 'to Italianise', internacional 'international' > internacional-iz-a 'to internationalise', judicial > judicial-iz-a 'to make judicial', labial > labial-iz-a 'to labialise', laico 'secular' > laic-iz-a 'to secularise', legal > legal-iz-a 'to legalise', militar > militar-iz-a 'to militarise', mundial 'global' > mundial-iz-a 'to globalise', occidental 'Western' > occidental-iz-a 'to Westernise', oficial 'official' > oficial-iz-a 'to make official', peatonal 'pedestrian' > peatonal-iz-a 'to make pedestrian', personal > personal-iz-a 'to personalise', político 'political' > polit-iz-a 'to make political', potable > potabil-iz-a 'to potabilise', profesional 'professional' > profesional-iz-a 'to professionalise', real > real-iz-a 'to realise', regional 'regional' > regional-iz-a 'to regionalise', singular > singular-iz-a 'to singularise', teatral 'theatrical' > teatral-iz-a

'to dramatise', sonoro 'voiced' > sonor-iz-a 'to voice', urbano 'urban' >
urban-iz-a 'to urbanise', verbal > verbal-iz-a 'to verbalise'

As can be seen, with the exception of the suffix *-ico* that is almost system-
atically removed from the verb (*económ-ico* > *econom-iz-a*), the base preserves
the adjectival relational suffixes on the base: *industria* 'industry' > *industri-al* >
industri-al-iz-a 'to industrialise', *urbe* 'city' > *urb-ano* > *urb-an-iz-a* 'to urbanise'.
   Other types of adjectives are less frequent, but this suffix also takes qualifying
adjectives (8) and even adverbial adjectives (9) as its base.

(8) agil 'agile' > agil-iz-a 'to speed up', agudo 'acute' > agud-iz-a 'to worsen',
    ameno 'nice' > amen-iz-a 'to make nicer', compatible > compatibil-iz-a
    'to make compatible', concreto 'concrete' > concret-iz-a 'to make con-
    crete', culpable 'guilty' > culpabil-iz-a 'to make guilty', especial 'special' >
    especial-iz-a 'to specialise', estable 'stable' > estabil-iz-a 'to make stable',
    estándar 'standard' > estandar-iz-a 'to standardise', estéril 'sterile' > esteril-
    iz-a 'sterilise', fiel 'loyal' > fidel-iz-a 'to make loyal', general > general-iz-a
    'to generalise', hostil 'hostile' > hostil-iz-a 'to make hostile', idiota 'idiotic'
    > idiot-iz-a 'to make idiotic', independiente 'independent' > independ-iz-a
    'to get autonomy', infantil 'childish' > infantil-iz-a 'to infantilise', máximo
    'maxim' > maxim-iz-a 'to maximise', mínimo 'minimal' > minim-iz-a 'to
    minimise', moderno 'modern' > modern-iz-a 'to modernise', patente 'obvi-
    ous' > patent-iz-a 'to make obvious', radical > radical-iz-a 'to radicalise',
    ridículo 'ridiculous' > ridicul-iz-a 'to ridicule', suave 'soft' > suav-iz-a 'to
    soften', sutil 'subtle' > sutil-iz-a 'to make subtle', uniforme 'uniform' > uni-
    form-iz-a 'to standardise'
(9) actual 'present' > actual-iz-a 'to update', anual 'annual' > anual-iz-a 'to make
    annual', mensual 'monthly' > mensual-iz-a 'to make monthly', temporal >
    temporal-iz-a 'to make temporal'

Many adjectival suffixes are preserved here, but note that *-nte* is dropped: *inde-
pend-ie-nte* > *independ-iz-a*.
   Interestingly, the aspectual properties of these change of state formations are
those of a telic achievement systematically. This is expected when the base adjec-
tive is a relational adjective, as these lack scales and degrees and, like nouns,
involve yes/no properties (10–11) (Bosque 1993).

(10) #más militar
       more militar
(11) El gobierno militarizó la zona durante dos meses.
      the government militarised the area for two months
      'The government made the area military for two months'

It is also true that some qualifying adjectives tend to be interpreted as relational adjectives with *-iz-*. For instance, *sonoro* 'resounding' is used in *sonorizar* 'to voice' in its relational adjective sense 'voiced' (used in phonology, in opposition to voiceless sounds), and *agudo* 'sharp' is used in *agudizar* 'to worsen' in its medical term, an acute or serious disease. However, this extends also to the few cases where the base is qualifying and so is the interpretation in the change of state, as in (12), (13).

(12)   El producto suavizó la camisa durante dos horas.
       the product soft-is-ed the shirt for two hours
       'The product made the shirt soft for two hours' (not 'The product made the shirt softer and softer for two hours')
(13)   Juan agilizó el trámite durante dos horas.
       Juan agile-ise-ed the procedure for two hours
       'Juan made the procedure be fast for two hours' (not 'The procedure became faster and faster for two hours')

In the context of the analysis made in this monograph, this strongly suggests that this suffix prefers bases which do not project DegP and ScaleP. Note that even if etymologically superlative bases are documented here (*minimizar* 'minimise', *maximizar* 'maximise', *optimizar* 'optimise'), the bases are elative adjectives in Spanish that cannot be used as superlatives.

This might explain that relational adjectives appear so often with these bases, because relational adjectives lack Deg and Scale, and in some analyses (e.g., Fábregas 2020) they are reduced to KP projections where the meaning is just that the adjective denotes some type of relation with the concept expressed by the nominal base.

(14)
```
              KP
            /    \
          K    ┌──────────────┐
          -al   │      NP       │    <--- industri-
               │    /    \      │
               │   N    √1918   │
               └──────────────┘
```
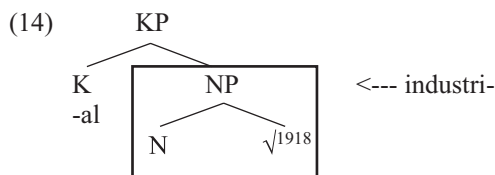
If *-iz-* heads a structure that impoverishes the relational structure below PredP, forcing Deg and Scale to be absent, we might be able to give an account of a puzzling property of this suffix: frequently, although the base is a relational adjective, the interpretation of the verb seems to build over the noun base that underlies the relational adjective. This is the case in the verbs in (15), where the segmented adjectival affix seems semantically transparent.

(15)   acuático 'aquatic' > acuat-iz-a 'to land on water', concepto 'concept' > con-
        cept-ual-iz-a 'to make something a concept', enfático 'emphatic' > enfat-
        iz-a 'to put emphasis', escuela 'school' > escol-ar-iz-a 'to school', foco
        'spotlight' > focal-iz-a 'to put under the spotlight', hipnótico 'hypnotic' >
        hipnot-iz-a 'to use hypnosis with someone', inicio 'start' > inici-al-iz-a 'to
        start', lugar 'place' > loc-al-iz-a 'to localise', mente 'mind' > ment-al-iz-a
        'to make aware of, to put in someone's mind', polo 'pole, extreme' > pol-
        ar-iz-a 'to polarise', punto 'point' > punt-ual-iz-a 'to point out', traumático
        'traumatic' > traumat-iz-a 'to give a trauma to someone'

Another example that could be added to this group is *visualizar* 'to visualise',
where the base *visual* 'visual' does not reflect the meaning of the verb but the
related nouns *vista* 'sight' or the verb *ver* 'see' seem more appropriate to para-
phrase the denotation of the verb; however, the base is difficult to identify here.
The cases in (15) often have a locative semantics, as many of the denominal for-
mations in -*iz*- that we will revise in §9.3 below, and thus the adjectival shape is
semantically vacuous.

This semantic situation is reminiscent of typical situations with relational
adjectives, which still denote (relations with) the classes of entities of their nomi-
nal bases and not qualities based on those classes of entities. This follows from
the presence of only a KP layer in them, without a PP layer that gives conceptual
content to that relation, and is visible in well-studied bracketing paradoxes such
as those in (16) (see Newell 2021 for a recent overview).

(16)   anti-cleric-al
        anti-clergy-al, 'anticlerical'

In (16), the apparent paradox is that the semantic interpretation is one where
the adjective anticlerical is interpreted as 'opposed to the clergy', where the base
is semantically the noun that underlies the adjective. However, the prefix formally
combines with the adjective, not the noun, as **anti-clergy* is not an attested word.
The paradox dissolves if -*al* is a manifestation of a KP layer which is semantically
transparent because it does not add conceptual semantics to the meaning of the
base noun.

I propose that the cases in (15) are instances of the same situation: the base
is formally an adjective which often has the shape of a relational adjective
because the base below PredP reduces to only the projection of KP exclud-
ing PP, ScaleP and DegP. Lacking these projections means lacking conceptual
content that differentiates the adjective from the base noun and also scale and
degree information that would allow under certain conditions for durative and
atelic readings of the change of state. (17) represents the relevant structure for
these bases.

(17)
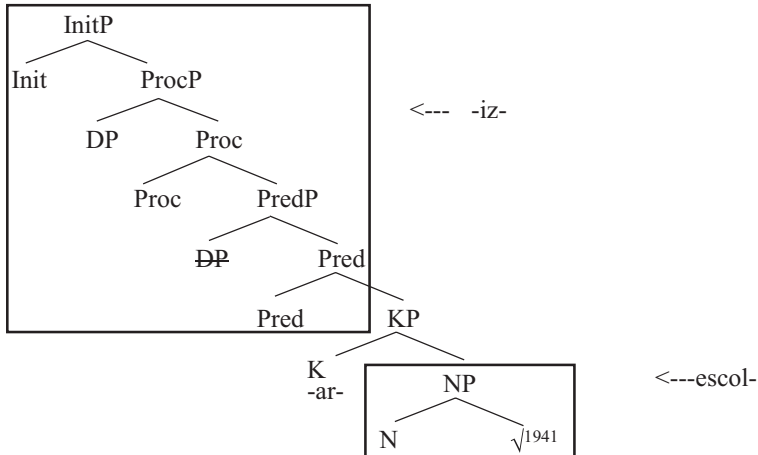
At this point, the question is whether KP as the highest projection of the base is a general property of -*iz*- or should be restricted to relational adjectival bases. I would like to suggest that the former is true, and that the structure lexicalised with -*iz*- is one where the relational structure is necessarily impoverished, with (at least) Deg and Scale/Path missing from the syntactic representation. More than that, I would like to suggest that the structures involving -*iz*- regularly remove also the PP layer from the projection of the base, which explains that (as we will see, cf. §9.4) the parasynthetic cases with nominal bases are very few and idiosyncratic.

Let me present here some arguments for the claim I just made, namely that -*iz*- reduces the relational structure to KP below the pP/PredP layer. First of all, if -*iz*- asks for a KP, and K is spelled out as a suffix building relational adjectives, we explain the tendency of this suffix for relational adjectives, which is higher than the one exhibited by -*ific*- (chapter 8), and also that even with qualifying adjectives the suffix tends to select readings that are relational and not descriptive. Second, this also explains why it is frequently the case that the adjectival suffix is transparent with respect to the base. Beyond the cases in (17), I am aware of another case where the suffix does not seem to be interpretable: *conta-ble* 'count-able' > *conta-bil-iz-a*, 'to count' (not 'to make something countable'). This is again expected if the layer PP that in this case would give the adjective a modal semantics is missing from the syntactic structure and the adjective is reduced to a KP layer lacking conceptual content.

Beyond this, I believe that the proposal that -*iz*- prefers structures that are not bigger than KP for the base has good chances to account for a puzzling property of this suffix from a synchronic perspective: it is often the case that the suffix forces

the presence of the relational adjective suffix -al with bases that otherwise do not carry it. (18) cites a few of such examples:

(18)   externo 'external' > extern-al-iz-a 'to externalise', sacro 'holly' > sacr-al-iz-a 'to sacralise', médico 'medical' > medic-al-iz-a 'to medicalise'

For some speakers that do not allow the adjective *neutr-al* (as opposed to *neu-tro* 'neuter'), *neutr-al-iz-a* 'to neutralise' is another example of this same situation. Even though one could argue that the extra morpheme might be coming from a foreign origin of these verbs, the question from my perspective is why speakers do not adopt then adjectives ending in -al for the bases in (18) or why they do not adapt the verbs removing the affix; note that in the three cases the meaning is compositional. In my analysis, the presence of the extra affix can be treated as an imposition from -iz- that a KP layer is projected but PP, Scale and Deg are missing, making the K head be spelled out as -al.

9.2.2 *The morphophonology of -iz-*

RAE & ASALE (2009: §8.10d) note that -iz- triggers frequently the haplology of the base, in several cases, especially when the base should end in the suffix -ico, also frequently used in forming relational adjectives. We have seen this situation before, in the case of -ific-, where I argued that the reason is that this suffix spells out down to KP, including pP and PP, making thus impossible that any parasynthetic formation emerges with it. Of course, I cannot claim that the same process takes place in -iz-, because my claim is that the suffix does not spell out P or K, as I have just argued.

When one considers in detail the pattern of facts, however, one finds crucial differences between this haplology and the haplology of -ific-. For starters, -ific- rejects any relational adjective suffix, while we have just seen that -iz- preserves -ano and -al, among others. Secondly, -iz- does not systematically remove -ico, as formations like (19) show.

(19)   sín-ico 'sinic' > sin-ic-iz-a 'to sinicise', étn-ico 'ethnic' > etn-ic-iz-a 'to ethnicise', clás-ico 'classic' > clas-ic-iz-a 'to classicise'

Third, what is cancelled is not a whole suffix, but the final part of the sequence, as can be seen in (20).

(20)   drama > dram-ático 'dramatic' > dram-at-iz-a 'dramatise'

I believe that the haplology caused by -iz- is phonologically triggered, not structurally triggered, and when it happens it tries to avoid a sequence of two /θ/ sounds in adjacent syllables. The examples in (19) show that when the suffix is not cancelled, the addition of -iz- causes spirantisation of the final /k/. A similar

consideration can be made about *independ-ie-nte > independ-iz-a*, where the suffix *-nte* would have spirantised in front of /i/, as (21) shows:

(21)   independ-ie-nt(e) > independ-e-nc-ia 'independence'

What I propose triggers the haplology is that the base ends in a segment that could spirantise. In nominal bases, *-ista* also disappears in (22), again a suffix ending in /t/.

(22)   protagon-ista 'protagonist' > protagon-iz-a 'to be the protagonist', antagon-
       ista 'antagonist'   > antagon-iz-a 'to antagonise'

Once this haplology is taken into account, in fact, a verb like *profund-iz-a* 'to get deeper into some issue', which RAE & ASALE (2009: §8.10j) treat as an irregular deadjectival formation not meaning 'to make something deep(er)' becomes treatable as a nominal formation, proposing that the base is actually the abstract noun *profund-idad* 'depth' following haplology of *-idad*, again a unit ending in a /d/ sound that is subject to spirantisation is front of palatal sounds:

(23)   ascend-e 'to ascend' > ascens-ión 'ascent'

9.2.3 Proposal

I therefore propose that, once the phonologically triggered haplological processes are factored out, the structure of change of state predicates with *-iz-* coming from adjectives correspond to (24), where KP is the only layer projected, both when the base already is a relational adjective and when it is other types of adjectives. (24) represents the causative verbal base; as in other cases Init is missing in the inchoative version and PredP in the complement of Proc is interpreted as a result state.

(24)
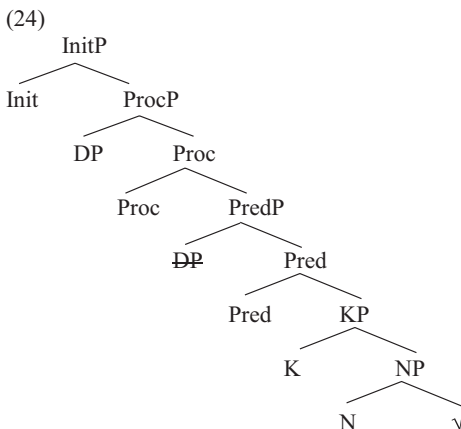
From the perspective of -iz-, my proposal is that it identifies the set Init-Proc-Pred, because *-iz-* has as its lower element in the lexical entry an iotta phrase representing an underspecified relational stative head, something which allows Pred to be identified by it, as we have seen Pred is a manifestation of iotta that contextually is equivalent to p or Res.

9.3 Nominal bases without a prefix

Let us now move to the range of readings with nominal bases with this suffix. We will see that they are reminiscent of the readings that are obtained with *-a*; the reason in our case is a combination of the base lacking a PP layer that determines the interpretation of the base noun and the underspecified nature of iotta, which makes the lower element of the entry of *-iz-* be interpreted as Pred, p, p[manner] or Res, alternatively.

9.3.1 Change of state verbs

The verbs in (25) obtain a change of state reading where there is a process that gives the internal argument some salient conceptual property of the base noun, in parallel to those discussed in §5.2. As expected, all these change of state verbs are telic once the plurality or mass nature of the argument is controlled for.

(25) alegoría 'allegory' > alegor-iz-a 'to turn something into an allegory', animal > animal-iz-a 'to turn into an animal', átomo 'atom' > atom-iz-a 'to turn something into atoms', bárbaro 'barbarian' > barbar-iz-a 'to barbarise', caramelo 'caramel' > caramel-iz-a 'to caramelise', carbón 'coal' > carbon-iz-a 'to turn into coal', caricatura 'charicature' > caricatur-iz-a 'to turn into a charicature', colonia 'colony' > colon-iz-a 'to colonise', cristal 'chrystal' > cristal-iz-a 'to chrystalise', demonio 'demon' > demon-iz-a 'to demonise', derecha 'right-wing' > derech-iz-a 'to become someone of right-wing', desierto 'dessert' > desert-iz-a 'to become a dessert', esclavo 'slave' > esclav-iz-a 'to become a slave', guion 'screenplay' > guion-iz-a 'to turn into a screenplay', ion 'ion' > ion-iz-a 'to become an ion', literatura 'literature' > literatur-iz-a 'to become dramatic like literature', metal 'metal' > metal-iz-a 'to become metal', minatura 'miniature' > miniatur-iz-a 'to become a miniature', moneda 'coin' > monet-iz-a 'to become profitable', prototipo 'prototype' > prototip-iz-a 'to become the prototype', robot > robot-iz-a 'to become a robot', Satán > satan-iz-a 'to satanise'

My proposal is that the structure of these verbalisations is on a par to the ones with an adjectival base – remember that in many adjectival formations the

interpretation was a nominal one anyways – (26). In these cases, the K layer is spelled out as zero.

(26)

```
        ProcP
       /    \
     DP     Proc
           /    \
        Proc    PredP      <--- -iz-
               /     \
             D̶P̶     Pred
                   /    \
                Pred    KP
                       /   \
                      K     NP
                      ø    /   \
                          N    √1956
```
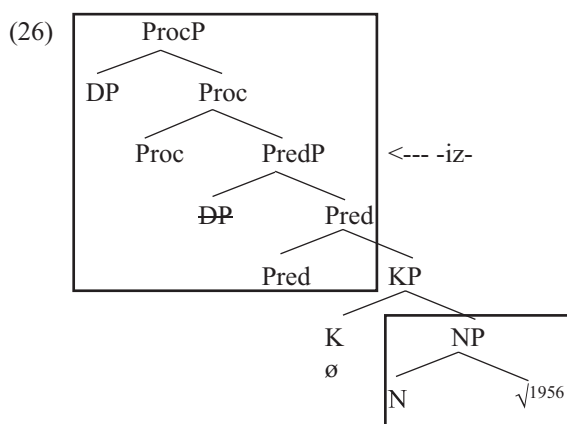
My proposal for the denominal formations is that, like in the case of deadjectival ones, the preferred structure for *-iz-* is that its lowest head selects a KP. I will crucially extend this type of analysis to denominal verbs where the base is interpreted as a participant, as it was the case for the formally deadjectival verbs in (15). One can in fact propose that the verbs in (15) are structurally identical to (26) – pace the specific manifestation of the iotta phrase – with the only difference that in (15) K is manifested with an overt affix and in the formally denominal cases K is spelled out as zero.

9.3.2 Attributive readings

There is a fair number of verbalisations with *-iz-* that, like some of the *-a* verbalisations (§4.4.3), are stative and express a 'be N' semantics.

(27)   antagon-ista 'antagonist' > antagon-iz-a 'to be the enemy of', espónsor 'sponsor' > esponsor-iz-a 'to be the sponsor of', obstáculo 'obstacle' > obstacul-iz-a 'to be an obstacle for', protagon-ista 'protagonist' > protagon-iz-a 'to be the protagonist of', rival 'rival' > rival-iz-a 'to be a rival of', símbolo 'symbol' > simbol-iz-a 'to be the symbol of'

Remember that there are no such stative verbalisations with *ec-e*, *-ific-* or *-e-a*. My proposal is that (27) should be treated as containing the structure in (28), where the verbalising structure reduces to ResP, as a relational head that establishes a stative subject-argument relation between a participant (the subject) and

a predicate, here defined by an NP which is relational and introduces the direct object of these verbs (29).

(28)

```
              EvtP
            /      \
        DP          Evt
                  /      \
              Evt          ResP
              -a-        /      \
                       DP̶        Res
                              /        \
                          Res    ┌──────────────────┐
                          -iz-   │      ...NP        │  <--- simbol-
                                 │    /      \       │
                                 │  N      √1960    │
                                 └──────────────────┘
```
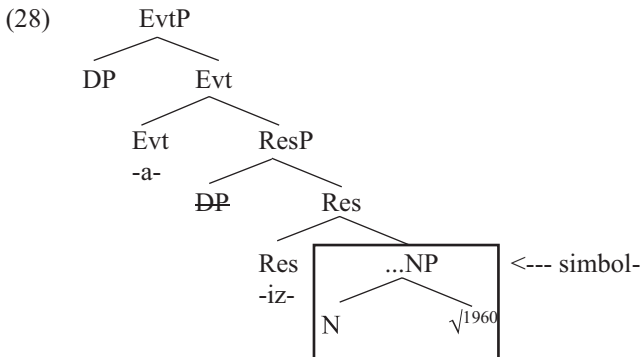
(29)   El blanco simboliza la pureza.
       the white symbolises the purity
       'White symbolises purity'

In (28), *-iz-* spells out ResP because Res is a manifestation of iotta phrase, which is the head that is represented as the lowest bound in the affix' lexical entry. Beyond this, the presence of these stative cases involves a reduction of the material spelled out by the suffix to its lowest constituent, by applying the Superset Principle.

Note that *-ec-e* cannot have stative construals because it contains a PathP structure that is incompatible with a structure that lacks Proc. In the case of *-ific-*, the structure specifies the spelled out constituent as including pP specifically: this blocks stative cases, because in order to verbalise that structure without Proc, Init has to be the head introducing pP and then we are in the situation, discussed in Chapter 5, where two consecutive heads have both a stative relational construal. Finally, a similar situation makes *-e-a* unable to trigger stative structures: its entry specifies the lowest element in the spelled-out material as p[manner], which semantically forces the presence of a process that allows to apply the manner, and of Init in order to license an external argument that controls the event.

9.3.3 Manner readings

There is also a non-negligible set of verbs whose base is interpreted as defining a manner of acting (§8.3), here always corresponding to the description of a kind of animate entity.

(30)   vándalo 'vandal' > vandal-iz-a 'to vandalise', caníbal 'cannibal' > canibal-iz-a 'to cannibalise', experto 'expert' > expert-iz-a 'to act as an expert', profeta 'prophet' > profet-iz-a 'to act as a prophet', tirano 'tirant' > tiran-iz-a 'to act as a tirant', vampiro 'vampire' > vampir-iz-a 'to act as a vampire'

It is tempting to add to this group the verb *Pasteur* > *pasteur-iz-a* 'to pauster-ise', to the extent that its base is a proper name associated to a particular way of treating some edible products, and the verb denotes performing that procedure, that is, acting in a manner defined by the individual designed by the base.

As in other cases involving manners and instruments, I propose that the manifestation of iotta as a specific relational head is p[manner] in these verbs. As in the parasynthetic verbs in -*a* (§5.5) and the verbs in -*e-a*, I propose that the p[manner] projection merges in its specifier the entity affected by that particular manner, when there is one.

(31)   a. EvtP

b.   Juan vampir-iz-ó a María.
       Juan vampire-is-ed DOM María
       'Juan acted like a vampire with María'

9.3.4 *Instrumental verbs*

The same structure involving p[manner] predicts that there should be a number of verbs involving instruments too (§5.3). The list in (32) shows some of the clearest cases.

(32)   computadora 'computer' > computador-iz-a 'to use a computer', dolar > dolar-iz-a 'to use dollars as coin', ironía 'irony' > iron-iz-a 'to use irony', máquina 'machine' > maquin-iz-a 'to use machines', metáfora 'metaphor' > metafor-iz-a 'to use metaphors', monitor > monitor-iz-a 'to use a monitor'

9.3.5 *Locatio*

The absence of PP layers in the nominal constructions makes it expected that with only the presence of the functional pP layer, a broad range of conceptual readings

where the base noun is a participant is obtained, as in §5.3. The first of these classes is the locatio one, which involves a semantics along the lines of 'to put something in N'. As in the case of *-ec-e* and *-e-a*, the locative verbs are established without a syntactic definition of the endstate which should relate the two objects, that is, how one is placed with respect to the other, which in the case of -iz- means that the verbs tend to get a metaphorical reading where the noun describes a situation or state rather than a spatial region. The only verb that, to the best of my knowledge, has a standard spatial region interpretation is *hospital > hospital-iz-a* 'to put in a hospital'. The rest of verbs (33) designate states where an entity is moved (anarchy, harmony), different types of structures that organise or arrange items in sequences (calendars, hierarchies, categories) or are used metaphorically (bunker).

(33)   anarquía 'anarchy' > anarqu-iz-a 'to put something into anarchy', armonía 'harmony' > armon-iz-a 'to put in harmony', bunker > bunker-iz-a 'to go to a bunker', calendario 'calendar' > calendar-iz-a 'to put in a calendar', canon 'canon' > canon-iz-a 'to canonise', categoría 'category' > categor-iz-a 'to arrange in categories', Islam > Islam-iz-a 'to Islamise', jerarquía 'hierarchy' > jerarqu-iz-a 'to arrange in a hierarchy', memoria 'memory' > memor-iz-a 'to store in memory'.

The structure that I propose for these formations is represented in (34), where I propose that KP is also included; this allows me to treat the verbs in (33) on a par with the locatio-interpreted verbs in (15), which on the surface are spelled out as relational adjectives.

(34)
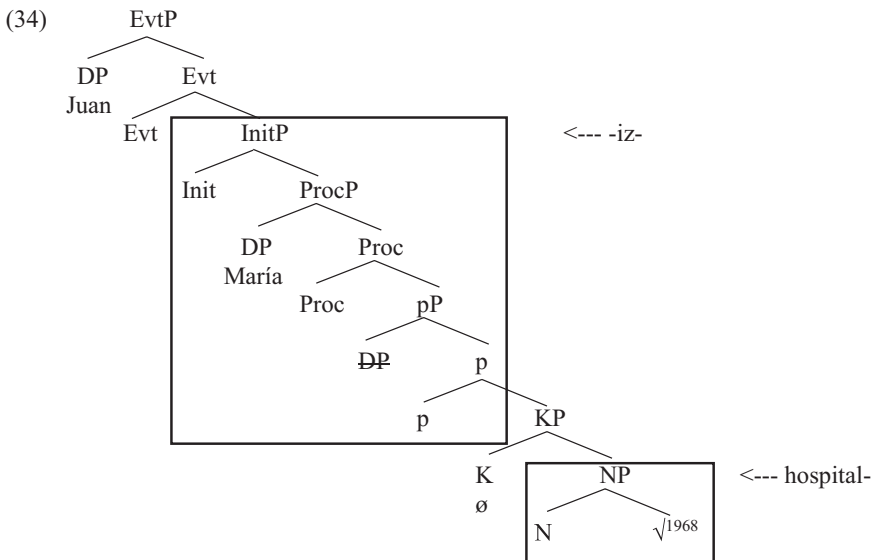
9.3.6 *Locatum and transfer*

The verbs in (35) are easily interpreted as locatum verbs (cf. §5.3):

(35)   aluminio 'aluminium' > alumin-iz-a 'to cover with aluminium', final > final-iz-a 'to put an end to something', ozono 'ozone' > ozon-iz-a 'to add ozone to something', parámetro 'parameter' > parametr-iz-a 'to set parameters on something', polen 'pollen' > polin-iz-a 'to put pollen on the flower', señal 'signal' > señal-iz-a 'to put signals on a place'

The notion of transfer, rather than locatum, is present in (36). Note that some of these verbs, like *cloroform-iz-a*, could also be interpreted as an instrumental 'to use chlororphorm with someone', but its telic nature suggests that a transfer analysis is more appropriate here.

(36)   anatema 'anathema' > anatem-iz-a 'to associate anathema to someone', cloromorfo 'chloromorph' > cloroform-iz-a 'to give chloromorph to someone', cultura 'culture' > cultur-iz-a 'to give culture to someone', estigma 'stigma' > estigmat-iz-a 'to stigmatise', evangelio 'gospell' > evangel-iz-a 'to transmit the gospel to someone', garant-ía 'guarantee' > garant-iz-a 'to guarantee', moral 'morality' > moral-iz-a 'to teach morality', narcótico 'narcotics' > narcot-iz-a 'to give narcotics to someone', oscar 'Oscar' > oscar-iz-a 'to give an Oscar', moral 'morality' > moral-iz-a 'to teach morality', parálisis 'paralysis' > paral-iz-a 'to produce paralysis on something', vasectomía 'vasectomy' > vasectom-iz-a 'to give someone a vasectomy', vehículo 'vehicle' > vehicul-iz-a 'to give someone a vehicle for something'

As with other verbalisers, like the ones in verbs in -*a*, the notion of transfer is interpreted as 'causing N on someone' rather than 'putting N' or 'giving N' when the base noun is a psychological state, as in (37).

(37)   escándalo 'scandal' > escandal-iz-a 'to cause scandal', horror > horror-iz-a 'to produce horror to someone', rubor 'blush' > rubor-iz-a 'to produce blush on someone', vigor > vigor-iz-a 'to vigorise'

As in the other cases of locatum verbs, I propose that the same structure as in locatio cases underlies these formations.

9.3.7 *Possessive verbs*

Stative verbs with -*iz*- are not exclusive of predicatively interpreted bases; the locative subset also has a few cases of stative verbs with a semantics parallel to 'to have N' (cf. §5.4.2).

(38)   hegemonía 'hegemony' > hegemon-iz-a 'to have hegemony over', monop-
       olio 'monopoly' > monopol-iz-a 'to monopolise, to have the monopoly of
       something', simpatía 'friendliness, affection' > simpat-iz-a 'to have affec-
       tion for someone'

On a par with §9.3.2 I take these stative cases to be a manifestation of the Res
head directly merged with Evt. As in the case of *-a* verbalisations, I take the pos-
sessive/transfer reading to derive from the constitutive quale of the base noun, in
contrast to the formal quale, which produces the predicative reading.

(39)
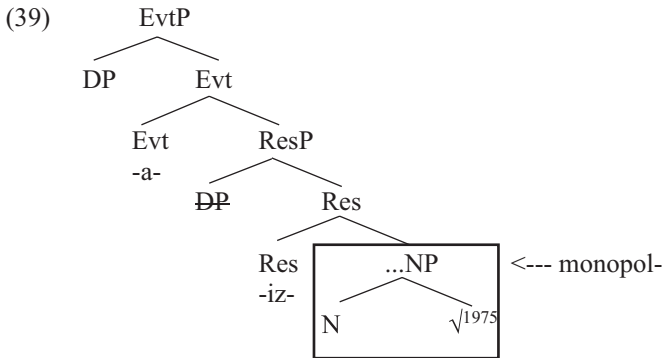
9.3.8 Created object and other readings

In essence, the expected behaviour of *-iz-* verbs with nominal bases is the one
of zero verbalisations, because PP is missing and the iotta phrase does not force
one of the relational stative heads. This means that we expect to find the type of
broader set of semantic interpretations that we also saw with *-a* (§5.6). The num-
ber of creation verbs is not high, but (40) gives a few cases.

(40)   análisis 'analysis' > anal-iz-a 'to make an analysis of', fotosíntesis 'photo-
       synthesis' > fotosintet-iz-a 'to do photosynthesis', teoría 'theory' > teor-iz-a
       'to theorise'

Note that, as in the creation verbs discussed in chapter 6, the aspectual prop-
erties of the resulting verb depend on the boundedness of the base. An analysis
is a bound entity that has a natural culmination, so the verb 'to analyse' is telic;
theories are unbound entities, and consequently 'to theorise' is also telic.
    Finally, the absence of lexical and syntactic restrictions that close the inter-
pretation of the verb in the case of *-iz-* produce a number of other formations
whose meaning is variable or requires more complex semantic paraphrases.
(41) gives some examples that can be paraphrased as 'to determine N' or 'to

control N', next to other more frequent interpretations, such as instruments, transfer, etc.

(41) alfabeto 'alphabet' > alfabet-iz-a 'to order according to the alphabet' or 'to teach the alphabet to someone', carácter 'character, personality' > carac-ter-iz-a 'to adopt the character of others' or 'to identify the character of someone' or 'to be characteristic of someone', clima 'climate' > climat-iz-a 'to control the climate of something', lema 'lemma' > lemat-iz-a 'to order according to the lemma' or 'to determine the lemma', sintonía 'tun-ing' > sinton-iz-a 'to control the tuning', tiempo 'time' > tempor-iz-a 'to determine or to control the time of a process', valor 'value' > valor-iz-a 'to determine the value of something'

There is a final prefix-less verb that we want to highlight in this context: *útil* 'utensil, tool' > *util-iz-a* 'to use as a tool'. In our analysis, in contrast to the most habitual claim (e.g., RAE & ASALE 2009: §8.10), this verb is not derived from the adjectival base corresponding to useful, but from the noun for 'tool'. The reason is that treating it as an adjectival base would produce the only deadjectival verb in -*iz*- which is stubbornly atelic. In my analysis, this verb is close to instru-mental verbs, only that its base denotes the hyperonym of all types of tools, and the internal argument is interpreted as the tool used; the base, in brief, can be taken as a descriptive modifier that explains how the internal argument is being used.

9.4 Parasynthetic verbs

Thus, to sum up, my claim is that -*iz*- spells out a structure which is similar to the one that -*e-a* has, only that the lower bound is an iotta phrase that makes it com-patible with four main configurations (42).

(42) a.   [Init [Proc [Pred]]]
      b.   [Init [Proc [p]]]
      c.   [Init [Proc [pmanner]]]
      d.   [Res]

My second claim, based in particular on the puzzling behaviour of deadjec-tival -*iz*- verbs (preference for relational adjectives, semantic transparency of the adjectival suffix even in many qualifying adjectives, unusual -*al* morphemes, etc.) is that the syntactic configuration underlying the structures tends to project the base only up to KP, so that KP is directly selected by the iotta head.

This means that I treat the parasynthetic cases as exceptional. As in other cases, the presence of a parasynthetic prefix with nominal bases means that PP is being projected, but in this suffix I believe that parasynthetic formations should be viewed as exceptional. For starters, the only series with some productivity is the

one in (43), where there is consensus that it actually involves one basic verb (the first) which has been used as a model to create the rest.

(43)   tierra 'land' > a-terr-iz-a 'to land', luna 'moon' > a-lun-iz-a 'to land on the moon', mar 'sea' > a-mer-iz-a 'to land on sea', marte 'Mars' > a-mart-iz-a 'to land on Mars'

In some of these formations, in fact, *-iz-* is kicked out in alternative formations; the Royal Academy dictionary recommends (44) for the verb corresponding to 'to land on sea', as it considers it more broadly documented (note that the form with *-iz-* requires an allomorph of the base that suggests its French origin, *mer* 'sea').

(44)   mar 'sea' > a-mar-a 'to land on sea'

In any case, (43) is the only set of verbs that can be expanded with new formations (cf. *a-mart-iz-a* 'to land on mars'). The vast majority of the rest of the forms involve psychological state bases, generally expressing negative and intense feelings; there is only one locatio verb in this suffix, *trono* 'throne' > *en-tron-iz-a* 'to enthrone'.

(45)   terror 'horror' > a-terror-iz-a 'to scare', temor 'fear' > a-temor-iz-a 'to scare'
(46)   cólera 'anger' > en-coler-iz-a 'to anger', fervor > en-fervor-iz-a 'to inflame'

However, *colerizar* 'to anger', *temorizar* 'to scare' and *fervorizar* 'to inflame' are also attested, where the prefix is dropped. As for other prefixes, there is only one that involves separation (*cuartos* 'body parts' > *des-cuart-iz-a* 'to dismember', which is unlikely to be segmentable for many speakers that do not use the base noun in that sense), and RAE & ASALE (2009: §8.10a) treats as parasynthetic *moral* 'morale' > *des-moral-iz-a* 'to demoralise' even though the verb *moralizar* 'to moralise' exists, perhaps because two different conceptual senses of the base are involved.

All in all, and while the existence of parasynthetic verbs with nominal bases confirms the general idea that *-iz-* spells out the functional relational layer without its lexical PP layer, I believe that the parasynthetic cases with this verb should be considered more exceptional, unstable and irregular than the equivalent cases in *-e-a* that were analysed in the previous chapter. I believe, therefore, that the claim that *-iz-* is mostly used in structures where KP is selected by an iotta head can be maintained with this suffix, for the general case.

9.5 Conclusions

Let us wrap up this last suffix: my analysis is that *-iz-* acts almost as underspecified as the zero verbalisations when the base is nominal, but is remarkably stable in its properties when the base is adjectival. Correlatively, this suffix can have

some individual cases of parasynthesis with nominal bases, but does never display parasynthesis with adjectival cases.

   The challenge with this suffix is to account for the broad properties with nouns; my strategy has been to propose that its lexical entry is compatible with the four types of stative relational head that we have seen in this study, therefore allowing for a quite broad spectrum of verbal readings. At the same time, the special behaviour of this suffix with adjectival bases has led me to propose that it selects KP as the complement of the iotta phrase.

   In fact, this allows me to propose that *-iz-* (with the exception of the few parasynthetic verbs, which I take to be idiosyncratically stored) is differentiated from the other verbal affixes precisely by this property, that it is the form that gets spelled out when the iotta phrase is KP:

(47)   [Init [Proc [ɪ]]]   -----> -iz-/_____ [KP

   With this I conclude the empirical study in this monograph and move to its final chapter.

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10 Conclusions of this monograph

10.1 Relevant grammatical verb classes

It is time to wrap up this monograph, and we will do so by highlighting the main theoretical consequences of the proposal made here. Probably the strongest claim in this work is that the presence of extra morphology signals an increase in the number of heads that are being used in the underlying syntactic representation. With the same suffix, introducing verbal descriptive heads, the presence of a prefix fixes and restricts the range of readings that the verb can have, how the base is integrated with the verbalisation and the aspectual types that are available with that verb. When the prefix is not present, the integration and the definition of the aspectual and argumental properties of the verb are decided taking into account the conceptual semantics of the base, because there is no syntactic structure that fixes that interpretation. At the same time, different expansions of the relational structure between the base and the verb have different consequences in the structure of the verb: lack of PP layers, but presence of pP, fixes the argument structure properties – the properties are predicated from the internal argument – and the aspectual information of the base, but do not specify the type of locative relation that the internal argument and the base must hold, opening up for additional readings that are not available in locative parasynthetic verbs, for instance.

Given this situation, we have argued for the relevance in grammar of the following verb classes:

a) We have argued that there are four interpretations where the base is interpreted as a predicate that gets integrated in the semantic and syntactic structure of the resulting verb. These interpretations differ largely due to the specific event descriptive heads (Init, Proc, Res; cf. §1.2.3) that are present in the structure.

  i. Change of state verbs, where the base designates a (set of) properties and the verb denotes the event of acquiring a higher or lower degree of that property, or, if the base does not define degree values, the event of becoming the type of entity denoted by the base. Parasynthesis with adjectival bases forces this reading. See §4.2-§4.3 and §5.2 for this class of verbs.

    ii.   Attributive verb, where the base designates a (set of) properties and the verb has a stative semantics equivalent to the one obtained by combining a non-verbal predicate with a copulative verb. This verb class is always non parasynthetic. See §4.4.3 and §5.2.2.2 for these verbs.

    iii. Property exhibiting verbs, where the base designates a (set of) properties and the verb describes the event of exhibiting such properties during an event. In contrast to class (i), these verbs do not imply change and in contrast to class (ii) these verbs are eventive. See §8.2.2 for this class of verbs, generally involving *-ear*.

    iv. Manner of acting verbs, where the base designates a particular behavioural property and the verb involves acting in the manner defined by the base. See §8.3 and §9.3.3 for these verbs.

b)   There is a higher number of interpretations where the base is integrated as a participant in the event – therefore, such bases must always be nominal – the presence of lexical P layers, the role of qualia structure and the possibility of having different even descriptive heads conspire to produce this wider set of interpretations.

    i.   Locatio verbs, where the base designates a location and the verb denotes the event of moving to that location once the event is completed. See §5.3 for these verbs.

    ii.   Locatum verbs, where the base denotes an entity that is located in a particular position (§5.3). I have argued that these verbs get a semantic interpretation as transfer verbs when the entity denoted by the base is typically transmitted to someone or the location where it is placed is interpreted as a possessor (§5.4).

    iii. Stative locative verbs, stative verbs where the base designates a location (§5.3.5). I have argued that possessive verbs (§5.4.2) should be seen as the stative version of transfer verbs, so the relation between stative locative verbs and possessor verbs should be seen as the stative parallel to locatum and transfer verbs.

    iv. Instrumental verbs (§5.5), which I have argued should be interpreted as manner verbs where the entity denoted by the base is an instrument typically used to perform an action.

    v.   Creation and activity verbs (§5.6.1), which are never parasynthetic because they can only be built when there is no prepositional structure between Proc and the nominal base, in order to let that base be interpreted as a rheme path.

    vi. In addition to this, a broad range of non-systematic readings (§5.6.2), that emerge taking into account the conceptual meaning of the base when there is not enough syntactic structure to specify the interpretation in some detail.

What have I considered 'conceptual structure'? Together with Gibert-Sotelo and Pujol Payet (2015) and Batiukova (2015), I have taken conceptual structure

to be partially systematic through Pustejovsky's (1995) qualia structure. In this sense, I have argued for the following distribution of qualia structure readings when there is no relational structure between the base and the verbal structure:

a) The formal quale of the base is activated when the base is interpreted as a predicate, irrespective of its aspectual type.
b) The constitutive quale of the base is activated in locative verbs and the classes close to them, such as transfer and possession
c) The telic quale of the base is activated in instrumental verbs
d) The agentive quale of the base is activated in creation verbs and verbs denoting the performance of an activity

10.2 How verbal suffixes are differentiated

In our account, theme vowels are differentiated from verbalisers because they reflect the presence of syntactic heads of different nature. Theme vowels are associated to EvtP, and therefore to the time and world parameters that adapt the event description to a clausal structure where aspect, tense and mood are introduced. The description of the event is divided between the base, a noun or an adjective, the relational structure and the verbal heads; the last ones are generally introduced through affixes that specify aspects of the Aktionsart and argument structure of the predicate by identifying the heads Init, Proc, Path and Res.

In my analysis, the verbalisers are differentiated always by at least one of the elements identified, as follows.

(1) a. ø [Init, Proc, Res]
      b. -ec- [Init, Proc, Path, Res]
      c. -ific- [Init, Proc, p, P, K]
      d. -e- [Init, Proc, p]
      e. -iz- [Init, Proc, ɪ]

The zero verbaliser (1a) that appears with verbs derived on the surface with plain -*a*, the default theme vowel, can identify the three verbal heads, but not Path – the generalisation is that Spanish lacks a zero path head. (1b) is characterised by the spell out of a verbal path that restricts the types of bases that it combines with and the interpretations that it imposes to them; (1c) is the suffix that spells out the whole set of relational heads, and therefore never emerges with a prefix although its syntactic and semantic behaviour is the one expected of a parasynthetic structure. As for (1d) and (1e), they are very similar, but are minimally differentiated in European Spanish by the nature of their lower head. In (1d) the lexical entry specifies the head as p, and the most frequent cases, by far, are those where that p is further specified in the semantics as [manner], a fact that we take to mean that the lexical item imposes as part of its lexical entry that manner specification in the regular cases, and those where it allows a change of state reading are lexicalised.

(1e) has a radically underspecified iotta head as its lowest element, meaning that this lexical element can combine with any type of relational stative head, allowing for a broad range of readings in the verbalisation.

Given this situation, the suffix that will be used in a particular verb will be predictable in general judging from the heads that are involved in the verbalisation process. There are only a few situations where the suffixes can overlap: *-e-* and *-iz-* c an overlap in cases where the iotta head is interpreted as p[manner], although we have seen that such cases are exceptional with *-iz-* and quite common with *-e-*. That situation ca be solved by listing idiosyncratically *-iz-* as the verbaliser for a number of bases, given that configuration.

The same suffix *-iz-* can overlap with some cases of the zero verbaliser provided that the structure presents a result phrase in its lowest part and there is no relational structure, because in such cases the configuration [Init, Proc, Res] could be spelled out by both. I note that speakers in fact produce alternations between zero and *-iz-* with a number of such verbs, such as for instance *concreto* 'concrete' > *concret-a ~ concret-iz-a* 'to make concrete', without any perceptible difference in meaning. This is what my account predicts, precisely. In this case, again, the zero verbaliser is the most frequent form, and it seems possible to restrict *-iz-* to cases where KP is the highest projection of the base or, alternatively, to list idiosyncratically the bases that take it when the lowest element can be interpreted as Res and thus the zero verbaliser is available.

10.3 The direction of productivity in word formation

The previous observations, I believe, bring up a topic that I consider crucial in word formation research. Traditional morphology has made us used to think about the productivity of a morphological process in a direction that goes from the base to the category change process: given a particular type of adjective, what suffix do you predict that it will take to verbalise? Given this view, a common observation on previous studies about verbalisation patterns (take Pena 1980; Rifón 1997 or Serrano Dolader 1999 as examples) is that it is impossible to predict through synchronic rules which verbalisation pattern will be used by which base, and in particular which bases will use parasynthesis and which bases will not. Lexical listing, or reference to the etymology of the word, must be added to these descriptions. I agree that this view of word formation operations is condemned to failure and that it will never be able to predict the verbalisation pattern that a base will take. However, the reason of this failure is not due to any shortcoming of synchronic grammar, but rather tells us that one should adopt a view that does not ask the question 'which verbalisation pattern does this base take?', but rather the opposite: which bases does this verbalisation pattern select? Let me explain why.

Assuming that the suffix that imposes a category head into the base is a head that takes the base as its complement, category change, very abstractly, corresponds to a structure like (2).

(2)   X

    X   Y
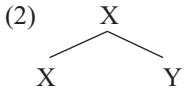
In (2) we expect to find a selectional restriction, and selectional restrictions are always defined as top-down relations, not bottom-up ones: it is the head that projects its label to the whole that selects the complement; the complement does not select the heads that are going to project on top of them.

Giving someone an adjective (say, *claro* 'clear') and asking them to predict what suffix will be used to verbalise it (or to nominalise it) is like giving someone a verb and asking him to predict whether it will appear in past, present or future, in indicative or in subjunctive, with which auxiliaries, or with an imperfective, perfective or perfect grammatical aspect. In a very few cases the meaning of the verb might make us expect that for instance it will combine easily with a particular type of auxiliaries, but we cannot make predictions about that direction simply because head selection functions in the opposite way. A speaker, or a researcher, that is asked to predict which suffix *claro* will use to verbalise can, at best, make some estimate based on the semantics of the base, but it will be more frequent that the answer will be based on a stored dictionary form.

Adopting the theoretically consistent notion of selection means getting used to viewing word formation from the opposite side, focusing on the properties of the formal process and not on those of the conceptually semantically stronger form, the base. In this view, the relevant question is 'given the information associated to this affix, what are the bases that are compatible with it?'.

For instance, if the suffix contains a path, as we have seen with -*ec*- in chapter 7, the bases that are compatible with it are predominantly those that have scales, because scales are alternative instantiations of paths and the presence of a path requires something that measures the change. If the suffix imposes a manner reading as -*e*- in Chapter 9, the best bases to combine with it will obviously be those that denote kinds of humans described by their behaviour, but this does not exclude other nouns from being conceptually associated to manners and behaviours that can also be taken as bases.

Of course, when we say 'suffix' in the previous paragraph we actually mean 'the syntactic structure that the suffix spells out'. This approach predicts a situation that is frequently the case, namely that the same base will appear with different affixes in the same category change process. In our example, we have the following:

(3) a.   clar-e-a
     b.   clar-ific-a
     c.   a-clar-a

The three suffixes are compatible with the suffix: (3a) because the adjective expresses a property that can be exhibited or manifested in a change of state; the

one in (3b) because that property can also be visible as an end result, and (3c) because the property has a scale that can be used to measure a gradual change. Nothing makes any of the formations in (3) impossible, and once they exist, speakers might want to specialise each one of these formations in terms of their conceptual semantics and the use that they make of these verbs in combination with other forms. However, that is not a property of the structures involved, or even of morphology even taken in a broad sense: it seems to be more a fact about how speakers arrange their vocabulary and assign concepts to units.

10.4 Verbalisers, theme vowels and copulative verbs

Our proposal also makes predictions about what turns an object into a verb in Spanish. The traditional characterisation of lexical verb is deconstructed here in two sets: the Evt head, that provides the formal properties that allow the structure to inflect as a verb and project as a clause, and the event descriptive heads that give content to whatever situation is described within the clause.

This separation into two roles for what we call 'verb' has been adapted in Chapter 2 to the problem of copulas. Beyond what we have said about them to support our view of theme vowels, the consequence of our analysis is that Spanish copulas are devices used to adapt a predicate that cannot combine with aspect, tense and mood so that it can project into a clause. Abstractly, then, the underlying structure of (4a) and (4b) are very similar.

(4) a.   Esto es amargo.
           this is bitter
     b.   Esto amarga.
           this bitter-ThV
     'This is bitter'

In (4a) the copula is a manifestation of Evt that further combines with tense, aspect and mood; in (4b) the Evt head is spelled out as a theme vowel, which can then also combine with tense, aspect and mood. The difference might reduce to the functional projection that dominates the adjective, which can be richer in (4a) than in (4b), and the exponents used.

This claim cannot be equated with the claim that all elements labelled as 'copula' in the languages of the world are manifestations of Evt; in fact, the behaviour of these elements beyond their surface property of combining with non-verbal predicates is very diverse, and quite likely some of them are manifestations of PredP and not Evt (see Baker 2002), next to other options (see Arche et al. 2018 for an overview). But for the Spanish-style copulas, which are used also as passive auxiliaries, there is an interesting prediction made by my analysis: in Spanish auxiliary verbs properly should be projections that include Evt and lack any type of verbal descriptive heads – remember that we have analysed the auxiliary *haber* 'to have', that lacks any strong verbal use, on a par with copulas. This in essence means that the set of verbs that are properly auxiliaries in Spanish should be much

more reduced than the long list of verbs that have traditionally considered so in Spanish grammar (the dictionary of periphrases made by García Fernández 2006 lists more than one hundred forms), and more generally that the notion of auxiliary should involve material including Evt and above, but never below. We hope to be able to explore this prediction in further research.

10.5 The role of the lexicon

This monograph has adopted a strongly Neo-Constructionist view, so it is important to highlight the areas where our analysis leaves room for the role of the lexicon, or even what has been traditionally called morphology.

In a pure Neo-Constructionist approach such as the one that Kayne and Collins (2020) advocate for, all relations are syntactic relations, and the presence of each morpheme corresponds biunivocally with a distinct syntactic configuration and distinct sets of features. In other words, in a strong Neo-Constructionist approach the lexical entries of the morphemes involved should not be overlapping – only roots, which lack syntactic features and are reduced to phonological indexes, can overlap.

As overviewed in §10.2 above, even though the lexical entries for each one of our suffixes are different, the specification allow for some overlap, particularly between the suffix *-iz-* and the rest; to this we must add the possible accidental homophony relation between a default *-e-* affix used in loanword adaptation and the *-e-* suffix that introduces a manner specification for p. In all these cases, the lexicon must have a power that goes beyond simply translating matrixes of abstract syntactic features into a segmental representation with conceptual semantics: it must be able also to impose restrictions on the exponent used to spell out that are not simply based on the nature of the syntactic material spelled out.

This seems particularly necessary in the case of the differentiation between the three theme vowels in Spanish. While we have made a proposal about their syntactic location that makes it unnecessary to treat them as ornamental morphology, we have accepted that the difference between *-a-*, *-e-* and *-i-* is based on idiosyncratic selectional restrictions. With *-a-* being the default form that emerges when there is no exponent selection by another exponent, verbs that take the other two theme vowels will have to do so because of a vocabulary entry that specifies it in an arbitrary way; once selected, that theme vowel produces a cascade effect that influences also the spell out of many of the inflectional affixes.

Thus, in the approach adopted here the lexicon must have the power to impose selectional restrictions. This is not the only property that in this monograph is left for an idiosyncratic specification in the lexicon: linearisation is also one such case. We have accepted in Chapter 4 that the prefixes in parasynthesis emerge to the left of the base despite their syntactic location, which would treat them as suffixes, because to the extent that they are prepositions they are listed as exponents that must attach to material to their right, not to their left. My proposal there is only sketched, but assumes that suffixes is the default linearisation in that type of configurations, but that the lexicon can specify that the exponent has to attach

to the left, as a prefix. Obviously, this is not ideal within the framework adopted here, and I leave for further research the question of whether the linearisation of prefixes as elements to the left can be derived from a non-idiosyncratic principle.

10.6 Why is parasynthesis typical of only some languages?

Let me end this chapter and this book with a final global question that I have not directly addressed in the rest of the monograph: why is parasynthesis typical of Romance languages, but not of Germanic languages? I would like to note, before we start, that perhaps the claim that parasynthesis does not exist in Germanic languages is biased, and based on a definition of the term that expects to find both a prefix and a suffix at the same time. If we adopt the view in this monograph – parasynthesis is verbalisation involving relational structure – a form like (5), from English, is parasynthetic because it involves a prefix – the theme vowel is expectedly out.

(5) en-rich

Following initial insights from Mateu (2002) and Acedo-Matellán (2016) I would like to suggest that the reason can be traced back to Talmy's (1985) distinction between verb-framing and satellite-framing. Romance languages, loosely speaking, are verb-framing languages which tend to incorporate the direction with the verb (6), while Germanic languages – again, speaking very loosely – are satellite framing languages that leave the path structure unincorporated.

(6) a.   Juan entró en la habitación <u>bailando</u>.
            Juan enter-ed in the room dancing
      b.   John danced in<u>to</u> the room.

As it is well-known, the distinction between verb- and satellite-framing is more a tendency than an absolute principle, and Talmy (1985) listed a number of verbs that seem to go into the opposite direction in languages that are otherwise predominantly of one type (see also Fábregas 2007). This explains that English has directional verbs like *enter, exit*, and so on, where the direction is contained in the lexical meaning of the verb.

Assume, however, that the distinction works. Paths are of course basically spatial entities whose use is extended to verbal aspect, scalarity and other notions. As a spatial entity, a path is a member of a relational structure. This means that being a verb-framed language means to be a language that can use relational structure to build verbs. The next logical step is, of course, that this relational structure can manifest as prefixes, producing a parasynthesis pattern.

In contrast, and again following Mateu (2002), Acedo-Matellán (2016) and especially Real Puigdollers (2013), we can take a satellite-framed language as a language which can introduce the conceptual content of the verb through adjunction, as shown in (7).

(7)

```
           VP
         /    \
        V      DP
      /   \
     √     V
```
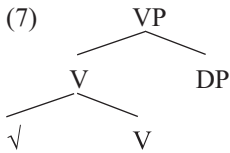
Real Puigdollers (2013) proposes (7) for specifically verbs involving a manner of movement, while Acedo-Matellán (2016) extends it to other classes, specifically rejecting a division between atelic and telic verbs based on the adjunction of the root.

Assume that this analysis is correct for satellite-framed languages, perhaps with global consequences in other domains (see also Snyder 2012, who argues that (7) is possible in languages that have unrestricted modification). If this is correct, it means that languages make available two ways to combine a verb with its conceptual content: through relational structure, where the conceptual content is hosted in a constituent introduced as a complement, and through adjunction. The first device would be used predominantly in verb-framed languages, and depending on the material spelled out by exponents might result in surface parasynthesis. The second device is typical of satellite-framed languages and never results in parasynthesis because the base is directly adjoined to the head.

(8)   a. verb-framed language (simplified)

```
          ...VP
         /    \
        V      PP
             /    \
            P      NP / AP
```
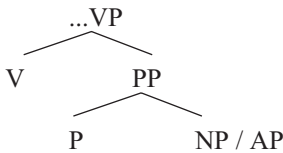
b. satellite-framed language (simplified)

```
           VP
         /    \
        V      ...
      /   \
   NP/AP   V
```
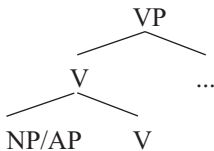
The prefixal cases in English might be an instance of their exceptional use of (8a) in only some verbs, or perhaps the effect of parsing a Romance prefix in another way, perhaps as a particle incorporated to the verb. Be it as it may, I believe that a distinction along the lines in (8) might be worth exploring in the quest of why Romance languages use parasynthesis in a global way.

Be it as it may, and with all the loose ends that this monograph inevitably has, I hope to have been able at least to show that a proposal where syntax accounts

for most of the properties of verbalisations in Spanish is worth exploring and makes relevant predictions that deepen our knowledge of the internal structure of predicates.

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