

THE ROLE OF MORPHOLOGY IN PORTUGUESE STRESS SYSTEM*

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Abstract : In Portuguese we can find words stressed on the last syllable (*catedral*), on the penultimate (*modelo*) or on the antepenultimate (*cátedra*). This is true for Non-verbs as well as for Verbs, although these are two different stress classes. As far as Non-verbs are concerned, we can formulate the generalization: stress is on the last syllable of the stem. So, the place of the main stress of the word is morphologically determined. The metrical algorithm of Idsardi allows us to adequately analyse those facts. We have to consider the derivational stem as the stress domain in Portuguese, and then construct a grid specifying the Edge Marking Parameter as: LLR (project a left parentheses to the left of the leftmost element) The foot in Portuguese is leftheaded. The constituent of Line 1 is rightheaded. With this parametrization we obtain the "normal" accentuation. All other cases are lexically marqued by a different specification of the edge. Verbal system has a different behaviour: there are no exceptions and there are inflectional morphemes specially marqued.

Keywords : metrical phonology, metrical grid, morphological composition, derivational stem, verbal inflectional morphemes, Portuguese stress system, nonverbal stress, verbal stress, lexical marked stress.

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The stress system of Latin is quantitative: the place of main stress depends on the weight of the penultimate syllable of the word. The phonological value of vowel quantity is lost in romance languages, which have stress systems of a different nature. Portuguese, as most of the romance languages, inherited from Latin the stressed syllable of words, not the stress rule. In addition to these facts, two other phenomena took place during the evolution from Latin to Romance that affected the linear position of stress in the word: syncope and apocope. The interaction of all these phenomena results, in Portuguese, in a three-syllable-windowed stress system, based on morphological regularities.

NONVERBAL STRESS

Verbs and nonverbs show different behaviours respect to stress and constitute two different classes. Nonverbs are represented in

1. a)	ca.**ne**.ta	'pen'	b)	bor.**del**	'brothel'	2.	**cá**.ga.do	'tortoise'
	a.**ba**.de	'abbot'		a.**rroz**	'rice'		**hós**.pe.de	'guest'
	sa.**pa**.to	'shoe'		so.**fá**	'sofa'		a.**çú**.car	'sugar'
							tá.xi	'taxi'

The forms in (1.) are examples of the normal pattern, the difference between (1.a) and (1.b) consisting of a distinct morphological composition. The words of (1.a) are composed of a stem and a class marker, those of (1.b) have no class marker. In both types of forms, the last syllable of the stem bears stress. This is also valid for derived stems like in *re.pu.bli.**ca**.no* ('republican') or *la.bi.**al*** ('labial'). So, we can state the nonverbal stress rule as:

3. Stress the last syllable of the derivational stem.

This statement allows us to consider the derivational stem the domain of nonverbal stress in Portuguese. Applying Idsardi's algorithm (Idsardi '92, Halle & Idsardi '95), we obtain the adequate results establishing the following parameters

4. Portuguese non-verbal stress parameters:
Stress domain: derivational stem

L_0	Edge: LLR	ICC: L	Head: L
L_1	Edge: RRR		Head: R

The examples in (2.) are marked cases. In these forms stress falls on the penultimate syllable of the stem, either it is the antepenultimate (***cá**.ga.do*) of the word or the penultimate (*a.**çú**.car*) Those stems are lexically marked as Edge: ∅, the place of stress being obtained by the application of the other parameters. The following grids are the result of those specifications:

5.

x	x	x
x)	x)	x)
x (x	x (x	(x x
canet] a	bordel] ∅	cágad] o

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VERBAL STRESS

Verbal stress behaves in a different way, because verbal inflectional morphemes have particular caracteristics. Stress patterns are rigid, there are no exceptional forms in a given inflectional paradigm. Verbal forms in Portuguese have the structure: Stem + TV + TMA + PN. Stress can fall either on the stem (1st, 2nd, 3rd sg., 3rd pl. present indicative; 1st, 2nd, 3rd sg., 3rd pl. present subjunctive; 2nd sg. imperative); on the TV (1st, 2nd pl. present indicative; perfect indicative; imperfect indicative and subjunctive; pluperfect indicative, future subjunctive, 2nd pl. imperative); or on the TMA (1st, 2nd pl. present subjunctive; future indicative; conditional).

Viewing these facts in another perspective, we can say that verbal stress affects the penultimate syllable of the word, except when there is a lexically marked TMA morpheme. The domain of verbal stress is the word and the parameter setting is as folows:

6. Portuguese verbal stress parameters
   Stress domain: word

L_0	Edge: ∅	ICC: L	Head: L
L_1	Edge: RRR		Head: R

Marked morphemes
Imp. Ind., Imp. Subj., Pluperfect, Cond. - Edge: RRR
Fut., Cond. - Edge: LLL

Verbal stress is more morphologized than nonverbal, in the sense that its place in the word is conditioned by the presence of certain inflexional morphemes that bear lexical information about stress.

CONCLUSION

Portuguese stress regularities involve morphological information and can't be found without it. In an analysis like ours, morphological information is introduced in a simple but determinant way, by establishing the domains of application of stress rules (the word in verbs and the derivational stem in nonverbs) and the lexical marking of some exceptional nonverbal stems and a few inflectional morphemes in verbs. The descriptive results are highly adequate.

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