## The Processing of Implicit Stereotypes in Everyday Scene Perception

Authors : Magali Mari, Fabrice Clement

Abstract: The present study investigated the influence of implicit stereotypes on adults' visual information processing, using an eye-tracking device. Implicit stereotyping is an automatic and implicit process; it happens relatively quickly, outside of awareness. In the presence of a member of a social group, a set of expectations about the characteristics of this social group appears automatically in people's minds. The study aimed to shed light on the cognitive processes involved in stereotyping and to further investigate the use of eye movements to measure implicit stereotypes. With an eye-tracking device, the eye movements of participants were analyzed, while they viewed everyday scenes depicting women and men in congruent or incongruent gender role activities (e.g., a woman ironing or a man ironing). The settings of these scenes had to be analyzed to infer the character's role. Also, participants completed an implicit association test that combined the concept of gender with attributes of occupation (home/work), while measuring reaction times to assess participants' implicit stereotypes about gender. The results showed that implicit stereotypes do influence people's visual attention; within a fraction of a second, the number of returns, between stereotypical and counter-stereotypical scenes, differed significantly, meaning that participants interpreted the scene itself as a whole before identifying the character. They predicted that, in such a situation, the character was supposed to be a woman or a man. Also, the study showed that eye movements could be used as a fast and reliable supplement for traditional implicit association tests to measure implicit stereotypes. Altogether, this research provides further understanding of implicit stereotypes processing as well as a natural method to study implicit stereotypes. Keywords : eye-tracking, implicit stereotypes, social cognition, visual attention

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1