GLASGOW COLOUR STUDIES GROUP

Notes following the Twentieth Meeting, 17th April 2013

The twentieth meeting of the GCSG took place in Room 1, English Language, University of Glasgow. Thanks are due to David Simmons, who acted as master of ceremonies, and to Christian Kay and Carole Hough who organized the refreshments.

Our speaker was Prof. Benedict Jones of the Institute of Neuroscience and Psychology, University of Glasgow, whose research investigates how people respond to social cues, particularly as exhibited in faces.

Prof. Ben Jones spoke on 'Facial Colour Cues and Attractiveness'

His abstract is as follows:

"Previous work on the effects of facial skin colour on aspects of social interaction has typically focused on the effects of cues of race. By contrast with this emphasis on the effects of between-race differences in skin colour, this short talk will discuss the importance of within-race variation in skin colour for judgements of others' facial attractiveness. I will first discuss the evidence that colour cues in faces provide critical information about aspects of individuals' underlying health, including their immunity to infectious diseases. I will then discuss the evidence that individual differences in the strength of people's preferences for these colour cues are linked to differences in fundamental motivations, such as sexual desire and pathogen avoidance. Together, these findings highlight the profound effects that even subtle colour cues can have on our perceptions of other people and provide strong evidence for evolutionary models of social interaction."

Commentary (by Carole Biggam; checked by Ben Jones)

Prof. Jones explained that our facial preferences function to minimize our interaction with unhealthy individuals and, therefore, our contact with disease, and this has clear advantages both for the individual and in evolutionary terms. Apart from the *classical* immune system which fights infection, humans also have a *behavioural* immune system which helps us to distance ourselves from disease. An example of the latter is the normal reaction of disgust and retreat from someone who sneezes without using a handkerchief. Such reactions can be found in diverse cultures, and appear to be inherent in human behaviour.

Mate preferences, in which humans select a healthy partner, are also evident in face attraction. Charles Darwin developed a theory of sexual selection whereby display features, like the male peacock's tail, may indicate good health to the female. So do human male characteristics function in the same way? Research has been carried out in thirty countries in which general health is poor, and it was found that women preferred the more masculine faces. Further research with 8,000 women in the U.S.A. produced the same results. Pathogen disgust can be measured, for example, dislike of stepping in dog dirt, shaking hands with someone with sweaty palms, and so on, and it

was consistently found that the strongest disgust occurred in women who preferred more masculine-looking men.

Colour information is also salient. It probably has a role in advertising health or the reverse, for example, a face pale with illness. In some animals and birds, colour can advertise health and social status, for example, the vivid red faces of mandrils. Is the same phenomenon found among humans? What is a healthy colour for the human face? To investigate this, about forty white women were photographed, and asked to fill out a health questionnaire regarding infectious diseases. Those with high scores on health had a redder coloration and a yellower coloration in the cheek region. They also had paler faces. Are these colour signals used by others? Informants were asked to select 'healthier' faces, and both males and females chose redder and yellower faces, although there was less bias towards paler faces. It seems that humans *do* use colour cues to judge health.

What about attractiveness? Is there a connection with germ aversion? It was found that those women with the strongest germ aversion show the strongest preference for reddish male faces. However, there was no obvious preference for yellowish faces, and the reason for this is not yet understood.

It seems that just looking at pictures of potential sources of illness activates the classical immune system. Does it also activate the behavioural immune system? Research was carried out by showing one group of subjects unpleasant, pathogen-related pictures, while the other group saw pictures that were not unpleasant. It was found that, in women whose behavioural immune system was activated, their preference for healthy colours increased. It seems that facial colouring and preferences function as part of the wider behavioural immune system.

News

• If you have suggestions for, or offers of GCSG talks (any format) for the academic year of 2013-14, please contact Carole Biggam at c.p.biggam@btinternet.com. Please note that we attempt to produce a balanced programme (i.e. different disciplines) and do not necessarily accept talks in the order in which they are offered. Nonetheless, all offers are most welcome and will be acknowledged.