

ALLOMORPHIC PATTERNS IN VERB DERIVATION OF BRAZILIAN PORTUGUESE

Indaiá Bassani
University of São Paulo

This paper examines the structure of morphologically complex verbs in Brazilian Portuguese (BP) focusing on the distribution of allomorphs of functional heads within a Distributed Morphology approach. Verb formation in BP is a process that can involve realized morphemes in a complex verbal event structure at the derivational level. Example (1) represents the schema of a morphological complex verb and example (2) illustrates how this schema is applied to the verbs *empobrecer* (to impoverish) and *aterrorizar* (to terrify). Most of the verbs with this configuration denote a bieventive structure in which the expression of a change of state (suffered by an internal argument) and resultative state associated with the meaning of the root are composed via combination of functional verbal heads *Voice*, *vBECOME* and *Vδ* (e.g. (3)).

The analysis explains how the functional heads within these verbs can interact with each other with a recent development of Distributed Morphology Theory (Halle & Marantz 1993, Embick & Noyer 2006) based on cyclic and linear locality domains (C_1 -LIN Theory (Embick 2010)). We will focus on the following phenomena: a) a phonological restriction on preffixation; b) the allomorphy of *vBECOME*; c) the choice of thematic vowels; d) the allomorphy of nominalizations.

We assume that the prefix of complex verbs is the phonological realization of a functional head responsible for introducing the internal argument in the argument structure. We follow Lin (2004) and label it *Vδ*. The head *Vδ* can only be realized by one of the three allomorphs (*a-*, *en-* and *es-*) if the root begins by a consonant. If the root begins by a vowel the head *Vδ* receives [Ø]. This interaction happens because *Vδ* is directly concatenated with the root, in the same cycle of PF (Phonological Form). Moreover, as the insertion of [a-], [eN-] or [eS-] in *Vδ* can be determined by (especially semantic) properties of the root, *Vδ* may be a non-cyclic head.

We also assume that *vBECOME* may have three allomorphs in Portuguese: [-ec-], [-iz] and Ø. This assumption comes from the empirical fact that mostly verbs formed by the suffix *-ec-* denote an inner change of state and can be provided or not with an external argument by *Voice*; others are necessarily associated with an external cause. So, these verbs alternate between a transitive and an unaccusative structure. Verbs formed by verbal suffix *-iz-* are frequently classified as causatives as soon as they denote a change of state associated with a resultative meaning caused, in general, by an agent or external cause. However, some of these verbs can appear in unaccusative structure as well, without the expression of an agent. Although verbs formed by verbal suffix *-ec-* are called inchoative and verbs formed by *-iz-* are called causative in traditional descriptive studies, they are part of a unique class in terms of the type of event they express. The difference between these formations is the manner in which *vBECOME* interacts with *Voice*.

As theme vowels are concatenated with *vBECOME* (in a post-syntactic component as suggested by Oltra-Massuet (2000)), and are non-cyclic heads, their form can be determined by that head: suffix *-ec-* enforces the insertion of theme vowel *e* and suffix *-iz-* enforces the insertion of theme vowel *a*. In the absence of an overt morpheme in *vBECOME*, the *Th* head can access the root. The examples *endoidecer* and *endoidar* (both meaning 'to mad') are strong evidence for this idea.

The overt heads above *vBECOME* do not seem to be sensitive to properties of the root or of *Vδ*. Nominalizations derived from verbs with suffix *-ec-* can only receive the allomorph *-mento* and those derived from verbs containing suffix *-iz-* can only receive allomorph *-ção*. However, throughout the discussion, empirical challenges to the C_1 -LIN Theory regarding outward sensitivity in nominalizations with null *vBECOME* allomorph are addressed.

In conclusion, the structure of complex verbs in Brazilian Portuguese can be approached focusing on the distribution of allomorphs of functional heads within a theory where morphology and syntax interact freely and contextual allomorphy is explained by locality domains.

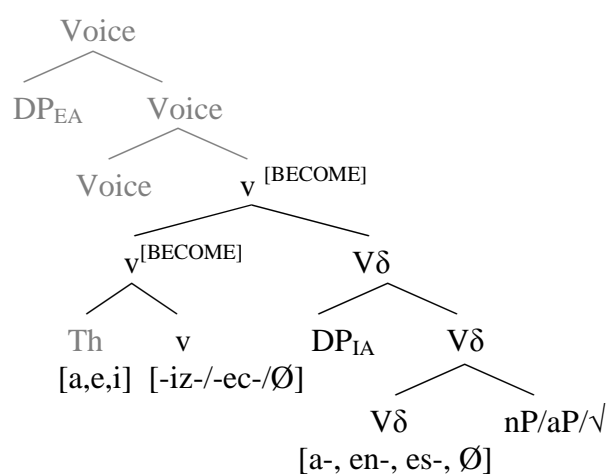
EXAMPLES

(1) PREFIX + ROOT/BASE + SUFFIX + THEME VOWEL + INFLECTIONAL SUFFIXES

(2) a. em-pobr-ec-e-r
 PREF-pobr-SUF-TV-INF
 ‘To impoverish’

b. a-terror-iz-a-r
 PREF-terror-SUF-TV-INF
 ‘To terrify’

(3) Complex event structure associated with change of state verbs¹



REFERENCES

- Embick, D. (2010). *Localism versus Globalism in Morphology and Phonology*. Cambridge: MIT Press.
- Embick, D., & Noyer, R. (2006). Distributed Morphology and the Syntax/Morphology Interface. In G. Ramchand, & C. Reiss, *Oxford handbook of Linguistics Interfaces* (pp. 298-324). New York: Oxford University Press.
- Halle, M., & Marantz, A. (1993). Distributed Morphology and the pieces of inflection. In K. Hale, & J. Keyser, *The View from Building 20* (pp. 111-176). Cambridge: MIT Press.
- Lin, J. (2004). *Event Structure and the Encoding of Arguments: The Syntax of the Mandarin and English Verb Phrase*. PhD Dissertation. MIT.
- Oltra-Massuet, I. (2000). *On the notion of theme vowel: a new approach to Catalan verbal Morphology*. MA Thesis. MIT.

¹ EA stands for External Argument and IA for Internal Argument.