The acquisition of vowel contrasts in Brazilian Portuguese

In this study we discuss the acquisition of the vowel system in tonic and pre-tonic positions in Brazilian Portuguese, henceforth BP, using longitudinal data from three children recorded every week from 1;0 to 3;5 (year; month). The theoretical framework assumed is The Contrastive Hierarchy Theory - CHT - (Dresher 2003, 2009), which proposes that the segments of a language are lexically represented by a feature hierarchy dependent on the language and its phonological processes. As the feature hierarchy is not innate, it must be constructed by the child. The study addresses two main issues regarding vowel acquisition in BP and the CHT: variability and restructuring in phonological acquisition. The study was carried out following the methodology proposed by Ingram (1981, 1989) according to which only types are taken into consideration and the correct productions for each vowel were categorized into marginal, in use and frequent (Fee, 1991 for values) in two different corpora: one for tonic vowels and one for pre-tonic vowels. A child's system was only considered complete in each corpus once all segments had been classified as *frequent*. Substitutions which occurred in deviant productions were also taken into consideration in order to determine the organization of the hierarchy at different stages. Our results show that, in fact, these children take different paths in acquiring the vowel system in BP. While two of them begin their hierarchies with the place of articulation, the third begins with height. In regard to these differences, we also discuss a proposal for a contrastive hierarchy for BP that begins with vowel height (Lee 2008), and we find that this proposal does not account for the external sandhi process in the São Paulo dialect to which the children in this study are exposed. For this reason, (i) we have put forward a contrastive hierarchy proposal for the dialect which begins with place of articulation and (ii) we have proposed that if children's initial contrasts subsequently prevent the child grammar from handling any of the language's processes, the child restructures its hierarchy as soon as possible. Regarding restructuring, we have identified a moment when there is restructuring in the hierarchies by observing substitutions. Regarding the acquisition of the pre-tonic position, we started from the hypothesis that the segments that undergo phonological processes would be acquired later (cf. Miranda 2013) and, for this reason, both pre-tonic /e/ and /o/ would present differences in acquisition in relation to their tonic counterparts. The results showed, however, that only the pre-tonic vowel /e/ is acquired later, which provides more evidence for studies that argue that only this vowel is the target of the vowel harmony process in BP.

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