Kétértelmű ábrák észlelési átfordulásának fejlődése egy- és kétnyelvű gyermekeknél

SÉRA LÁSZLÓ¹ RÉVÉSZ GYÖRGY² DÓSA ZOLTÁN³

Abstract

Ambiguous figures trigger two incompatible perceptions, the one perception spontaneously changing into the other. Based on their previous experiences, a number of adults are able to sense the reversal without being informed, however children under 5 years are not capable of experiencing the change, although they can notice and understand the double interpretation of the figure (rabbit/duck) even at an earlier age. Investigation of the development of the ability to reverse an ambiguous figure is of particular interest in the understanding of the development of the abstract, manifold representation formed of the same object, and its relation to metacognitive ability (Doherty and Winner, 2005; Gopnik and Rosati, 2001). Two experiments were done with children between the ages of 3.5 and 9 years. In the first experiment we assessed the proportion of the spontaneous reversal of images, and the relationship between the reversal of the informed condition ambiguous figures, and the results of theory of mind tests, and those of tests assessing interpretation differences (False Belief, Droodle task). The results reveal that children of 5-9 years are able to experience spontaneous reversal, whereas having been informed of the ambiguity facilitated the perception reversals of younger children (4-5 years). A relatively weak correlation was found between the scores of the Droodle task and of the perception of reversal. In the second experiment we aimed to explore the relationship of reversals and executive functions in the case of both monolingual and bilingual children (see Bialystok and Shapero, 2005). Our findings indicate that selective attention, inhibition, attentional switch and mental imagery abilities connected to the central executive function also contribute to the complex perception-based process of reversal, beyond the comprehension of the possible twofold interpretation on adequate developmental level.

Keywords

ambiguous figure, perceptual reversal, executive function, bilingualism