Association and definition in school-age children

In the last twenty years, many studies on categorization in children have focused more on the role of thematic relations, i.e. relations holding between a word and a situation, than on taxonomic relations, i.e. class inclusion relations. Evidence shows that pre-school children make use of thematic relations in sorting tasks and shift to taxonomic ones when confronted with the acquisition of new terms (Markman, 1989).

This research aims at showing how the mastering of these two kinds of relation develops with age.

To this purpose two tasks were devised: a definition task and a free association task. Both the tasks were performed by the same sample of thirty children, aged 9, 11, 13, on 45 of the 800 most frequent words children produced in a previous experiment, selected to represent different kinds of concept, e.g. natural and nominal kinds, artefact, social and abstract concepts. Children's associations and definitions were coded by two experimenters according to the kind of relations linking the produced definition and association to the stimulus concept noun: for example spatial, temporal, attributive, functional, taxonomic, partonomic relations (Barsalou & Billman, 1989, Tversky & Hemenway, 1984).

The relations thus coded were analyzed both quantitatively and qualitatively with several correspondence analyses in order to verify the two following hypotheses:

a. children will produce more taxonomic relations in the definition task than in the association task and vice versa;
b. children will produce more thematic than taxonomic relations with natural kind and artifact concept nouns, and more taxonomic than thematic relations with nominal kind concept nouns.

The purpose of the present study was to gather systematic data on the progress of articulatory abilities in pre-school children that are native speakers of European Portuguese. Ninety-four female and 88 male children divided in three age groups (3-, 4- and 5-year-olds, about sixty per age group; age range: 2;11 to 6;1) were observed on a picture naming task. The pictures (n=127) were chosen so that the corresponding words were presumably available in the children's lexicon and would allow to test the complete set of consonant and vowel phonemes of Standard European Portuguese, as well as major consonant clusters and diphthongs. Children's responses were classified as correct articulations (of target word), misarticulations (misarticulated target word, excluding dialectal variants), absence of response, and production of non-target word. Results show an overall increase in the correctness of articulation that is more marked from three to four years of age; vocabulary also increases with age, steadily across all age levels. A context-sensitive analysis of misarticulations will be presented. A relatively more frequent source of misarticulations is found in /h/ or /l/ in the clusters CVC and CVC; another frequent misarticulation is found in the same phonemes as part of the rime (CVR or CVI). Other misarticulations are found mostly in voiced fricatives, that are produced as devoiced. These findings will be discussed as a source of information concerning normal speech and language development in European Portuguese; their relevance for the diagnosis of developmental speech disorders will also be considered.