

205

A COMPARATIVE EYE-TRACKING STUDY IN CHIMPANZEES AND HUMANS

F. Kano^{1,2}, M. Tomonaga¹

¹*Primate Research Institute, Kyoto University, Inuyama, Aichi, Japan,* ²*Japan Society for Promotion of Science*

Presenter's Email: fkanou@pri.kyoto-u.ac.jp

We introduce a novel approach to comparative cognition studies—a comparative eye-tracking study in chimpanzees and humans. Eye-tracking methodology enables us to compare the eye movements of two species directly (i.e. both qualitatively and quantitatively). First, we will show the striking similarities in eye movements between chimpanzees and humans when viewing photographs. Both species viewed the same sets of photographs depicting bodies and faces freely under the same experimental conditions. The similarities between the species were pronounced in terms of how they view faces. Second, we will focus on the differences in eye movements between chimpanzees and humans when viewing various scenes including both social and non-social ones. Fixation duration (defined as the time during which the gaze is still) is known to play an important role in semantic processing. Compared to chimpanzees, humans exhibited longer durations of fixation on average and spent more time viewing objects/faces in peripheral vision. We interpret these results in terms of species-specific strategies in eye movements/information processing.

Keywords; chimpanzee, cognition, comparative study, eye-tracking, comparative study