

Topic 2.

Why are symmetric faces attractive?

Attraction to symmetric faces



Symmetric (attractive)

Asymmetric (unattractive)

Many studies have shown that people tend to judge symmetric faces to be more attractive than asymmetric faces.

These studies have used computer graphic methods to manipulate symmetry in face images.

Attraction to symmetric faces



Symmetric (attractive)

Asymmetric (unattractive)

People from diverse cultures (e.g. UK, Japan) tend to prefer symmetric faces to relatively asymmetric faces

This suggests symmetry preferences have a 'biological basis'

Why are symmetric faces attractive?

Two different theories have been put forward to explain attraction to symmetric faces:

THE EVOLUTIONARY ADVANTAGE VIEW

symmetric individuals are attractive because they are particularly healthy

THE PERCEPTUAL BIAS VIEW

symmetric individuals are attractive because the human visual system can process symmetric stimuli of any kind more easily than it can process asymmetric stimuli

The Evolutionary Advantage View of symmetry preferences

Although we are designed to develop symmetrically, disease and infections during physical development cause small imperfections (i.e. asymmetries).

Only individuals who are able to withstand infections (i.e. those with strong immune systems) are successful in developing symmetric physical traits.

Symmetric individuals are considered attractive because we have evolved to prefer healthy potential mates.

The Evolutionary Advantage View of symmetry preferences



Male swallows and peacocks with symmetric tail feathers are:

- 1) preferred by females of their species
- 2) healthier than their asymmetric counterparts

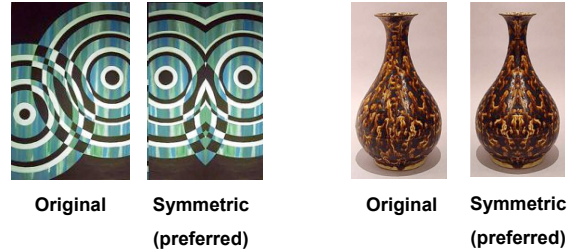
The Perceptual Bias View of symmetry preferences

Our visual system may be 'hard wired' in such a way that it is easier to process symmetric stimuli than it is to process asymmetric stimuli.

Because of this greater ease of processing symmetric stimuli, symmetric stimuli of any kind might be preferred to relatively asymmetric stimuli.

Under the perceptual bias view, preferences for symmetric faces are no different to preferences for symmetric objects of any kind.

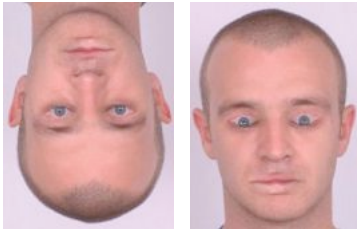
The Perceptual Bias View of symmetry preferences



Consistent with the view that symmetry is attractive in any type of stimuli, symmetry preferences have been observed for judgements of abstract art and decorative objects

Testing explanations of symmetry preferences

These are the same face! →

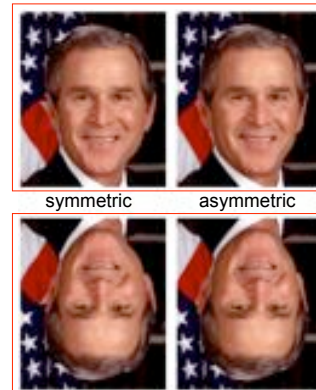


Inverted faces are not processed like faces but are processed like other objects (this is why it's hard to spot the manipulation in the inverted face above)

While faces are generally 'mate choice relevant' stimuli, inverted faces (and objects) are 'mate choice irrelevant stimuli'

Testing accounts of symmetry preferences

Little & Jones (2003)

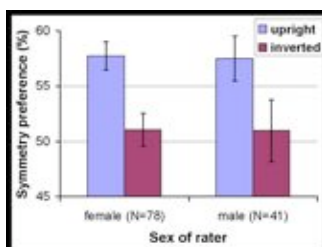


Evolutionary Advantage View: predicts stronger symmetry preferences in upright faces than inverted faces

Perceptual Bias View: predicts no effect of inversion on symmetry preferences

Testing accounts of symmetry preferences

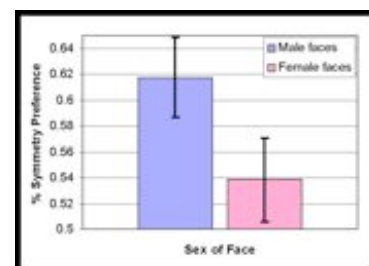
Little & Jones (2003)



Little & Jones showed that symmetry preferences are stronger for upright faces (i.e. mate choice relevant stimuli) than inverted faces (i.e. mate choice irrelevant stimuli), supporting the Evolutionary Advantage view of symmetry preferences rather than the Perceptual Bias view.

Testing accounts of symmetry preferences

Little et al. (2001)



Little et al. (2001) showed that symmetry preferences are stronger for opposite-sex faces (i.e. mate choice relevant stimuli) than own-sex faces (i.e. mate choice irrelevant stimuli), supporting the Evolutionary Advantage view.

Key points from Topic 2

Symmetric faces are more attractive than asymmetric faces

i.e. People tend to prefer faces that have been warped into a perfectly symmetric shape than the original (i.e. relatively asymmetric) faces

The effect of inversion on symmetry preferences supports the Evolutionary Advantage view rather than the Perceptual Bias view

i.e. Preferences for symmetry are stronger in mate choice relevant stimuli (upright faces) than mate choice irrelevant stimuli (inverted faces)