

REDUPLICATION IN EARLY BRAZILIAN PORTUGUESE ACQUISITION: A WHOLE-WORD AND TEMPLATIC PHONOLOGY APPROACH

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This paper will present an initial analysis and a discussion of phonological reduplication in child speech, specifically in the acquisition of Brazilian Portuguese (henceforth BP), the role it plays in the transition from babbling to first words and its relation to the process of morphophonological reduplication found in some languages. The Whole-Word Phonology model will be adopted (Macken 1979; Ferguson & Farwell 1975, Vihman & Velleman 2002, Vihman & Croft 2007).

The Whole-Phonology claims that the organizing principle in early phonological development is the whole word, not features or segments, as we find in early productions many unusual phonological substitutions, which tend to occur due to a 'pattern force' (Macken 1979). These early word patterns are understood as *templates*, i.e. systematic shapes that facilitate expansion of the lexicon. The early reduplicated words are then understood as manifestation of these templates, or initial 'routines' (Vihman & Velleman 2000).

A longitudinal study was designed to investigate the early reduplication in BP (M., a boy, aged 9 – 24 months). A total of 1993 words (tokens) were analysed, involving 797 types altogether over the 15 months. Babbling production was considered as well. The following hypotheses were tested: (i) child reduplicated words confirm the continuity view; (ii) there is no connection between child phonological and adult morphophonological reduplication.

The first hypothesis on the (dis)continuity debate (Jakobson 1972, Vihman et al. 1985, 2006) was supported. Lewis (1936) and Fee & Ingram (1982) point out that early reduplicated words could be considered as 'bits of babble' or 'traces of babble'; however, neither of these authors conducted a comparative analysis between the two periods. We observed that the most frequent combination in babbling (dorsal consonant plus dorsal vowel) is predominant in early reduplications. Also, in the early longitudinal sessions, babbling and word productions were produced in parallel, with the most frequent combinations in babbling being the most frequent ones in the reduplicated words as well (cf. Elbers & Ton 1985).

The second hypothesis was apparently supported although more investigation is required. The child (M.) used total reduplication ($\Sigma_1\Sigma_1$) as a means to adapt and produce adult words in his early productions, as the following examples show:

Table 1: *The use of the template $\Sigma_1\Sigma_1$ (Adapt)*

Age (months)	Child Production	Adult Target	Gloss
12	[ka.'ka]	galinha [ga.'li.ɲe]	hen
13	[ba.'ba]	bola [ˈbɔ.lɐ]	ball
14	[ta.'ta]	tchau [tʃaw]	bye
15	[ba.'ba]	barbie [ˈbar.bje]	barbie

Table 2: *The use of the template $\Sigma_1\Sigma_1$ (Select)*

Age (months)	Child Production	Adult Target	Gloss
11	[na.'na]	nanar [na.'nar]	<i>to sleep</i>
14	[ne.'ne]	nenê [ne.'ne]	<i>baby</i>
15	[po.'po]	vovô [vo.'vo]	<i>grandfather</i>
16	[ma.'mãj]	mamãe [ma.'mãj]	<i>mother</i>

In addition to total reduplication, the child used total consonant harmony as another strategy to produce new words. Authors such as Schwartz et al. (1980) consider consonant harmony as

partial reduplication. However, in this study, only total reduplication is considered, i.e. the repetition of two identical syllables.

The question that still remains is if studies of child reduplication should use proposals such as Prosodic Morphology (McCarthy & Prince, 1988) or the Generative model by Raimy (2000) to explain the early process, which has no morphology involved. If morphophonological reduplication is taken to be related to the child process, the latter should be more distant from the babbling as the adult process cannot be attributed to the babbling period, but what we observed is a parallelism between late babbling and early reduplicated words. Also, early reduplication involves repetition and adaptation of the target, which shows that the child is aiming to match the target as a whole rather than to achieve in terms of a segment-by-segment match (Vihman & Velleman 2000).

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