

P2-38 What gives a face its race?

Wonmo Jung¹(croquies@korea.ac.kr), Regine GM Armann¹, Isabelle Bülthoff²; ¹Korea University, Korea, ²Max Planck Institute for Biological Cybernetics, Germany

By biological criteria, human “races” do not exist (e.g., Cosmides et al., 2003). Nevertheless, every-day life and research from various fields show that we robustly and reliably perceive humans as belonging to different race groups. Here, we investigate the bases for our quick and easy judgments, by measuring the influence of manipulated facial features on race classification. Asian and Caucasian faces of our 3-dimensional face database (<http://faces.kyb.tuebingen.mpg.de>) were paired according to sex, age and overall appearance. With these Asian-Caucasian face pairs we created a variety of mixed-race faces, by exchanging facial features between both faces of a pair: eyes, nose, mouth, “outer” features, shape or texture. Original and modified faces were shown in a simple race classification task. We tested 24 Westerners (Germany) and 24 Easterners (South Korea). In both groups, eyes and texture were major determinants for race classification, followed by face shape, and then outer features, mouth, nose, which only had a weak influence on perceived face. Eastern participants classified Caucasian original faces better than Asian original faces, while Western participants were similarly good at classifying both races. Western participants - but not their Eastern counterparts - were less susceptible to eye, shape and texture manipulations in other-race faces than in their own-race faces. A closer look at the data suggests that this effect mainly originates from differences in processing male and female faces in Western participants only. Our results provide more evidence of differences between observers from different cultural and ethnic backgrounds in face perception and processing.

Acknowledgement: This study was supported by the Max Planck Society and the World Class University Program at Korea University