## Bare morphology

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ABSTRACT. Several cases of Portuguese words that share the same root string are studied, representing different types of conversion. Such is the case with  $firm_{ADJ} - firmar_{vi}$ ;  $abaix_{ADV} - abaixar_{vi}$ ;  $manch_{N} - manchar_{vi}$ ,  $afia_{N} - afia_{N}$ . In order to set them apart one needs to take into account features from every grammar domain. It may be concluded that this fact is one of the best arguments for considering conversion as a lexical word formation process (as opposed to morphological, syntactic or semantic notions).

KEY-WORDS. conversion, derivational process, morphology.

Conversion is usually defined as a derivational process linking lexemes of the same form but belonging to different word classes. Virtually all of this has been questioned at one point or another, and yet the concept of conversion remains in use, very much as the conventional system of word-classes does in languages for which it is theoretically inadequate.

Bauer & Varela (2005: 8)

Eight years later, this opinion by Bauer & Varela (2005) still remains the state-of-the -art on conversion: it is still not difficult to accept that conversion may not be a derivational process, that it may not link lexemes, that, whichever entities are involved, they may not have the same form and that they may not even belong to different word classes. Nevertheless, at some point of the discussion on word formation, it is necessary to consider these cases that involve neither affixation nor compounding. This kind of (negative) definition allows treating as equal what has traditionally been considered as different. Portuguese grammars generally mention two sorts of 'bare' word formation processes, both classified under the label of derivation: 'derivação regressiva', for an allegedly subtractive deverbal

noun formation<sup>1</sup>, and 'derivação imprópria'<sup>2</sup>, for the use of a word in a non-canonical syntactic position. Yet, ahead of his time, Said Ali (1923-1931, 1965: 230-231) questioned this view by arguing that "a mudança de sentido e de função que sofrem as palavras [...] deverá denominar-se semântica e não derivação". So, much remains to be clarified in this domain. In this paper, some of the basic questionings will be confronted with data from Portuguese, from the viewpoint of word grammar<sup>3</sup>. The relevant data includes a wide variety of situations, some of which may be seen bellow:

- (1) i. a. Não gosto de bebidas **doces**]<sub>adj</sub>
  'I don't like sweet drinks'
  - b. Vou fazer um doce]<sub>n</sub>de amora'I'm going to prepare a blackberry jam'
  - ii. a. A palha **seca**]<sub>adj</sub>arde depressa 'Dry hay burns quickly'
    - b. A **seca**]<sub>n</sub>destruiu as colheitas

      'The drought destroyed the crops'
    - Temos de pôr o barco em seco]<sub>n</sub>
       'We have to drydock the boat'
    - d. Seca]<sub>v</sub>as batatas antes de fritá-las
       'Dry the potatoes before frying them'
  - iii. a. Estas flores estão **murchas**]<sub>adj</sub>
    'These flowers are wilted'
    - b. Estas flores murcharam]

      'These flowers wilted'

¹ Cunha & Cintra (1984: 104) describe the 'derivação regressiva' as "um processo de criação vocabular [...] que consiste na redução da palavra derivante por uma falsa análise da sua estrutura". Even in this kind of literature, some evolution has taken place. In a recent edition of the *Moderna Gramática Portuguesa*, Bechara (2009: 370) claims that "intimamente relacionada com a derivação temos a formação regressiva ou deverbal, que consiste em criar palavras por analogia, pela subtração de algum sufixo, dando a falsa impressão de serem vocábulos derivantes: de *atrasar* tiramos *atraso*, de *embarcar*, *embarque*; de *pescar*, *pesca*; de *gritar*, *grito*."

<sup>&</sup>lt;sup>2</sup> Cunha & Cintra (1984: 105) call 'derivação imprópria' the "processo de enriquecimento vocabular pela mudança de classe de palavras", "sem sofrer modificação na forma'. In this case, Bechara (2009: 372) offer as an example the nominal use of a negation adverb ('terrível palavra é um não') and he calls it a case of conversion, but he still feels the need to make an observation about the previous label: "Os casos de conversão recebiam o nome de derivação imprópria. The terminological turn is unconvincingly justified by Bechara for the fact that "a conversão não repercute na estrutura do significante de base [...]."

<sup>&</sup>lt;sup>3</sup> The background analysis of words for the description in this paper is based on Villalva (2000; 2008; 2011).

- iv. a. *Não me faças perguntas difíceis*]<sub>adj</sub>
  'Don't ask me difficult questions'
  - b. Ele adora falar difícil<sub>adv</sub>'He likes to speakin a complicated manner'
  - c. O **difícil**] não é chegar a horas 'The hardpart is not arriving on time'
- v. a. Este poço é muito **fundo**]<sub>adj</sub> 'This is a very deep well'
  - b. Ele respira fundo]<sub>adv</sub>'He breathes deeply'
  - c. Quem não nada vai ao **fundo**]<sub>n</sub>

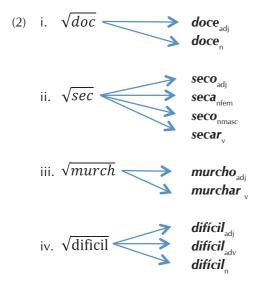
    'Those that can't swim will keel over'
  - d. *Eles fundaram*], um clube 'They founded a club'
- vi. a. *El*e é de *firmes*]<sub>adj</sub>*convicções* 'He has firm convictions'
  - b. Vai **firme**]<sub>adv</sub> 'Go steady'
  - c. Com esta fotografia **firmaremos**]<sub>v</sub>este momento tão particular 'With this picture, we will document this peculiar special moment'
- vii. a. *Já fiz imensas*]<sub>adj</sub>tentativas 'I've already madelots of attempts'
  - b. Gosto **imenso** ]<sub>adv</sub>de queijo 'I like cheese a lot'
- viii. a. O professor mora **longe**]<sub>adv</sub>
  'The teacher lives far away'
  - b. Não vejo nada bem ao longe]<sub>n</sub>
     'I can't see well at a distance'
- ix. a. Passa **adiante**]<sub>adv</sub>
  'Move forward'
  - b. Vou adiantar]<sub>v</sub>este projecto'I'm going to keep on working on this project'

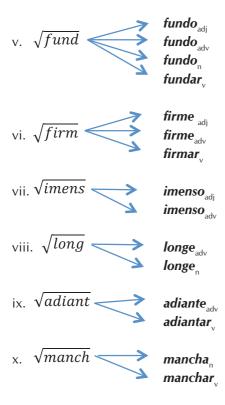
- x. a. Há **manchas**]<sub>n</sub>de humidade na parede 'There are damp patches on the wall'
  - b. A humidade **manchou**], a parede 'Damp stained the wall'

The basic issue under discussion in this paper concerns the common *vs* different nature of all the situations in (1). If they are the outcome of a single process, we could call it conversion, but what kind of process is this and how does it operate? If, instead, they involve different word formation processes, then it is relevant to ask if there is any of them that is a word formation process, or if it is a lexical, a morphological or a syntactic matter, or even, as Said Ali suggested, if it is all about semantics.

#### 1. The underspecified root hypothesis and its reverse

Hypothetically, one could admit that all the words in (1) are projections of the following set of roots that would, in each case, unfold into a variable number of words:





The problem with this hypothesis stems from the fact that the words formed by this set of rules bear a number of inherent and selectional properties that are idiosyncratic. Features such as gender or thematic class for nouns (eg. *fundo* and *seco* are –o ending masculine nouns, whereas *mancha* and *seca* are a- ending feminine nouns), variability for adjectives (eg. *fundo/funda* is a variable adjective, but *doce*is invariable), the thematic class of adverbs (eg. *fundo* is an –o ending adverb, but *firme* is an e- ending adverb) and the conjugation for verbs (*fundar* is 1st conjugation and *fugir is* 3rd) verb, are not derivable – they must be listed somewhere. Notice that the similarity of words involved in conversion is self-evident if we consider citation forms, but less convincing if we take into account full lexical paradigms or their syntactic and semantic behaviour:

$\sqrt{fund}$	adj	adv	n		v	
citation form	<u>fundo</u>	<u>fundo</u>	<u>fundo</u>	fundar		
other forms	fundos funda fundas		fundos	fundo fundas funda fundamos fundais fundam fundei fundaste fundou fundámos fundastes fundaram fundavas fundavas fundavas fundávanos fundávanos fundávamos	fundara fundaras fundaras fundaramos fundareis funde fundes fundes fundeis fundeis fundes fundes fundass fundasse fundasses fundasses fundassemos fundassemos fundassem	fundardes fundarem fundarei fundarás fundarás fundarais fundareis fundaria fundaria fundarias fundarias fundarias fundarias fundarias fundarianos fundariamos fundariamos fundarian

There is a relatively broad consensus that idiosyncratic properties are lexically established, so, if the roots that are inscribed in the lexicon are underspecified roots, where does this idiosyncratic information come from?

The reverse of the underspecified root hypothesis is the one root for each lexical paradigm hypothesis. Again, if we consider the data in (1), the output of this new hypothesis is as follows:

(4) i. 
$$\sqrt[adj]{doc}$$

$$\sqrt[n]{doc}$$

ii. 
$$\sqrt[adj]{sec}$$
 $\sqrt[n]{sec}$ 
 $\sqrt[n]{sec}$ 

iii. 
$$\sqrt[adj]{murch}$$

iv. 
$$\sqrt[n]{dificil}$$
 $\sqrt[adj]{dificil}$ 
 $\sqrt[adv]{dificil}$ 

v. 
$$\sqrt[n]{fund}$$
 $\sqrt[adj]{fund}$ 
 $\sqrt[v]{fund}$ 

vi. 
$$\sqrt[adj]{firm}$$
  $\sqrt[adv]{firm}$   $\sqrt[v]{firm}$ 

vii. 
$$\sqrt[ady]{imens}$$

viii. 
$$\sqrt[n]{long}$$

ix. 
$$\sqrt[adv]{adiant}$$

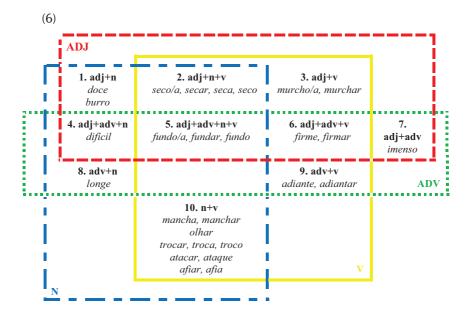
$$\begin{array}{ccc}
x. & \sqrt[n]{manch} \\
\sqrt[n]{manch}
\end{array}$$

Aside from being blatantly uneconomical, the main problem of this counter-hypothesis is that it fails to acknowledge that probably not all the roots from (4i) to (4x) have the same lexical status. Even intuitively, it is easily demonstrated that the use of *dificil* as an adjective or as a noun does not require a huge effort, from the point of view of the knowledge of these words. However, the use of pairs such as  $mancha_N / manchar_V$  and  $trocar_V / troca_N$ , for instance, requires a more significant effort, since in one of these cases, the verb is a sort of causative involving the noun, and, in the other case, the noun is a sort of deverbal action noun. This is exactly what can be found in typical morphological word formation processes:

(5) a. 
$$mancha_N$$
 '(the) damp patch'  $manchar_V$  'to stain'  $plano_N$  '(the) plan'  $planear_V$  'to make plans'  $cristal_N$  '(the) cristal'  $cristalizar_V$  'to cristalize'  $fruto_N$  '(the) fruit'  $frutificar_V$  'to fructify'

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b. trocar,
                    'to change'
                                                            '(the) change'
                                       troca<sub>N</sub>
   apresentar<sub>v</sub>
                    'to present'
                                       apresentação N
                                                            '(the) presentation'
                    'to forget'
                                       esquecimento N
                                                             '(the) forgetting'
   esquecer<sub>v</sub>
                    'to tolerate'
                                                             '(the) tolerance'
   tolerar,
                                       tolerância<sub>N</sub>
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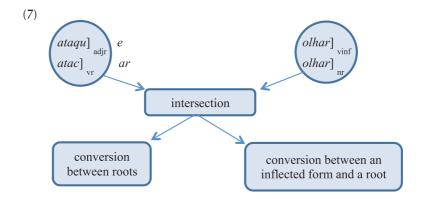
Strictly speaking, conversion is not a morphological word formation process, since no affixes or compounding strategies are involved, but it is also quite obvious that conversion is a word formation process of a different nature, or, most probably, even more than one word formation process. In the following sections, I will try to identify different subtypes of conversion in Portuguese. At the same time, I will attempt to consolidate a more principled analysis of the type of data in (1), considering an expanded set of words, shown in (6):



We will first consider some morphological clues, enabling us to identify the morphological nature of the input and of the output of conversion and, eventually, to uncover the directionality of conversion.

### 2. Morphological category of conversion forms

The idea of treating pairs of words such as  $atacar_{v}$  /  $ataque_{N}$ as well as  $olhar_{v}$  /  $olhar_{N}$ as conversion products, was an interesting insight. However, this approach requires identification of the morphological category of the intersection string, in order to be able to obtain some descriptive adequacy. In fact, in  $atacar_{v}$  /  $ataque_{N}$  conversion targets the root, where as in  $olhar_{v}$  /  $olhar_{N}$  conversion involves an inflected form of a root:



From this observation, we can surmise that the identification of the morphological category of conversion members is required. However, probably, the most relevant outcome is related to the fact that the output of a conversion operation is a root, as this pushes (this kind of) conversion into the lexicon, pulling it away from syntax and from semantics. From this point of view, conversion is not very different from regular derivation that also yields roots as its output:

(8) 
$$ole_{nr}$$
  $ole-os_{adjr}$   $(o/a)$   $ole-os-idad_{nr}$  (e)   
'oil' 'oily' 'oiliness'

#### 3. Assessment of the directionality of conversion

Looking at the derivational history of complex words provides an interesting tool for assessing the directionality of conversion. Words such as simpatizante 'fan, supporter', which can surface both as nouns and adjectives are probably not the best choice. In fact, since -nt(e) suffixation is a vestige

of the Latin present participle, which had a predominantly adjectival nature, we could admit that deverbal -nt(e) words are generated as adjectives, and later converted into nouns. But although words such as *atraente* 'atractive', exigente 'demanding' oufluente 'fluent' only occur as adjectives, the vast majority of -nt(e) words have a hybrid categorical behavior, occurring as either adjectives or nouns.

A much more convincing case concerns pairs such as  $embarcar_{V}$  /  $embarque_{N}$ . Embarcar is a parasynthetic verb, based on a noun root (ie. barc-). Parasynthetic verb formation is a very productive resource in Portuguese (as in other Romance languages). Since parasynthesis is typically a verb formation process, the directionality puzzle is solved in this case:

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\begin{array}{lll} (9) & \textit{bra}\varsigma_{\text{nr}} \text{ 'arm'} & \rightarrow \textit{abra}\varsigma_{\text{vr}} \text{ 'to embrace'} & \rightarrow \textit{abra}\varsigma_{\text{nr}} \text{ 'hug'} \\ & \textit{barc}_{\text{nr}} \text{ 'boat'} & \rightarrow \textit{embarc}_{\text{vr}} \text{ 'to embark'} & \rightarrow \textit{embarqu}_{\text{nr}} \text{ 'boarding'} \\ & \textit{purg}_{\text{nr}} \text{ 'purge'} & \rightarrow \textit{expurg}_{\text{vr}} \text{ 'to expunge'} & \rightarrow \textit{expurg}_{\text{nr}} \text{ 'purge'} \\ & \textit{bord}_{\text{nr}} \text{ 'board'} & \rightarrow \textit{transbord}_{\text{vr}} \text{ 'to transship'} & \rightarrow \textit{transbord}_{\text{nr}} \text{ 'transhipment'} \end{array}
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The same can be said about pairs such as  $bloquear_v / bloqueio_N$ . The verb is formed by suffixation, so it is the noun that must be obtained by conversion:

(10) 
$$bloc_{nr}$$
 'block'  $\rightarrow bloque_{vr}$  'to block'  $\rightarrow bloquei_{nr}$  'blockade'  $cabec_{vr}$  'head'  $\rightarrow cabece_{vr}$  'to nod'  $\rightarrow cabece_{nr}$  'nod'

These previous examples also allow us to notice that conversion competes morpho-semantically with morphological word formation processes, such as action noun formation. In some cases, the output of conversion even competes with morphological derived words (cf. 11c):

(11) a. Essa empresa abate gado
'This company slaughters cattle'
O abate de gado por essa empresa ...
'The slaughter of cattle by this company...'

## b. Esta escola **forma** professores

'This school trains teachers'

A **formação** de professores por esta escola ...

'The training of teachers bythis school ...'

Este conductor **atropelou** duas pessoas

'This driver ran over two people'

O atropelamento de duas pessoas ...

'The running over of two people ...'

c. *acumular*'accumulate' *atropelar* 'runn over'

acúmulo, acumulação 'accumulation' atropelo, atropelamento 'trampling'

A morphologically controlled paraphrase of the conversion words is also a useful tool for assessing directionality. In the case of adjective-noun pairs such as *doce*, we can see that the adjective participates in the paraphrase of the noun, but the reverse is not possible. Consequently, we may hypothesize that the noun is the output form<sup>4</sup>:

#### (12) Vou beber um vinho doce

'I am going to prepare a sweet wine'

Vou fazer um doce (= algo doce)

'I am going to prepare a sweet (= something sweet)

Finally, we will consider etymology. This is a criterion that needs to be used with care. Speakers seldom acquire the knowledge of etymology, and word etymons are often unknown to philologists<sup>5</sup>. The following example is of a conversion of an adjective (AMICUS) into a noun (AMICUS) that took place in Latin. The existence of an adjective (i.e. *amigo* 'friendly') and a noun (i.e. *amigo* 'friend') in Portuguese is probably due to the fact that both existed in

<sup>&</sup>lt;sup>4</sup> Notice that this claim does not imply that the nominal surfacing of *doce* demands the ellipsis of a noun. It's up to the syntactic analysis to decide upon that matter.

<sup>&</sup>lt;sup>5</sup> There is a huge contingent of words that have an unknown origin (eg. *palerma* 'fool'). In some other cases, the origin of the word is controversial. The Portuguese word *burro*, that may occur as a noun (meaning 'donkey' or 'fool') or an adjective (meaning 'stupid'), is related to a Latin adjective (i.e.Buricus), which meant 'those that come from Buri and have peculiar horses', but eventually the Latin adjective is not the ancestor of the Portuguese word. Originally, Buri is a Germanic toponym.

Latin and both evolved into Portuguese. There is no reason to believe that any kind of conversion took place in Portuguese in this instance:

(13) in Latin: in Portuguese: 
$$\sqrt[p]{am} \rightarrow \sqrt[adj]{amic} > \sqrt[adj]{amig}$$
$$\sqrt[n]{amic} > \sqrt[n]{amig}$$

In the case of *melhor*, historical information clearly shows that its predecessor (i.e. Melior) was created in Latin, as the superlative of the adjective bonus, that also entered the Portuguese lexicon, as *bom*. The verbal and the adverbial valences of  $\sqrt{melhor}$  are Portuguese innovations, so these may have been obtained through conversion:

(14) Este é o meu melhor casaco (adj) 'This is my best coat'

Vê lá se melhoras dessa gripe (v) 'Get better from that flu'

Nesse caso, o melhor é irmos embora (n) 'In that case, we hadbetter be leaving'

*Um chapéu branco protege melhor do sol* (adv) 'A white hat protects better from the sun'

In this section, I endeavored to assemble a set of tools that can serve to determine the directionality of conversion, which amounts to saying that there is no single way of determining this – we need to gather information from various sources. In the following two sections, we will consider two different cases of conversion as word formation processes.

### 4. Case study #1: deverbal nominalization

There is a large number of pairs of verbs and nouns. In this section, we will see that some of them can be sorted into three subtypes. Subtype I includes action nouns formed from a verb root. As mentioned before, the presence of derived and parasynthetic bases attests that conversion generates deverbal nouns and not the opposite.

5)	derivation noun root		conversion		
			verbroot → action noun		
	barc- caix- casc-	parasynthetic	embarc- encaix- descasc-	embarque encaixe descasque	
	baf- boc- far-	ej-	bafej- bocej- farej-	bafejo bocejo farejo	

The semantics of these action nouns indicates that they are the result of a word formation process:

The main problem with the description of these nouns as lexically formed words is the lack of a pattern for their thematic class membership and gender value. Apparently, everything is possible and unpredictable (cf. 17a). We can even find more than one noun formed upon a single verb root (cf. 17b) and we can also find variation between European Portuguese and Brazilian Portuguese:

(1 <i>7</i> )	a.		base verb	vr → nr	deverbal noun
		1 <sup>st</sup> C	avisar 'to warn' derramar 'to spill' pescar 'to fish'	avis- derram- pesc-	aviso (-o masc) 'warning' derrame (-e masc) 'leakage' pesca (-a fem) 'fishing'
		2 <sup>nd</sup> C	socorrer 'to help' abater 'to slaughter' escolher 'to choose'	socorr- abat- escolh-	socorro (-o masc) 'help' abate (-e masc) 'slaughter' escolha(-a fem) 'choice'
		3 <sup>rd</sup> C	resumir 'to summarize' curtir 'to enjoy' fugir 'to run away'	resum- curt- fug-	resumo(-o masc) 'summary' curte (-e fem) 'enjoyment' fuga (-a fem) 'escape'
	b.		trocar 'to change'		troca 'changement' troco 'change'
			cuspir 'to spit'		
	C.				cuspo(PE) 'spit' cuspe(PB) 'spit'

Based on this kind of evidence, the nature of this word formation process seems unquestionably difficult to capture and the lexicon seems the only place capable of hosting it.

Subtype II concerns nouns formed from an impersonal infinitive form (eg. olhar). Virtually, all verbs share this possibility of nominalizing an infinitive and all of them, in spite of the conjugation class of the base verb, are masculine nouns belonging to the  $\varnothing$  thematic class:

(18)		infinitive	noun root	masculine noun
		latejar 'to throb'	latejar-	latejar 'throbing'
	1st C	poupar 'to spare'	poupar-	poupar 'sparing'
		fumar 'to smoke'	fumar-	fumar 'smoking'
		beber 'to drink'	beber-	beber 'drinking'
	2nd C	conhecer 'to know'	conhecer-	conhecer 'knowing'
		derreter 'to melt'	derreter-	derreter 'melting'
		sentir 'to feel'	sentir-	sentir 'feeling'
	3rd C	vestir 'to wear'	vestir-	vestir 'wearing'
		dormir 'to sleep'	dormir-	dormir 'sleeping'

These infinitive nouns (traditionally called verbal substantives) may compete with a 'cognate' derived noun (cf. 19a-c) or even with another deverbal noun formed by root conversion (cf. 19d). These coincidences, available mostly if there is a semantic specificity for each of these nouns<sup>6</sup>, enable them to act as members of the same class of action nouns:

- (19) a. Gosto de assistir ao **nascer** do sol 'I like to watch the sunrise' Gosto de assistir ao **nascimento** de uma criança 'I like watching the birth of a child'
  - b. Incomoda-me muito este padecer do João
     'John's suffering bothers me a lot'
     Incomoda-me muito este padecimento do João
     'John's suffering bothers me a lot'
  - c. O poupar é muito importante 'Saving is very important'
     A poupança é muito importante 'Saving is very important'
  - d. O pertencer a essa família só lhe trouxe preocupações 'Belonging to this family only brought him concerns' A pertença a essa família só lhe trouxe preocupações 'Belonging to this family only brought him worries'

<sup>&</sup>lt;sup>6</sup> The existence of a derived action noun often blocks the use of an infinitive noun or, at least, it renders it quite marginal:

A comemoração  $_{\rm N}$  do teu aniversário foi muito divertida.

O comemorar do teu aniversário foi muito divertido.

<sup>&#</sup>x27;The celebration of your birthday was very nice'

A apanha, da fruta começa em Junho.

O apanhar, da fruta começa em Junho.

<sup>&#</sup>x27;The harvest of the fruit begins in June'

Nevertheless, there are occasions that seem to point in the opposite direction, particularly when we consider colocations or idioms:

Até ao lavar dos cestos é vindima

<sup>\*[</sup>Até à lavagem dos cestos é vindima]

<sup>&#</sup>x27;The grape harvest isn't over if the baskets haven't been washed'

Like other (derived) action nouns, some of these infinitive nouns get a secondary meaning, which, independently of its precise meaning, implicates countability, evident in the fact that these nouns can pluralize, whereas the previous ones can't:

- (9) a. É preciso ter cuidado com o prazo de acabamento dos trabalhos 'It's necessary to be careful with the deadline for completion of work' acabamento 'completion' = o acto de acabar Neste apartamento há muitos problemas de acabamentos 'In this apartment there are many problems with the finishing' acabamentos 'finishings' = remates
  - b. andar 'walk'

Por este **andar**, não acabamos hoje o trabalho 'At this pace, we won't finish this job today' por este andar 'at this pace' = a este ritmo Ela tem dois **andares** em Lisboa 'She has two apartments in Lisbon' andares 'apartments' = apartamentos

dever 'duty'

Ele tem o **dever** de cuidar bem dos filhos 'He has the obligation to take good care of the children' dever 'obligation' = obrigação Vais brincar quando acabares de fazer os **deveres** 'You'll play when you're done with the homework' deveres 'homework' = trabalhos de casa

jantar 'dining'
Às vezes os **jantares** de família são maçadores
'Sometimes family dinners are boring'
jantares 'dinners' = refeições nocturnas

parecer 'looking'

Quem escreveu estes **pareceres** sobre a tese?

Who wrote these opinions about the thesis?

pareceres 'opinions' = opiniões

ser 'essence' = essência
O autor inventou uns seres muito estranhos
'The author has invented some very strange beings'
seres 'beings' = criaturas

Once again, based on this kind of evidence, this word formation process seems to be a lexical matter.

Subtype III deals withsubject-nouns<sup>7</sup> formed upon present indicative,3<sup>rd</sup> person singular verb forms. The identification of the input form is decided on the evidence of 3<sup>rd</sup> conjugation verbs and, particularly, irregular verbs:

(9)

	INFINITIVE	$3^{\text{RD}}$ sing. Pres. Ind.	NOUN	
	empatar 'to hinder'	empata	empata 'hinderer'	
1st C	penetrar 'to penetrate'	penetra	penetra 'gatecrasher'	
	afiar 'to sharpen'	afia	afia 'sharpener'	
2 <sup>nd</sup> C	pertencer 'to belong'	pertence	pertence 'belong	ing'
2 0	comer 'to eat'	come	come 'eater'	come e dorme
3 <sup>rd</sup> C	dormir 'to sleep'	dorme	dorme 'sleeper'	'lazy person'
3C	desentupir 'to unclog'	desentope	desentope 'toilet	plunger'
Y 1	fazer 'to do'	faz	faz(-tudo) 'handy	man'
Irregular verbs	ir 'to go' vir 'to come'	vai vem	vaivém 'shuttle'	

<sup>&</sup>lt;sup>7</sup> Booij (1986: 507) suggests that agent nouns are more adequately labeled as subject-nouns since the word formation process that forms them links the thematic role of the base verb to the derived word. Thus, deverbal subject nouns can be agent nouns (which is the most frequent case), but they can also be patient nouns or experiencer nouns (cf. sofredor 'sufferer', mercedor 'deserver').

Notice that these subject-nouns, just like morphologically derived subject-nouns<sup>8</sup>, may have a [+human] or a [-animate] interpretation:

#### (22) a. [+human]

Ele/a é um/a empata. 'He/she is a hinderer' Ele/a é um/a penetra. 'He/she is a gatecrasher'

Ele é um **conquistador**. 'He's a conqueror' Ele é um **vindimadeiro**. 'He is a grape harvester'

#### b. [-animate]

Preciso de comprar um **afia**.
'I need to buy a sharpener'
O **escorrega** precisa de ser arranjado.
'The slide needs to be fixed'

### 5. Case study #2: verb-forming conversion

This case is about nouns such as *albergue* or *mancha*, that are also related to verbs (e.g. *albergar*'to host', *manchar*'to stain'), by sharing the same root. But, unlike the previous cases, theyare not action nouns or agent nouns. These are usually concrete, countable nouns, such as *albergue* 'hostel'. The verbs, however, exhibit some regularities: they are always 1st conjugation verbs and they always have a *latusensu* causative meaning:

(23)	noun	nr→ vr	verb	paraphrase
	albergue 'hostel'	alberg-	albergar 'to host'	dar albergue
	alerta 'alert'	alert-	alertar 'to alert'	pôr alerta
	mancha 'stain'	manch-	manchar 'to stain'	pôr mancha(s)

<sup>&</sup>lt;sup>8</sup> Dressler (1986) established a hierarchy for the conceptual category of Agent that captures the observation that agent noun forming resources are also available for instrument noun and locative or source nouns.

These denominal verbs have properties that can be observed in verbs similarly based on adjective and adverb roots. The input form is different, but the output verb resembles the denominal instance: like the previous cases, they are always 1<sup>st</sup> conjugation verbs and they always have a *latusensu* causative meaning.

(24)	adjective	adjr→ vr	verb	paraphrase
	firme 'firm'	firm-	firmar 'to firm'	tornar firme
	murcho/a 'wilted'	murch-	murchar 'to wilt'	ficar murcho
	melhor 'better'	melhor-	melhorar 'to better'	tornar/ficar melhor

(25)	adverb	advr→vr	verb	paraphrase
	abaixo 'below'	abaix-	abaixar 'lower'	pôr abaixo
	adiante 'further'	adiant-	adiantar 'advance'	pôr adiante

Etymology can provide valuable clues. The Portuguese noun alarme, or the English version alarm, are borrowings from the Italian noun allarme, which was based on the interjective prepositional phrase all'arme, used to call the soldiers for a defensive intervention. In Portuguese, both the noun alarme (eventually under the form alarma) and the verb alarmar 'to cause alarm' are not registered prior to the 19th century, but, according to the authors of Le Trésor de la Langue Française Informatisé (atilf.atilf.fr/dendien/ scripts/tlfiv4/showps.exe?p = combi.htm; java = no;), the French word alarme has been used since the beginning of the 14th century and the verb alarmer, is aknowledged as existing from the 17th century onwards. The authors of the Tesoro della Lingua Italiana delle Origine (tlio.ovi.cnr.it/TLIO/) consider that the first documented use of the word occurs in a 13th century text (the verb allarmare is not registered at all in this lexicographic source). So, historical information, namely in Italian where the noun first appeared, clearly favours the hypothesis that the use of the noun is available prior to use of the verb in several languages.

This is, so far, the most regular case of word formation by conversion, since any noun root, adjective root or adverb root prone to representing a culmination state may be converted into a 1<sup>st</sup> conjugation causative verb root.

### 6. Closing remarks

Our initial question about the different or common nature of the data in (1) found an obvious response: not all the instances of root sharing are alike. If conversion covers all of them, then we must admit that there are different types of conversion. We also concluded that in order to set them apart we need to take into account features from every domain of the grammar, which is probably the best argument for considering conversion as a lexical word formation process rather than a morphological, syntactic or semantic one.

In practical terms, the data in (1) that have been scrutinized in this paper can be arranged as in table (26):

(26)				
		verbs		
nouns	$n \rightarrow v$			
	$manch \rightarrow manch$			
	$v \rightarrow v$			
	$troc \rightarrow troc$			
	$olhar \rightarrow olhar$			
	afia → afia			
L. XII	ayta - ayta	1.	1	,
[+N]		adj→v	adjectives	
burr		$fund \rightarrow fund$		
doc		$murch \rightarrow murch$		
		$sec \rightarrow sec$		
		adv →v		
		abaix → abaix		
		adiant → adiant		
			adv	ert

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