

Reduplication in the Acquisition of Language

It has commonly been stated, that “children like reduplication”¹. And indeed, the reduplication of syllables is one of the most frequent processes of first language acquisition on the prosodic phonological level (quite apart from reduction in consonant-clusters and the deletion of unstressed syllables). In contrast to morphological reduplication, as it is systematically used by adults in many languages of the world, reduplication in language acquisition is purely a phonological phenomenon, and entirely unrelated to the morphological reduplication which can appear in the target language. Phonological reduplication produced by children can be observed from the very beginning of the language acquisition (i.e. at around 12 months-) until some 18 to 24 months of age.

Form

In most cases, the reduplications employed by children take the form of bi-syllabic words comprising one reduplicated syllable. More often, the expression employed substitutes for polysyllabic adult words (as for example [wawa] for *water*² or [nana] for *another*³). More commonly, the stressed syllable of the target word is reduplicated by children. To a lesser extent, they may also represent mono-syllabics (as for example [baba] for *ball*). These forms are either exact reduplications, or they contain an alternation of the vowel (e.g. [nani] for *candy*⁴) or the consonant (e.g. [bu:du:] for *bacon*⁵).

Further Examples:

English: [be:be:] for *biscuit* (Waterson 1971: 186), [aɪaɪ] for *all right* (Leopold 1947: 213)

German: [nana] for *Nase*, [bebe] for *Bär* (Dressler et al. 2005: 462-463), [dada] for *danke*, [bubu] for *Papier* (Leopold 1947: 213)

French: [ne'ne] for *donner* (Dressler et al. 2005: 462-463), [bubu] for *bouche*, [vava] for *vache* (Ingram 1979: 140)

Origins

The origins of reduplicative structures in child language phonology are doubtless a form of 'playing a game' with language structure, at the babbling stage. The so-called “canonical babbling” (cf. Ferguson & Macken 1983: 236), i.e. /C₁V₁C₁V₁/-utterances, is the most important stage in the development of articulation (cf. Papoušek 1994: 84). At this stage, babies practice articulation without intending to produce concrete words, but this acquired skill of producing polysyllables is later applied to express meanings. Apart from babbling, reduplication probably also occurs by imitating the baby talk of adults. Reduplication is one of the most salient features of baby talk in all languages. Child-directed speech is structured in a manner, which satisfies the skills and preferences of small children (and is in turn an imitation of child language).

1 cf. for example Leopold 1947: 221.

2 Ingram 1979: 140

3 Waterson 1971: 186

4 Ingram 1979: 145

5 Ingram 1979: 138

Functions

The main function of reduplication of simple syllables is the process of acquiring meaningful words, in order to enable the child to produce polysyllabic utterances without articulating complex structures (cf. studies of Fee & Ingram 1982, Lleó 1990, Schwartz et al. 1980). Empirical studies show, that there is a significant negative correlation between the amount of reduplicated utterances and polysyllabic words produced by a child; i.e. to the degree, that polysyllabic words are increasingly and correctly pronounced by a child, the proportion of reduplicated utterances decrease (cf. Schwartz et al. 1980). Ingram (1974) draws the conclusion, that the function of the reduplication of syllables by children is a strategy to compensate their "... inability to appropriately represent or produce the second syllable of the word" (Ingram 1974: 54).

Examples:

German: [nana] for *Nase*, French [ne'ne] for *donner*, [papama] for *pyjama*, [wawar] for *au revoir*, [afaf] for *giraffe* (Dressler et al. 2005: 462)

However, reduplications do not only substitute polysyllabic- but also monosyllabic words as well - only to a smaller extent. The reason for this is, that children seek to avoid the final consonant, because it causes considerable difficulties in the early stages of language development (cf. Fikkert 1994). The study of Fee and Ingram (1982) shows, that the reduplicating stage usually precedes the acquisition of final consonants. Schwartz et al. (1980) find significantly negative correlations of numbers of words with final consonants and reduplications.

Examples:

German: [bebe] for *Bär*, [baubau] for *Bauch* (Dressler et al. 2005: 463)

Frequency

Of course, not all children reduplicate to the same extent. While some children use this strategy intensively, others don't use it at all. But, this does not permit any conclusions to be drawn with regard to abnormal- or normal language-development.

... children who can be classified as frequent reduplicators are not experiencing greater difficulty in reproducing multisyllabic words than other children. Rather, they are at the onset of phonological development and are concentrating on developing multisyllabic rather than monosyllabic productions. (Fee and Ingram 1982: 52)

With regard to the linguistic discussion on the relevance of reduplication in language acquisition, there are arguments for two contradicting positions. Whereas some authors see reduplication as a universal phenomenon in language acquisition (e.g. Jakobson 1944, Moskowitz 1973), others consider reduplication to be an individual strategy 'consciously' and deliberately selected by some children (e.g. Ferguson 1979, Lleó 1990).

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