

## Changing the face of our lives: how our innate interest in faces can change the choices we make.

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General Category

Faces are important to people. They are strongly linked with our sense of identity. Anyone who has been watching the news lately will be aware of the surgical pioneering work into full face transplants. These are not without risk: patients undergoing transplants will have to take immunosuppressant drugs throughout their lives to prevent their bodies from rejecting the new facial tissue. Nevertheless, people unlucky enough to have suffered facial damage are willing to take the risk. So, why are faces so important to us?

Studies have demonstrated that looking at faces produces greater brain activity than looking at strings of letters or textures. Furthermore, newborn infants appear to pay greater attention to faces than to arbitrary objects. Such evidence has prompted researchers to suggest that our interest in faces is innate.

If indeed we are predisposed to focus on faces, it may be for good reason. If we were unable to identify others as friend or foe, we would quickly run into trouble. People suffering from prosopagnosia, the inability to recognise faces, do encounter such difficulties. Dr Brad Duchaine of the Institute of Cognitive Neuroscience explains: "Imagine failing to recognise your boss in the elevator or walking right past your boyfriend. Even worse, imagine picking up the wrong child at daycare or failing to recognize yourself in mirrors or photos. These sorts of incidents occur regularly for people with face recognition problems, and not surprisingly lead to serious social problems."

So we may be predisposed to pay attention to faces because this confers a social advantage. Indeed it's possible that faces guide us in deciding whom we can and cannot trust. Research by psychologists in Canada has demonstrated that we are more likely to trust individuals whose facial features are similar to our own. This is possibly because we use facial resemblance as a cue to detect kin and are hardwired to cooperate with family. Furthermore, scientists in New York have found that we are disposed to remember the faces of individuals who cheat in "social contract" games - exercises such as borrowing money and returning it when promised. Naturally, remembering cheats is important if you wish to avoid them in future. Dr Anthony Little, an evolutionary psychologist and face expert explains: "We are able to retrieve a huge amount of information about past deeds and reputation based on only a brief viewing of a known face - we know who has been nice to us or can help us so we can turn to them, and conversely we know who has cheated us or others in the past and avoid them."

So faces help us to recognise friends and to avoid cheats, but why else should they be so

significant? A growing body of research demonstrates the importance of facial cues in what might be one of the most important decisions of our lives – our choice of partner. Evidence suggests that we unconsciously use features such as facial symmetry and masculinity to judge the quality of potential mates. For example, a symmetrical face is thought to indicate good health, and therefore “good genes”, which ought to be desirable in a potential mate if we hope to produce healthy offspring. There can be a conflict of interests for women however, since masculine characteristics indicate good genes, but more feminine features convey a caring personality – one more likely to invest in rearing children. Research has found that generally, young women prefer men with slightly feminised features, but that when their fertility is at its peak, a masculine face is more attractive.

Our innate interest in faces is used by advertisers to sell products. Research from the Center for Consumer Marketing has shown that a smiling face on an advert can lead consumers to a positive attitude towards the company using the advert, making them more likely to patronize the company and to recommend them to others.

Faces really are important. They help us to decide who to trust, with whom to mate, even what products or companies to trust. Those who are unable to recognise faces can suffer for it. Those who have lost their faces feel lost without them. Not even faces it seems should be taken at face value.

## **Biography**

Gillian has a BSc in Zoology with Evolutionary Psychology from the University of Liverpool, where she hopes to return to further study in 2007. Since graduating in 2005 Gillian has co-authored a paper on her research into Nausea and Vomiting in Pregnancy (morning sickness) and completed a variety of work experience projects related to science communication, including work with the Science Media Centre, BBC Focus Magazine and Newton’s Apple, and has also spent 4 months in India working as a volunteer. She is now one of the UK coordinators for Yearoutindia, a company that sends volunteers to do charitable work at various sites in southern India.