

Men in black and green: testing a link between perceptual and conceptual knowledge

Tsigeman E.S., Tsaregorodtseva O.V.

Tomsk State University, Tomsk, Russia

linnynya@yandex.ru

Previous studies demonstrated a link between abstract concept and physical metaphor, existing due to activation of conceptual knowledge during color perception (Meier, Robinson & Clore, 2004). It was suggested that conceptual knowledge about particular color based on cultural and linguistic experience is activated and affected processing of words (positive/negative words in black and white color). In the set of the research in this field, the issue about automaticity of the perceptual/conceptual link is still unresolved. Different studies provided mixed results. Meier et al. (2004) showed the aforementioned link only in semantic categorization task, while Sherman & Clore (2009) demonstrated it in a simple Stroop task.

The current research was aimed to examine whether color (associated with positive/negative emotion) would affect the processing of emotion-laden words (positive/negative) in various types of tasks. Four experiments were conducted. In the pretest green was evaluated as 'good' color and black as 'bad'. In the first experiment modified Stroop task was employed, where participants' attention was drawn to external characteristic of the words (font color). In the second experiment, lexical decision task was used, where deeper level of word processing was required. In the third experiment, semantic categorization task was taken, when participants had to judge whether word means color or not.

None of the experiments showed significant results, that is why the forth experiment is planned now to investigate the same effect when the task is directed to positive and negative semantics distinction. In this experiment, participants are asked to discern positive and negative word semantics. We predict that this task can draw participants' attention to particular features of semantics and create a strong interaction between color and word.

Keywords: color perception, emotion-laden words, language processing.