

# Outline explanations of prosopagnosia essay



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Visual agnosias is the inability to recognise familiar objects presented visually. There are two types of visual agnosias- Apperceptive agnosia and Associative agnosia. Apperceptive agnosia is the physiological type of visual agnosia, where it is a failure of recognition due to damaged visual perception. Associative agnosia is the developmental type. It is where perceptual ability is intact, but it shows difficulty in recognising familiar objects because of a failure in accessing relevant knowledge from the person's memory.

Prosopagnosia is an example of associative agnosia. This is whereby a person has an inability to recognise faces, despite having no problem with visual recognition of most other objects. Prosopagnosia occurs when there is a failure of visual and associate memories to come together to produce a normal recognition. The two explanations of prosopagnosia is a ' unique face-specific problem' which is discovered from PET and FMRI scans. Farrah and Aguirra showed that the right fusiform gyrus (FFA) is activated during face recognition but not during object recognition. Barton found that the FFA was damaged in people with prosopagnosia. This suggested that there are specific processing mechanisms that are used in recognition in faces only. Farrah found that studies on prosopagnosics show that ' faces are special' supporting this explanation of prosopagnosia.

However, there are suggestions that prosopagnosia is not a ' face-specific' problem. Gauthier used brain imaging techniques and found that some people with prosopagnosia struggled with more than facial recognition, such as identifying objects. This suggests that prosopagnosia is related to holistic processing and the activation of the FFA is associated with identifying

objects which people are familiar or expertise in something relevant. Holistic processing refers to recognition based on overall shape and structure, rather than on individual elements.

The studies used to investigate prosopagnosia used a lot of case studies. Although case studies are rich in detail and information, they cannot be generalised and used as a representation of the general population. The viewpoint that 'faces are not special' is supported by Gauthier and Tarr's study, which claimed that apparent differences between face and object processing can be explained. The way that faces are identified are also used to identify objects that individual's know a lot about. Currently, there is evidence for both explanations of prosopagnosia. What has been concluded is that face recognition and prosopagnosia involve different mechanisms from other forms of recognition or object agnosias. Eysenck and Keane's study was the most recent form of research, and suggests that faces aren't as 'special' as once thought.

The research into prosopagnosia is seen as the physiological approach and has provided explanations for many behaviours, but has been criticised for being reductionist. It has been criticised for being reductionist because it only focuses on one explanation, and for simplifying the explanations. Having said that, this approach identifies areas of the brain that are involved in various behaviours, such as facial and object recognitions, giving psychologists a background to focus on when doing further research.