

# Inflection, derivation and compounding: issues of delimitation

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## 1. Introduction

First, I propose a non-gradual criterion of distinction between derivation and inflection based on a model of the position of morphology in the architecture of the language faculty. According to this model, derivational morphology reflects aspects of the syntactic structure of words (and implies the creation of different words), while inflectional morphology reflects aspects of the syntactic structure of sentences (and implies the creation of different forms of the same word). Next, I propose definitions of the three traditional morphological processes (inflection, derivation and compounding), then show that the problems of delimitation between them do not reveal inconsistencies in the definition of the processes, but rather, problems in the application of the definitions to specific cases, these being grouped as follows: (a) processes that seem inflectional, but are derivational, (b) processes that seem derivational, but are inflectional, and (c) problems of delimitation between derivation and compounding, which have to do with the problems of delimitation between roots and affixes.

**Keywords:** Inflection; Derivation; Compounding; Lexeme; Word form

## 2. Definitions of inflection, derivation and compounding

Before addressing the definition of the three essential morphological processes, a terminological clarification is required. Since morphology is central to the structure of words, we must distinguish two uses of the term *word*: (i) the word as an abstract unit (which to avoid confusion I will call *lexeme*), and (ii) “the notion ‘word’ in the sense of ‘concrete word as used in a sentence’” (Booij 2005, 3), which I will call *word form*. Thus, a lexeme such as the Spanish adjective *claro* ‘clear’ has at least four different word forms, depending on the syntactic context in which it appears: *claro*, *clara*, *claros*, *claras*. In this case, then, there are four word forms of the same word (= lexeme).<sup>1</sup> The derivational or compounding processes that affect the adjective *claro* (e.g. *aclarar* ‘clarify’, *clarividente* ‘clever’) do not produce different forms of that word, but different words (lexemes). The relation between lexemes and word forms is analogous to that between phonemes and allophones, or between morphemes and allomorphs (see Carstairs-McCarthy 2000).

### 2.1. The main criterion of distinction between inflection and derivation

The distinction I am going to propose between inflectional morphology and derivational morphology has a crucial relation to the distinction between lexemes and word forms. In fact, it is often said that derivational morphology has the creation of lexemes as a function, while inflectional morphology has as a function the creation of the different word forms of each lexeme (e.g. Pena 1999, 4308; Booij 2000, 360-361). This view coincides with part of the

grammatical tradition, according to which “inflection [...] dealt with the systematic variation in the forms that words took in context” while derivation and compounding (word formation) “dealt with the systematic means by which new words were formed and added to the lexicon” (Aronoff 2000b, 343). This criterion, based on the difference in the output of the processes, is the criterion that I will consider decisive in the present contribution. However, it is common in discussions of the difference between inflection and derivation, both in general (Booij 2000) and in the field of Spanish (Varela Ortega 1990; Fábregas 2013), to propose a list of different criteria for their distinction. Thus, along with the criterion already mentioned, others are added, as reflected in Table 1 (following Booij 2000):

Table 5.1. Criteria for the distinction between inflection and derivation

Criterion	Inflection	Derivation
1. Output	Word forms	Lexemes
2. Change of word class	-	+
3. Generality and productivity	+	-
4. Obligatoriness	+	-
5. Paradigmaticity	+	-
6. Peripherality	+	-
7. Recursivity	-	+
8. Semantic transparency	+	-
9. Storing in the mental lexicon	-	+
10. Syntactic relevance	+	-

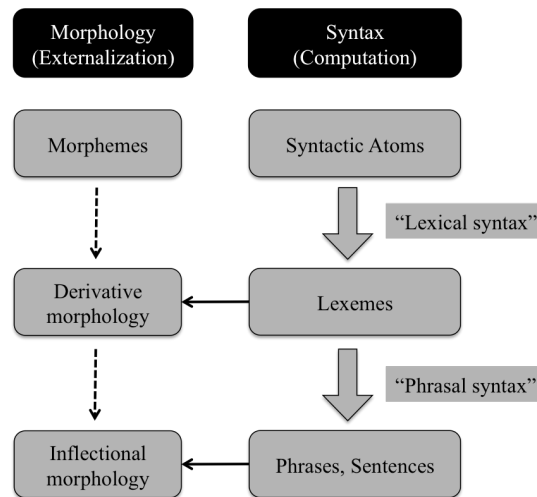
The gradual or diffuse difference between inflection and derivation that many authors argue for (see Bybee 1985; Dressler 1989; Haspelmath 1996) is based on the fact that the + and - signs in Table 1 associated with criteria 2-10 very often need to be interpreted as ‘high (+) or low (-) degree’, and not as a strictly privative opposition. But this is not so with criterion 1, which I have privileged here as being the only one that is necessary and sufficient for the distinction. The central idea is that the behaviour of morphological processes with respect to criteria 2-10 (which are arranged alphabetically) is a consequence of criterion 1, and that the feeling of uncertainty produced by the gradualness of some of these properties should not affect the structural distinction between the two types of morphology. On the contrary, the use of various criteria (and not just one) suggests the possibility of a prototypical characterization of morphological processes, so that those that fulfil certain properties to a high degree (productivity, regularity, paradigmaticity, compositionality, etc.) are considered prototypical inflectional processes in contrast to those at the other end of the scale, in which the prototypical derivational processes would be located, with a whole range of intermediate options. Yet this attitude, although apparently more descriptively appropriate, does not allow us an adequate understanding of the place of morphology in the language faculty, nor does it really explain why there would be two types of morphology, nor why certain tendencies are more or less prominent in some morphological processes than in others.

## 2.2. Morphology in the architecture of the language faculty

Unlike the formulation of the criterion of distinction between inflection and derivation in functional terms (“derivation [...] is that kind of morphology that serves to create new lexemes, whereas inflection serves to create different forms of the same lexeme” Booij 2000, 360), I suggest here a model in which the difference in output of the two morphological processes (criterion 1) is a consequence of the architecture of the language faculty. This approach has the advantage that it does not require a lexicalist conception of morphology to

recognize a qualitative difference between inflection and derivation, so the proposal is compatible with non-lexicalist models (see Fabregas 2013a, chap. 6 for a discussion of this issue with other conclusions). The essential key of my current proposal is the conception of morphology as a mechanism for the externalization of syntactic derivations, according to the scheme in Figure 1.

Fig. 5.1. The place of morphology in the Faculty of Language



As the scheme shows, the language faculty (the internal language of each person) is formed centrally by a computational system (the syntax) that produces syntactic derivations from basic units (according to Chomsky 1995 et seq., through the single operation *Merge*). At a given moment of the syntactic derivation (which in the scheme is indicated by the operation of syntactic categorization that produces lexemes), a first phase of externalization is established, which is what we call *derivational morphology* (or *lexical morphology* in some traditions), and which produces stems (traditionally, the result of eliminating inflectional morphology from one word). Lexemes are not, then, morphological entities, but syntactic entities (syntactic words, in fact). Derivational morphology reflects, with greater or lesser transparency (depending on historical and other factors), the internal syntactic structure of the word.

In the model developed in Mendívil-Giró (2019), it is argued that this is the first point at which an internal syntactic derivation is associated with the sensory-motor system. At that point, the association (memorization) between syntactic structures and morpho-phonological representations that we normally call *mental lexicon* is established. Once the syntax exceeds the level of the lexemes, it continues its computation and produces more complex entities (phrases and sentences). Note that, although the model reflects a descriptive distinction between so-called ‘lexical syntax’ and ‘phrasal syntax’ (separated by the creation of lexemes), it is compatible with the non-lexicalist interpretation according to which ‘everything is syntax all the way down’, since the model does not imply qualitative changes in the computational mechanisms of both ‘types’ of syntax, but rather, if at all, in the properties of the units with which *Merge* operates. Aronoff, normally considered a lexicalist author, suggests that morphology “in the very restricted sense of ‘the realization of forms’ is an entirely different enterprise from what the syntactician is engaged in, which is the arrangement of abstract categories”, but that syntax, hence, “accounts for the syntactic side of both word formation [...] and inflection [...]” (Aronoff 2000a, 199-200). And this is precisely what is reflected in the scheme in Figure 1. As Aronoff also pointed out, what was

called weak lexicalism “merely draws a line in this abstract syntax at the lexeme, which is the traditional line between syntax and derivation” (2000a, 200). In my interpretation, this dividing line at the level of the lexeme is not a consequence of two distinct generative systems, but of the relevance of syntactic categorization for the language faculty (see Mendívil-Giró 2019).

As suggested in the scheme, inflectional morphology is a totally post-syntactic process, in the sense that it produces the appropriate word forms for the syntactic configuration in which each lexeme is at the end of the syntactic derivation. In this sense, if derivational morphology reflects part of the internal syntactic structure of words, inflectional morphology reflects part of the structure of sentences. In both cases, morphology has to do with the ‘realization of forms’, and hence it is not surprising that there is a formal continuity between inflection and derivation (in the sense that both processes can employ similar mechanisms of prefixation or suffixation, for example).

Compounding does not appear in the scheme as a specific type of morphology. The essential reason (apart from the fact that compounding is itself a complex and heterogeneous phenomenon) is that it seems more reasonable to understand it as a special case of derivational morphology, in the crucial sense that it also implies the creation of new lexemes, and not different word forms of the same lexeme. For this reason, some traditions group derivation and compounding under the label *lexical morphology*.

### 2.3. Definitions

Starting from the model presented in the previous section, it is possible to formulate the following informal definitions of each of the three morphological processes for Spanish grammar, in which no mention is made of criteria 2-10:

*Derivation*: Formation of a lexeme from another lexeme. It is typically expressed through a derivational affix and may involve recategorization (*libro* ‘book’ > *libresco* ‘bookish’), although it is not mandatory (*libro* > *librería* ‘bookshop’).

*Compounding*: Formation of a lexeme including at least two lexical roots (*limpia*-(r) ‘to clean’ + *botas* ‘boots’ > *limpiabotas* ‘shoeshine’).

*Inflection*: Modification of a lexeme to obtain other forms of the same word. In Spanish, such modification is carried out by means of inflectional affixes (*libro* ‘book’ > *libros* ‘books’) or irregularly by suppletion (*ten-e-r* ‘have’ > *\*tení* > *tuve* ‘I had’).

Compounding has an asymmetrical position, since it is assimilated into derivation according to the relevant criterion. Some types of compounds (*camión cisterna* ‘tank truck’ or *pez globo* ‘puffer fish’) have problems of delimitation with syntactic constructions and idioms, not with derivations (see Val 1999; Mendívil-Giró 2009; Marqueta 2019, and Sanromán this volume). In fact, controversies in Spanish morphology (as in other languages) mainly focus on two kinds of problems: those of delimitation between derivation and inflection, and those of delimitation between compounding and syntactic construction. The reason for this is that derivation and compounding do not resemble each other much formally, but they are similar in terms of function (the creation of new lexemes); in turn, derivation and inflection do not resemble each other much functionally, but do so formally (typical and exclusive use of affixation).

From the proposed model of distinction, we can use the following algorithm to distinguish between derivational morphological processes and inflectional ones:

- (1) Algorithm of distinction between derivation and inflection  
 If  $A \rightarrow B$  is a morphological process and  
 (i) B is a different word than A  
     then  $A \rightarrow B$  is a derivational process  
 (ii) B is a different form of the same word  
     then  $A \rightarrow B$  is an inflectional process

The relevant conclusion now is that the apparent uncertainty of some morphological processes does not imply that inflection and derivation are extremes of a continuum, but simply that it is not always easy to distinguish when A and B are two different words or two different forms of the same word.

#### 2.4. On the multiplicity of criteria

Although a greater or lesser degree of compliance with any of the criteria 2-10 in Table 1 is usually an indication of whether a given process is inflectional or derivational, no particular criteria by itself is a necessary and sufficient condition to determine this. Only criterion 1 meets that condition. I have said that derivational morphology reflects (part of) the internal syntactic structure of words, while inflectional morphology reflects (part of) the syntactic structure of sentences. Just as this difference does not imply that there are two different ‘syntaxes’, it does not imply that there are two different ‘morphologies’, since the formal processes that derivation and inflection employ in the world’s languages are common to both types of processes (see Mel’čuk 2000). However, the fact that the products of these processes are different (lexemes in one case, word forms in the other) is certainly relevant in explaining differences in behaviour with respect to the other criteria.

A crucial consequence of this is the paradigmaticity of inflectional morphology (criterion 5), a central property which determines other properties attributed to inflection in Table 1. Consider, for example, the present tense, indicative mood paradigm of the verb *cantar* ‘sing’ in Spanish:

Table 5.2. Present indicative paradigm of *cantar* ‘sing’

Present, Indicative	Singular	Plural
1st person	<i>canto</i>	<i>cantamos</i>
2nd person	<i>cantas</i>	<i>cantáis</i>
3rd person	<i>canta</i>	<i>cantan</i>

A (partial) inflectional paradigm such as the one in Table 2 can be understood as a set of cells resulting from combining different morphosyntactic features (in this case, person and number features). Each cell combines a set of features and provides a specific word form for each possible syntactic context. With the exception of certain syncretisms and occasional gaps, a Spanish verb normally has 61 possible synthetic forms (in addition to 56 analytic or periphrastic forms). Any verb of the same conjugation class as *cantar* (with the exception of a few irregular ones) is conjugated in *exactly* the same way, so that in principle it cannot be assumed that all word forms of a lexeme are stored in the lexicon (criterion 9), but are calculated or inferred from a more limited number of the so-called “principal parts” and certain rules (see Stump and Finkel 2013). Note that the verbs whose 61 forms are conjugated in Spanish according to the paradigm in Table 2 are not counted by tens or hundreds, but by thousands or tens of thousands (in fact, any invented verb ending in *-ar* will be conjugated in

the same way). The greater tendency for generality and productivity (criterion 3) and for semantic transparency (criterion 8) also follows from the essentially analogical nature of the organization of inflectional morphology. Obligatoriness (criterion 4) also follows from this trait, in the sense that it is not possible to use the lexeme *cantar* without choosing any of the cells of its inflectional paradigm, precisely because word forms reflect the syntactic structure in which the lexemes are used (criterion 10), something that does not happen with derived or compound words.

However, I have already noted that most of the properties in Table 1 (with the exception of the first one) are gradual and not privative, which implies that, just as there is sometimes irregularity, defectivity and opacity in inflectional morphology, there is also regularity, productivity and compositionality in derivational morphology, a fact that in itself does not threaten the neat difference between both types of morphology. Traditionally, the notion of derivational paradigm is not common (although see Bonami & Strnadová 2019), but the notion of *word families* is. Consider, for example, the following (partial) word family based on the adjective *claro* ‘clear’ in Spanish:

Table 5.3. (Partial) word family of the adjective *claro* ‘clear’

<i>claro</i> ‘clear’	<i>aclarar</i> ‘clarify’	<i>claridad</i> ‘clarity’	<i>clarividente</i> ‘clever’
	<i>esclarecer</i> ‘clear up’		<i>claroscuro</i> ‘chiaroscuro’
	<i>clarificar</i> ‘clarify’		
	<i>clarecer</i> ‘dawn’		<i>claramente</i> ‘clearly’

What we have in Table 3 is not a paradigm in the strict sense, because, unlike what happens with the paradigm in Table 2, which can be applied to literally thousands of Spanish lexemes, the ‘paradigm’ of Table 3 is exclusive to the lexeme *claro*. If we take an adjective of the same type and which is semantically related, such as *oscuro* ‘dark’, we see that a direct application here is inadequate:

Table 5.4. (Partial) word family of the adjective *oscuro* ‘dark’

<i>oscuro</i> ‘dark’	* <i>aoscurar</i>	<i>oscuridad</i> ‘darkness’	* <i>oscurividente</i>
	* <i>esoscurecer</i>		* <i>oscuroclaro</i>
	* <i>oscurificar</i>		
	<i>oscurecer</i> ‘darken’		<i>oscuramente</i> ‘obscurely’

In fact, each lexeme has its own ‘derivational paradigm’, revealing that word families, even though they are crucial for the knowledge of the lexicon, are of a different formal nature than inflectional paradigms. Each of the members of the paradigms in Tables 3 and 4 is not a distinct form of the word *claro* or *oscuro*, but a different word. Comparing the families of words in Tables 3 and 4 shows that there are derivational processes that are more productive than others. Thus, we observe from this very limited corpus that there are at least three analogical pairs (*oscurecer/clarecer*, *oscuridad/claridad*, *claramente/oscuramente*).

However, it can be observed that the first pair does not present property 8: *clarecer* does not mean ‘make something clearer’ but is used only with the meaning of ‘dawn’, ‘began to clear’. *Oscurecer*, on the other hand, carries both meanings (‘make something darker’ and the impersonal meaning ‘get dark’). This type of semantic idiosyncrasy is typical of derivations precisely because of their lexical nature: derivations are different lexemes from their bases and, as independent lexical units, they are very susceptible to losing part of

compositionality or specializing their meaning in a peculiar way. Nominalization with *-idad* ‘-ity’ is much more productive and transparent (*normal* ‘normal’ > *normalidad* ‘normality’, *peculiar* ‘peculiar’ > *peculiaridad* ‘peculiarity’, *vital* ‘vital’ > *vitalidad* ‘vitality’), although it is not difficult to find adjectives that do not admit it (*alto* ‘high’ > *\*altidad* vs. *altura* ‘height’; *bello* ‘beautiful’ > *\*bellidad*, vs. *belleza* ‘beauty’) or that show synchronically anomalous bases (*fidelidad* ‘fidelity’). More difficult (although not impossible, see Kovacci 1999, 710 et seq.) is to find adjectives of quality that cannot be converted into adverbs by means of *-mente* (as *\*gordamente* ‘fatly’). And because of its high productivity, some authors have suggested that this is an inflectional process: “the attachment of *-mente* to adjective bases is sufficiently predictable and productive to be considered a case of infection” (Lang 1992, 162). Note, though, that this conclusion is an example of considering productivity (and predictability) as the criterion of distinction between both types of morphology (as Haspelmath 1996 does). However, if it is indeed true, as indicated in the scheme in Figure 1, that derivational processes are the reflection of the operation of syntax in the creation of words, it might be expected that some of them will be very productive, very semantically transparent, and will not require dictionaries to collect their outputs, but that this does not make them inflectional processes. Likewise, the fact that irregular inflectional forms (such as *tuve* ‘I had’) have to be acquired through memorization does not mean that they are derived words.

Adverbs derived with *-mente* (see De Benito Moreno, this volume) are in fact one of the typical problems of delimitation in the morphology of Spanish, although, according to the criterion proposed here, it is not possible to consider this process as inflectional, but, rather, the problem is in determining whether these formations are derivations or compounds (see 3.3 below). One of the reasons for considering *claramente* ‘clearly’ as a different lexeme from *claro* is that, in terms of traditional grammar, the former is an adverb and the latter is an adjective. Advocates of the gradual vision might argue that criterion 2 (change of word class) seems contradictory with respect to criterion 1, since there are many derivational processes that do not change the category (*zapato* ‘shoe’ > *zapatero* ‘shoemaker’), and some authors consider that there are inflectional processes that do this (Haspelmath 1996) and which thus could be considered derivational. A recurrent example here involves the so-called non-personal forms of verbs, also known as hybrid forms (see Marín this volume for a detailed analysis). But it is inaccurate to say that the inflection of hybrid forms implies a change of category. In Spanish, infinitives, gerunds and participles have fully verbal productive uses, and their special syntactic behaviour can be explained by the absence of person, time and mood features. Every verb has infinitive, gerund and participle forms, and this fits the notion of inflection, no matter how much these forms are prone to nominal, adjectival or prepositional uses. That the creation of new lexemes may involve the change of category (although this is not mandatory) is natural, whilst it is not expected that the creation of a word form of a lexeme implies the change of category without producing a new lexeme. Regarding criterion 6 (peripherality), it cannot be a criterion of differentiation between derivation and inflection, but presupposes it, given that it is a generalization about the tendency of inflectional affixes to be peripheral with respect to derivational ones. This generalization was established as a universal (number 28) by Greenberg: “If both the derivation and the inflection follow the root, or they both precede the root, the derivation is always between the root and the inflection” (Greenberg 1963, 93, apud Booij 2000, 366). Possible objections to this universal have been pointed out (e.g. Rainer 1996), but the general interlinguistic tendency is very robust, and it is clearly consistent with the structural criterion of distinction proposed here, in the sense that inflectional morphology operates with already made lexemes to determine its final form according to the syntactic context.<sup>2</sup>

Finally, regarding criterion 7 (recursivity), Booij points out that the difference between derivation and inflection is a consequence of their functional difference: “whereas an inflectional process is applied only once to a word in order to create a word form that fills a cell of the paradigm, derivational morphology may apply recursively because each derivational step may add some additional meaning” (Booij 2000, 365). A possible example in Spanish would be the repetition of the diminutive *-it-*: *chico* ‘little’ > *chiquito* > *chiquitito*, although, as we will see in section 3.2, the case of diminutives is one of the main problems of delimitation between derivation and inflection in the Spanish grammatical tradition.

### 3. Some problems of delimitation in Spanish morphology

In light of the algorithm in (1) let us now briefly consider some problems of delimitation in the morphology of Spanish, which are discussed in greater detail in other chapters of this volume.

#### 3.1. Derivational processes that seem inflectional

The most common cases are those in which inflectional morphemes produce changes in meaning that go beyond the strict compositionality of inflectional processes. Such is the case of the relatively frequent ‘derivational plurals’ (the term used by Lliteras 2019, 258) such as *amistades* ‘friends’, *botones* ‘bellboy’, *existencias* ‘stock’ and *celos* ‘jealousy’, which denote something different than a plural of their respective singular forms (*amistad* ‘friendship’, *botón* ‘button’, *existencia* ‘existence’ or *celo* ‘zeal’). Thus, these plural nouns are not merely plural word forms, but different lexemes that are added to the word family of the original base (see RAE & ASALE 2009 §3.8p).

The case of nominal gender (see Camacho this volume) is analogous, although more controversial, partly because of the conflation in much of the literature of the inherent gender of Spanish nouns with the genuinely inflectional gender of Spanish adjectives, determinants and other adnominal elements that show gender agreement with nouns.

Nouns denoting things that show gender opposition (such as *suelo* ‘soil’ / *suela* ‘sole’ or *manzana* ‘apple’ / *manzano* ‘apple tree’) are not especially problematic, since it is easy to see in each pair that their members are not two forms of the same word, but two words (lexemes) with different denotations. Although there are certain trends in such pairs (size, fruit / tree, etc., see Ambadiang 1999) they are highly idiosyncratic and very limited in productivity, so pairs like these are clearly derivational processes (and seem inflectional because they use the same morphology as the truly inflectional gender variation of adjectives). RAE & ASALE (2009, §2.3c) admits that in these cases it makes no sense to consider the terminations *-o/-a* gender morphemes, but, rather, word marks (see Harris 1991 on this concept). The old feminine nouns used to refer to the wives of men holding high offices (*catedrática* as ‘wife of the professor’ and *regenta* as ‘wife of the regent’) can also be considered derivational, since new lexical content is thus also added.

However, things get complicated with other person nouns, especially those that designate trades or positions, such as *ciudadano* ‘citizen-M’ / *ciudadana* ‘citizen-F’), or the classic example in the literature of *niño* ‘kid-M’ / *niña* ‘kid-F’ (see Ambadiang 1999 and Serrano-Dolader 2000 for reviews of this controversy). In such cases the problem is that grammatical gender seems to be systematically correlated with a denotative difference (basically sex information: ‘male’ / ‘female’). To complicate matters further, the Spanish reference grammar, RAE & ASALE 2009, does consider the terminations *-o/-a* in these cases as gender morphemes (see RAE & ASALE 2009 §2.3b). We should recall here that the issue



to be resolved is whether *niño* and *niña* are two different words (lexemes) or two different forms of the same word. It seems to me that, since these endings *-o/-a* are not gender morphemes in the strict sense (nominal gender in Spanish is inherent, not determined by endings, both in inanimate and in animate nouns), it can be said that the relation between *niño* and *niña* is derivational and not inflectional, regardless of whether it is a very productive phenomenon in current Spanish, and regardless of whether it has the appearance of inflectional morphology, especially with variable adjectives. Indeed, adjectives *claro* and *clara* are two forms of the same word, and not two different words, since they denote exactly the same thing, and vary depending on the gender of the noun with which they agree. But this is not the case with *niño* and *niña*, whose variation is not the result of agreement. In fact, a girl (*niña*) is not a female version of a boy (*niño*), just as a woman (*mujer*) is not a female version of a man (*hombre*), but instead are distinct denotative realities (because information about sex is lexical, not grammatical).

We might add that obtaining feminine person nouns, although very productive in Spanish in recent decades, is not as productive or automatic as obtaining feminine adjectives (in the paradigm of variable adjectives). Consider the sequence in (2):

- (2) *el médico* > *la médico* > *la médica*  
 the-M doctor-M                      the-F doctor-F                      the-F doctor-F

According to the model of nominal gender in Spanish developed in Mendivil-Giró (2020) (based on Roca 2005), the masculine noun *médico* does not include in its denotation semantic information of sex (it means, roughly, ‘person who is a doctor’), and thus it has inclusive value, and can refer to both men and women (*El médico, sea hombre o mujer, debe tener compasión* ‘the doctor, whether male or female, should have compassion’). *Médico* has masculine gender because that is the default gender in Spanish (and is marked with *-o* because this is the default word mark for masculine gender), but it is not masculine because it denotes men. In fact, it does not. The first derivational step to create a term that specifically designates female medics (as a result of their relatively recent access to the profession) is to duplicate the inclusive masculine lexeme and coin one with inherent feminine gender: *la médico*.<sup>3</sup> This process produces one of the countless person nouns that traditional Spanish grammar calls ‘common in terms of gender’ (*el pianista/la pianista* ‘the pianist’ *el regente/la regente* ‘the regent’, etc.). Since in Spanish the default word mark for masculine nouns is *-o*, and the default word mark for feminine nouns is *-a*, it is not uncommon that in some varieties the word mark is regularized, producing *la médica*, which is not universally accepted in current Spanish and coexists with *la médico*. As can be seen in the following example pairs, differences in acceptability in formally analogous processes suggest that we are seeing here a (very productive) derivational process, and not the automatic use of an inflectional paradigm:

- (3) *el médico* > *la médico* > *la médica* ‘the doctor’  
*el miembro* > *la miembro* > \**la miembra* ‘the member’
- (4) *el juez* > *la juez* > *la jueza* ‘the judge’  
*el fiscal* > *la fiscal* > \**la fiscala* ‘the prosecutor’
- (5) *el presidente* > *la presidente* > *la presidenta* ‘the president’  
*el agente* > *la agente* > \**la agenta* ‘the agent’

### 3.2. Inflectional processes that seem derivational

The mirror case to the one described above, and probably the most controversial in the Spanish grammatical tradition, is that of the so-called appreciative affixation and, most notably, the productive diminutive *-it-*: *libro* > *librito* ‘book’ (see Kornfeld this volume). Although the Spanish morphological tradition treats these processes as derivational (for example Pena 1999, RAE & ASALE 2009 §9.1), it is very common that, when authors classify them as derivation, they also indicate typically inflectional (or atypical in derivation) characteristics of diminutives, such as (following Varela Ortega 1990, 87 et seq.), (i) the fact that they never change the category of the base (*casa* > *casita* ‘house’; *claro* > *clarito* ‘clear’), (ii) that they only add connotative, not denotative, changes in meaning, (iii) that they tend to be ordered after unequivocal derivation (*bab-os-o* > *bab-os-it-o* ‘slimy’) and even “within” derivational suffixes (*anarqu-ista* > *anarqu-ist-it-a* ‘anarchist’), (iv) that diminutives can behave like infixes (*Carlos* > *Carl-it-os* ‘Charles’; *azúcar* > *azuqu-ít-ar* ‘sugar’; *lejos* > *lej-it-os* ‘far’), (v) that, contrary to other derivational suffixes, the diminutive always maintains the gender of the base, including contradictory marking (*la moto* > *la mot-it-o* ‘bike’, *la mano* > *la man-it-o* ‘hand’, which coexists with the regularized form *man-it-a*), and (vi) that it is insensitive to the internal structure of compounds: *tocadisquitos* (< *tocadiscos* ‘turntable’) does not refer to small discs (*disquitos*) but to a small turntable, and for *paraguas* ‘umbrella’ we have *paragü-it-as* and not *paraguas-it-o*.

All these properties of diminutive morphology (see also RAE & ASALE 2009 §9.1) show that it is, at the very least, a strange type of derivation, although they do not demonstrate in themselves that it is inflection. Inflection is the result of a process of agreement (or government) in a given syntactic configuration (gender, number, case, etc. are features that are explained in this way in current literature), but what remains unclear is the category or syntactic configuration with which these appreciative affixes ‘agree’. Despite this, the algorithm in (1) indicates that we are looking at an inflectional process, that is, a process of creating word forms of a lexeme, and not a derivational process of creating a new lexeme (excluding the frequent cases of lexicalization, such as *bombilla* ‘light bulb’ or *cerilla* ‘match’). The fact that, with few exceptions (see Lázaro Mora 1999), every Spanish noun and adjective of quality may have a form with the suffix *-it-* (including *bombillita* and *cerillita*) identifies diminutivization with inflection rather than with derivation.

For its part, the formal behaviour of diminutive *-it-* also points to a greater affinity with inflectional morphology, in the sense that, as Varela Ortega (1990, 91) points out, it seems that *-it-* is inserted ‘when the word is already formed’, with a more phonological than strictly morphological conditioning. In fact, although this controversial issue cannot be developed further here, the diminutive *-it-* seems to behave like an infix that stands just in front of the word mark: *niñ-o* > *niñ-it-o* ‘kid’ and *art-ista* > *artist-it-a* ‘artist’ are analogous in this regard, compared to analyses that suggest (see Lázaro Mora 1999, 4659-60) that in the first case it is a suffix and in the latter an infix. Examples of the type of *Carl-it-os* also support this idea, assuming with Pazó (1989) that the sequence *-o-s* of the proper name is reanalysed as the set of the slots for gender (word mark) and number (see also Bermúdez-Otero 2006). When the word mark does not exist or is irregular (it is not *-a* or *-o*), then the affix is placed after the stem and it replenishes the regular word mark based on the gender of the base (*árbol* > *arbolito* ‘tree’, *nariz* > *naricita* ‘nose’), using the *-c-* increment in bases ending in *-e* (*hombre* > *hombrecito* ‘man’; cf. *hombro* > *hombrito* ‘shoulder’) or in consonants ending in *-n* and *-r* (*camión* > *camioncito* ‘truck’, *tambor* > *tamborcito* ‘drum’).<sup>4</sup> In fact, in adverbial elements without gender, the formants *-o* and *-a* are treated in the same way: *pronto* > *prontito* ‘soon’, *cerca* > *cerquita* ‘near’. All this seems more consistent with obtaining word forms appropriate to a certain context of use than with the creation of new lexemes. Fábregas (2017,

142), based on Dressler, suggests that by adding an appreciative morpheme to a base, ‘the most that can be said is that we are talking about a non-prototypical value of the meaning of the base’, an interpretation that suggests that diminutives of the *-it-* type reveal in the form of the word a certain pragmatic type of non-canonical use of a term (based on a diminutive quantification), which would be consistent with its classification as part of inflectional morphology.

### 3.3. Problems in the distinction between affixes and roots

The boundaries between derivation and compounding (see ten Hacken 2000) become blurred when the difference between a root and a derivational affix itself becomes blurred.

The most recalcitrant cases in the Spanish tradition, without any intention of completeness, are (i) the status of adverbs in *-mente* (in the sense of whether it is an adverbializing suffix or a compound element) (see Carriscondo 2018 for a defence of the compounding option, in line with the arguments of RAE & ASALE 2009, §7.14d), (ii) the status of the initial element of words as *contranatural* ‘unnatural’ or *contrapuerta* ‘inner door’ (see Marqueta 2018 for arguments that in the first case it is a prefix, and in the second a preposition included in a compound), and (iii) so-called neoclassical stems (as in *filántropo* ‘philanthropist’ and *antropología* ‘anthropology’) and their doubtful status somewhere between roots and affixes, which some authors have significantly called *affixoids* (see Varela Ortega 2005 and Fábregas 2013a for arguments that these elements are lexical stems and not affixes).

## 4. Conclusions

I have tried to show that the distinction between derivation and inflection is a consequence of the architecture of grammar itself, so it is not expected to be gradual. The sense of gradualness, and the problems of delimitation that we have found, have to do with the formal continuity between both types of morphology, with the gradual way in which both processes behave with respect to some of the criteria commonly used in the literature to its characterization, and, above all, with the difficulty in deciding, once the algorithm in (1) has been applied, whether A and B are two different words or two different forms of the same word.

## Notes

<sup>1</sup> This notion of lexeme should not be confused with the sense of ‘lexical morpheme’ or ‘lexical root’, with which it is also used in the tradition of Spanish morphology as a means to distinguish roots from affixes (see Felú this volume).

<sup>2</sup> As Rainer (1996) points out, potential counterexamples are not such if we consider that “enclosed” inflectional morphemes are not part of the inflection of the derived word, as in the case of *-mente* adverbs. The case of *soplándito* ‘blowing’ does not constitute an objection to Anderson’s (1992) model, as Rainer (1996, 86) suggests, since the diminutive *-it-* is inserted “inside” the inflectional suffix (*-ndo*), not after it (but see 3.2 below on this issue).

<sup>3</sup> Note that *Busco un médico varón* ‘I’m looking for a male doctor’ is not redundant, and that we can say *Busco un médico mujer* ‘I’m looking for a female doctor’ but not \**Busco una médico mujer*.

<sup>4</sup> See Fábregas (2013b) for an analysis in terms of the prosodic integrity of the bases, and in which the diminutives of Spanish are treated as specifiers, not heads.

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