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A little girl in a Kodak Snapshot Album

Unknown photographer,

Four photographs in album, c. 1940s, 12.8 x 33 x 1.6cm (open)

National Museum of Photography, Film & Television, Bradford

No 95

I am a psychologist who specialises in human face perception – understanding how we understand social signals from the human face. Human faces serve a number of different functions – they bear our sense organs allowing us to see, smell, hear and taste. Eyes are spaced to allow stereo vision, ears placed to help localise sounds. The lips, tongue and jaws are specialised in ways that allow us to articulate speech sounds as well as to eat the range of foods that we omnivores require. Because of these important functions human faces are all pretty much the same – but despite this, subtle differences between the faces of different people, and momentary changes in the face as it moves and expresses, allow the face to send a rich variety of social signals. We can ‘read’ messages even from the faces of strangers.

The little girl in these pictures – well, we know she’s a little girl, but we recognise this not just from her face but also from her clothes and hairstyle. People are remarkably good at telling the difference between male and female faces even when superficial cues from hairstyle are not present. If pictures of adult faces are shown with no visible hair, facial hair or make-up, people can decide with over 95% accuracy whether they are male or female, and this level of performance is as good as any computer program yet written. By making detailed measurements of the facial features and their arrangement in large numbers of male and female faces it is possible to find out what the differences are between males and females upon which we can base such decisions– and by experimenting with the effects of concealing different parts of the face we can confirm the important variations to which we are sensitive. Measurements and experiments of this kind have shown that we are sensitive to the distance between the eyebrows, and to the distance between the upper eyelids and eyebrows. Males have bushier brows and deeper set eyes than females (and females tend to pluck their eyebrows to increase this cue to their femininity). The shape of the nose is an important cue too – males

have bigger, more protruding noses, while women have smaller noses and more concave profiles. Females have fleshier cheeks but smaller chins than males, and their skin texture is smoother (even clean-shaven men may have a visible shadow.

These differences between the adult male and female faces arise during puberty as a result of the different sex hormones which affect the growth of the face. Male sex hormones influence the development of heavier brows, larger noses, stronger jaws, while the female face develops softer pads of fat on chin and cheekbones. Indeed an adult female face is more 'infantile' in form than an adult male face – the adult female has a relatively small chin, soft skin texture, smaller nose. If adult female faces are altered with computer graphics to make them more or less feminine in appearance, the more feminine versions also look younger. However, at the age of this little girl in our pictures, there is rather little difference at all between the female and male face shapes. So we probably used the visible clothing and hairstyle mostly to tell so easily that this was a girl.

We know that the pictures show a child because of the face as well as clothing. Infant faces have relatively large eyes and high foreheads, small chins and noses. This infant-like pattern is very attractive to adults, and even pictures of cartoon characters can be made 'cute' in appearance by exaggerating such infant-like features (think of the face of Bambi in Walt Disney's film). Note that there are no obvious cues to the pictured child's age from taller companions in the pictures shown here. (Indeed this itself is rather strange in a family picture album, giving this little person a strange sense of isolation.) I would estimate this child to be about three years old, from the images presented.

What else can we read into these pictures? In the picture shown in the oval frame in which the girl's arm is raised behind her head, she is clearly attending to something at or near her feet – perhaps a pet dog? We tell this from the angle of her head and eyes – and such cues to social attention play an important role in our everyday interpersonal attention. One of the most central features of human cognition is that we ascribe 'minds' to other humans, and we infer what these other minds are thinking about or attending to by inferences from their behaviour. Non-verbal behaviour is particularly important in this respect. One theory of what goes wrong in autistic individuals is that they cannot understand other people's minds in the ways that most people do. Symptomatic of this is the autistic person's difficulty in using subtle aspects of the posture and expression of eyes to deduce emotional and attentional states.

In the other pictures, the child faces the camera and appears to attend only to that – or to us, now the viewers of these pictures. Her expressions suggest she is a relaxed and happy little girl. Facial expressions betray other aspects of the human mind – emotional as opposed to attentional states. One famous social psychologist, Paul Ekman, has claimed that there are a small set of some six basic emotions – happiness, sadness, fear, anger, disgust and surprise, universally portrayed and understood across all cultures. Other psychologists stress the cultural and situational determinants of emotional expression and interpretation- different cultures having different ‘conventions’ about the appropriateness, or otherwise, of showing overt emotion in public, or in particular situations.

What will have become of this child in the years (perhaps 40 or more) between these images and now? The child is attractive – and attractiveness is a great advantage in life. Attractive faces tend to be accorded a variety of other desirable attributes, and social psychologists have demonstrated that the same acts may be interpreted more leniently if perpetrated by an attractive rather than unattractive protagonist. But what is attractiveness – is beauty ‘in the eye of the beholder’ or are there universal principles? Perhaps surprisingly, there is a good deal of agreement between different individuals, even from different races, over which faces within a set appear more or less attractive. Attractive faces tend to be more symmetrical, and more ‘average’ in appearance than unattractive ones. For female faces, attractiveness and femininity are more or less the same thing – so faces rated more attractive show more sex-typical characteristics than unattractive ones. There is no such simple linkage between attractiveness and masculinity for male faces, however, and under some circumstances, women may even find male faces more attractive if made more feminine in appearance.

This brief essay has described how psychologists understand some of the things we can read from faces, and the nature of the information we use to decipher such messages. When faces are familiar to us, we can go beyond the visual information to retrieve who the person is – their name, and the context in which they are familiar. But as I don’t know this little girl, my interpretation of these images must stop at the more general associations to her gender, age, expression and attention.