

Recognition of facial expressions is not universal

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(PhysOrg.com) -- Caucasians and Asians don't examine faces in the same way, according to new research. PhD student Caroline Blais, of the Université de Montréal Department of Psychology, has published two studies on the subject: one in *Current Biology* and the other in *PLoS One*.

Previous studies have shown that people collect information by mostly studying the eyes as well as the <u>mouth</u> of a face. "The problem is that these studies always used Caucasian test subjects," says Blais.

Questioning the universality of facial recognition began after studies showed that Asians study <u>faces</u> in an overall fashion, while Caucasians break down faces into distinct parts.



Blais used a camera designed to track eye movements to study 14 Caucasian and 14 Asian participants. As part of the experiment, subjects were shown 112 Caucasian and Asian faces and asked to report if they had seen the face before and to name the dominating trait. The study confirmed that Caucasians study the triangle of the eyes and mouth, while Asians focus on the nose.

Caucasian and Asian subjects excelled at recognizing someone of their race, yet both had the same level of difficulty in identifying someone of another ethnic group. According to Blais, this says more about the analytical approach of <u>Caucasians</u> and the holistic approach of Asians.

In a second experiment, test subjects had to pinpoint an emotion: surprise, fear, disgust or joy. Asians mostly focused on the eyes and not enough on the mouth, which meant some emotions were wrongly identified.

"Asians had particular problems with negative emotions. They confused fear and surprise as well as disgust and anger," says Blais. "This is because they avoided looking at the mouth which provides a lot of information about these emotions."

Cultural or biological causes, Blais says, might explain why humans don't read faces in a universal fashion.

Provided by University of Montreal

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