

Epenthesis as a repair strategy influencing EFL word stress assignment: the case of Brazilian Portuguese native speakers learning English as a Foreign Language

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This study takes place in a context of a limited number of researches which use Optimality Theory as their theoretical base to approach the acquisition of English phonology by native speakers of Brazilian Portuguese (henceforth BP). Such studies have shown that English as foreign language (EFL) learners produce stress patterns that are typically of interlanguage hierarchies. They seem to follow a constrain hierarchy which mixes L1 and L2 ordering and sometimes they produce outputs that are neither from L1 nor from L2 systems, according to studies by Bonilha and Vinhas (2006), Post (2007), Ferreira-Gonçalves and Post (2008). Studies in English stress acquisition by BP speakers are even in a more limited number, such as the ones by Batista (1984, 1988, 1989), Farias (2007) and Ferreira-Gonçalves and Post (2008).

I chose a connectionist Optimality Theory approach (henceforth COT), Bonilha (2004), as the theoretical basis of this study mainly because it previews that, unlike generative approaches, constraints can be acquired in the process of language acquisition, and that different phonological levels interact in order to achieve outputs as closer as possible to the ones of the target language. Besides, likewise other OT proposals, COT permits to focus on the hierarchy structuring process of the target language, which can be observed by the application of a learning algorithm, Boersma & Hayes (2001), that represents a great advantage to the understanding of acquisition data. From this theoretical perspective, acquiring an L2 is not only restructuring L1 constraint hierarchy into an L2 one, but it also consists in acquiring constraints that are exclusive from the L2.

In this paper I investigate English primary stress acquisition by BP learners, more specifically, I intend to analyze the relation between syllabic structure and stress assignment. For this aim, firstly, I revise some hierarchies proposed for the L2 stress pattern, Hammond (1999) and Kager (1999), as well as the hierarchy proposed by Lee (2007) for PB. Later, I describe and analyze data from sixteen BP native speakers learning EFL. They are all college students, coursing the second, fourth, sixth and eighth semesters of English major. The recordings consisted of two readings per subject of an instrument constituted by 135 suffixed and non-suffixed isolated words and 135 carrier-sentences. Data were recorded in a digital recorder and submitted to auditory transcription and acoustic analysis made in Praat software. Each recording lasted, on average, 12 minutes.

Data showed discrepancies in learners' stress attribution. As data have shown, the repair strategy of vocalic epenthesis was the most attributed concerning syllabic structure repair, and the trochaic stress was the most applied repair strategy for stress errors. Concerning the most applied repair strategies, there seem to have a trend of fixing the syllabic structure of the L2 according to the patterns that militate in the L1. Data also indicate that such repair of the syllabic structure also influences in stress attribution in cases in which the epenthesis form a new light syllable, in outputs like [kɪ.tʃə.'ne.tʃɪ], for instance. Thus, I could conclude that some specific L2 patterns have been ranked in learners' interlanguage hierarchy, despite the fact that most of the correct productions should be related to the transfer of patterns from the L1 constraint hierarchy. The results found confirm the adequacy of a connectionist cognitive paradigm for explaining real language acquisition, as well as the validity of Optimality Theory to formalize such process in gradual interlanguage hierarchies.

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