

## Face recognition: nurture not nature

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(PhysOrg.com) -- Researchers have discovered for the first time that our society can influence the way we recognise other people's faces.

Because face recognition is effortlessly achieved by people from all different cultures it was considered to be a basic mechanism universal among humans. However, by using analyses inspired by novel brain imaging technology, researchers at the University of Glasgow have discovered that cultural differences cause us to look at faces differently.

Lead researcher Dr Roberto Caldara said: "In a series of eye-movement studies, we showed that social experience has an impact on how people look at faces. Specifically we noticed a striking difference in eye movements in Westerners and East Asian observers. We found that Westerners tend to look at specific features on an individual's face such as the eyes and mouth whereas East Asian observers tend to focus on the nose or the centre of the face which allows a more general view of all the features. One possible cause of this could be that direct or excessive eye contact may be considered rude in East Asian cultures."

The results of the study, funded by the Economic and Social Research Council and the Medical Research Council, provide novel insights into why non verbal communication between people from different cultures is sometimes problematic, in an age where globalisation has dramatically increased interdependence, integration and interaction among people and corporations from all over the world. Western societies are generally more individualistic, whereas East Asian societies are seen to be more collectivistic; Westerners appear to think and perceive focally and



## Easterners globally.

Dr Caldara continued: "By disproving the long-held assumption that face processing is universally achieved we have highlighted that the external environment, including the society in which we develop, is very influential in basic human mechanisms and caution should be taken when generalising findings to the entire human population."

The research article 'Culture Shapes How We Look at Faces' will be published in PLoS ONE on Wednesday 20 August at <a href="https://dx.plos.org/10.1371/journal.pone.0003022">dx.plos.org/10.1371/journal.pone.0003022</a>.

Provided by University of Glasgow

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