Semantic rivalry between affixes: the case of Portuguese nominalisers

Alexandra Soares Rodrigues
Escola Superior de Educação do Instituto Politécnico de Bragança;
CELGA- Universidade de Coimbra
afsr@ipb.pt

1. Introduction

In Portuguese there are different suffixes that permit us to construct event deverbal nouns. Those affixes may adjoin the same verbal base. Examples of this are presented in table 1:

Table 1: Different deverbal nouns from the same verb

Base verb	EDN in -mento	EDN in -da	EDN in	EDN in	EDN in
			-ção	-dela	-dura
tosquiar 'to shear'	tosquiamento	tosquiada	tosquiação	tosquiadela	tosquiadura
moer 'to mill'	moimento	moída	moição	moidela	moedura

Albeit deriving event nouns, the meanings of the derivatives of these suffixes are slightly different. We intend to contribute to the understanding of the mechanisms that are involved in affix semantic rivalry, specifically to the knowledge of the semantic features of the verbal base that are sensitive to the semantics of each affix.

2. Affix selection: the 'all or nothing' hypothesis

Fábregas (2010) has proposed that in Spanish the selection of the different nominalising suffixes depends on the semantic features of the internal argument of the base verb. According to Fábregas, verbs of change of state with a rheme path object originate nominals with the suffix -da/-do, but not with the suffix -miento. Contrarily, verbs of change of state with an undergoer choose the suffix -miento and not -da/-do.

Table 2: Verbs with undergoer and verbs with rheme path objects with deverbal nouns with -da and -mento

Verbs with undergoers	Deverbal nouns with -da	Deverbal nouns with -mento		
processor	processada	processamento		
'to process'	'event of processing'	'event of processing'		
pensar	pensada	pensamento		
'to think'	'event of thinking'	'event of thinking'		
aquecer	aquecida	aquecimento		
'to heat'	to heat' 'event of heating'			
esfriar	esfriada	esfriamento		
'to cool'	'event of cooling'	'event of cooling'		
engordar	engordada	engordamento		
'to fatten'	'event of fattening'	'event of fattening'		

Verbs with rheme path objects	Deverbal nouns with -da	Deverbal nouns with -mento		
bronzear	bronzeada	bronzeamento		
'to tan'	'event of tanning'	'event of tanning'		
envernizar	envernizada	envernizamento		
'to varnish'	'event of varnishing'	'event of varnishing'		
descascar	descascada	descascasmento		
'to peel'	'event of peeling'	'event of peeling'		
descer	descida	descimento		
'to pull down; to lower'	'event of pulling down;	'event of pulling down; event of		
	lowering; descent'	lowering; descent'		

The analysis of Portuguese data does not corroborate Fábregas' hypothesis. As Portuguese data evidence, affix selection is not sensitive to the distinction between rheme path objects and undergoers. In fact, both verbs may be bases of nouns with the suffixes -da and -mento, as exemplified in table 2.

What we would like to question are those perspectives that consider affix selection as a question of blockage that operates in an 'all or nothing mode', that is, if a verb has a certain feature, the verb blocks the adjunction of a certain affix and requires the adjunction of another one. The examples in tables 1 and 2 arouse doubts concerning the 'all or nothing mode' conception of how suffix selection operates. It is intriguing that the same verb goes under the affixation of so many suffixes that operate in the same word-formation rule. Should not affix rivalry provide for the blockage of synonyms?

3. Affix selection: Our proposal

Instead of considering an 'all or nothing mode', we propose the notion of compatibility between the semantic features of the suffix and those of the verb (Rodrigues 2008, 2009, 2012; Rodrigues & Rio-Torto 2013).

We consider that the suffix contains semantic features. The verbal base also has semantic features related to the event and to the lexical semantic structure of the verb. The semantic feature will coindex with the semantic feature of the verb that is more compatible with its own feature. The conception of coindexation that we adopt is not the same that is presented in Lieber (2004). In Lieber (2004), coindexation operates with semantic and syntactic features. Our proposal eliminates syntactic features and focuses on semantic ones. Coindexation is a semantic operation required in word-formation processes such as affixation and compounding (Rodrigues & Rio-Torto 2013). In the case of affixation, coindexation is responsible for the adjunction of suffixes to the base, on the level of semantic structures operating in those formations. Coindexation works with semantic compatibility between the affix and the base.

Semantic features of the affixes are observable in a non-direct way, in the derivative. We have to compare event deverbal nouns that share the same base with each other, such as the ones presented in table 1. We also have to compare deverbal nouns from different bases but with the same affix with each other, as the ones presented in table 2.

These two ways of comparison had led to the following statements (Rodrigues 2008; Rodrigues & Rio-Torto 2013):

- -da has as semantic features [+sudden event; +point of arrival]; a.
- -mento has as semantic feature [+process]. b.

3.1 Semantic coindexation

The coindexation mechanism is described now. Remember that -da has as semantic features [+sudden event; +point of arrival]. If there is a verb whose event structure has a point of arrival, then the semantic feature of -da will coindex with this feature of the base, forming a deverbal noun whose meaning will be 'sudden event focused on the point of arrival'. The suffix, because of its own semantic feature(s), highlights the feature of the verb it coindexes with.

Regarding the suffix -mento, this one has as semantic feature [+process]. This feature contains the sub-features [+durative], being minimally compatible with the feature [point of arrival]. Subsequently, the semantic feature [+ process] of the suffix -mento will coindex with the feature [+durative] of the base.

This means that the base may contain both features [durative] and [point of arrival]. However, due to this mechanism of coindexation, which works in a semantic compatibility mode, the same verb may select both -da and -mento. The first affix will capture the point of the arrival of the event implied in the base and the second affix will capture the process implied in the base.

Table 3 and 4 contain a representation of the mechanism (for details of the symbols notation see Rodrigues 2008).

Table 5. Weenamsm of confidenation of t	the leature of the surffix -mento with	the reatures of the base
	Features of the verb	Features of the affix -m

Table 3: Mechanism of coindexation of the feature of the suffix -mento with the features of the base

		Features of the verb		Features of the affix -mento		
verb	Deverbal deverbal	durative	point of	telic	process	point of arrival
	noun		arrival			
tosquiar	tosquiamento	$E^{e,s}$	E	$E^{e,s}$	S s	
'to						
shear'						

Table 4: Mechanism of coindexation of the feature of the suffix -da with the features of the base

		Features of the verb			Features of the affix -da		
verb	Deverbal noun	durative	point of arrival	telic	process	point of arrival	
tosquiar 'to	tosquiada	Е	E ^{e,s}	E ^{e,s}		Ss	
shear'							

3.2 Affix as rivals?

Due to the different semantic features involved in each formation, the suffixes in those situations are not acting as rivals. In fact, the derivatives, although both meaning 'event', have different semantic nuances. Indeed, tosquiada means a quick event, whilst tosquiamento means the course of the process in itself (examples 1-4):

- **(1)**
- a. Vamos proceder ao tosquiamento do rebanho.
 - 'We will proceed to the shearing of the flock.'
- Estamos a assistir ao tosquiamento do rebanho há mais de duas horas. b.
 - 'We are attending the shearing of the flock since two hours ago'.
- (2)
- *Vamos proceder à tosquiada do rebanho. a.
 - *'We will proceed to the shearing of the flock.'

- *Estamos a assistir à tosquiada do rebanho há mais de duas horas. b.
 - *'We are attending the shearing of the flock since two hours ago.'
- Vamos dar uma tosquiada ao rebanho. (3) 'We will give a shearing to the flock.'
- **(4)** *Vamos dar um tosquiamento ao rebanho.
 - *'We will give a shearing to the flock.'

Examples (1-2) show that event deverbal nouns with *-mento* are compatible with a durative reading implied in the construction estar a assistir a 'to be attending sth' and ir proceder 'to go to proceed to'. Deverbal nouns with -da are not compatible with those constructions. Examples (3-4) demonstrate that -da may occur with the light verb dar 'to give', which does not happen with suffixes with *-mento*.

4. Conclusions

Unless there are other orders of constraints, in terms of semantic operations in word formation, it is not possible to state that only a certain kind of verbs will select a certain affix, since many affixes occur with the same base. This is possible because affixes have semantic features. These semantic features are semantically compatible or not with each one of the aspect features of the verb. The semantic feature of the affix will coindex with the semantic feature of the verb that is most compatible with itself. Because of this there may be a verb with different event deverbal nouns. Each one has semantic nuances that result from the specific features used in coindexation. Those semantic differences are observable in utterances that contain aspect constructions.

References

Fábregas, A. (2010) A syntactic account of suffix rivalry in Spanish. In A. Alexiadou & M. Rathert (Eds.), The syntax of nominalisations across languages and frameworks. Berlin/New York: Mouton de Gruyter, 67-91.

Lieber, R. (2004) Morphology and lexical semantics. Cambridge: Cambridge University Press.

Ramchand, G. (2008) Verb meaning and the lexicon: a first phase syntax. Cambridge: Cambridge University

Rodrigues, A. (2008) Formação de substantivos deverbais em português. München: Lincom.

Rodrigues, A. (2009) Nomes em -dor, -douro, -deiro, -doura, -doura e -deira: uma abordagem de acordo com o modelo de RFPs em interfaces. In Linguística: revista de Estudos Linguísticos da Universidade do Porto 4, 133-152.

Rodrigues, A. (2012) What affixes reveal about word formation? In M. Bloch-Trojnar & A. Bloch-Rozmej (Eds.), Modules and interfaces. Lublin: Wydawnictwo, 255-270.

Rodrigues, A. & R.-T. Graça (2013) Semantic coindexation: evidence from Portuguese derivation and compounding. In P. ten Hacken & T. Claire (Eds.), The Semantics of Word Formation and lexicalization. Edinburgh: Edinburgh University Press, 161-179.