

Behaviourist and cognitive approach to learning and phobias essay sample



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In this essay I will be discussing face perception and in particular Bruce and Young's (1986) theory on face recognition. I will discuss their theories of recognizing people's faces and forgetting the names of people who we know. I will discuss how helpful their theories are in understanding face perception.

Face recognition allows us to perform the highly adaptive task of identifying individuals and picking up information from their expressions. This is an important social function as it allows us to identify people in our society, create relationships with these people and also be able to non verbally communicate how we feel through facial expressions and gestures. (Bruce 1994 cited by Martin, G. N.(Ed.) et al., 2010, p. 222)

Identifying a face involves a number of stages, including recognising the face as familiar, working out where we have seen it before and putting a name to it. Failure at one stage causes particular problems in the process of identification.

Bruce and Young's (1986) came up with a cognitive model which describes face perception. This model shows how Bruce and Young's theory splits face recognition into different functions. The first stage of their theory describes how the face is encoded using descriptions. These descriptions are then analysed independently for facial expressions and then information about their age, gender and race. Feature information enables us to make familiarity judgements on the basis of the physical features of faces which lead to the next stage of the model.

In the second stage of the model it shows how if the features analysed in the first stage are familiar, the Face Recognition Units (FRU) is activated. The <https://assignbuster.com/behaviourist-and-cognitive-approach-to-learning-and-phobias-essay-sample/>

FRU matches the visual description of the seen face against stored descriptions of the appearance of familiar faces seen before.

The final stage involves the retrieval of the person's name, which is stored in long term memory along with biographical details such as personality and occupation. Familiar faces activate this information by using the Person Identity Node (PIN). This information can also be accessed through the personal identity node by other inputs such as voice. (Breen et al., 2000)

This model on face perception is helps to understand how we recognise someone's face and how we remember their name but only gives us a description of what happens when we recognise a face and was later developed by Burton et al. (1990). He developed the Face Recognition Units, Personal Identity Nodes and cognitive parts of the Bruce and young model.

Burton et al.'s (1990) model is an interactive activation model. The IAC model describes the many and complex relations amongst the units at which the Bruce and Young model only hints. The aim of this model is not to produce a description of what happens, but to understand the processes which allow us to recognise people, remember facts about them and so forth.

This model describes the Face Recognition Units and Personal Identity Nodes in further detail and also relates these to the semantic identification nodes. It shows how it has excitatory and inhibitory connections between the nodes in each part of the model.

The nodes in the Face Recognition Units correspond directly with face input and face recognition. There is one node for each known face and the notion is that all these units are view independent. This means that any recognisable view of the face will cause the appropriate FRU to be activated.

Similar to the Face Recognition Units, the Personal Identity Nodes also have one unit for each known person but instead of identifying the face these nodes identify the person. Similarly to the Bruce and Young model (1986) other domains such as voice recognition also activate the PINs to identify the person.

There are also the semantic information units (SIUs) which store information about known individuals. SIUs can be shared as there may be more than one person with similar information. For example, people may share the same occupation. Information is stored about a person by forming a link between the PIN and their SIU.

This model shows how each separate node is linked when recognising someone's face. When the appropriate Face Recognition Unit has been activated all domains at this level converge. Burton and Bruce (1993) goes on to explain this convergence between face and name recognition. There is also the link I have previously mentioned, that is formed between the Personal Identity Nodes and Semantic Information Units when information is being coded into the SIUs, in long term memory, about the person.

Although the Bruce and Young model (1986) on face recognition is helpful in the understanding of face perception and name recognition, it only describes what happens when we recognise a face and does not provide a detailed <https://assignbuster.com/behaviourist-and-cognitive-approach-to-learning-and-phobias-essay-sample/>

description on how each part of the model works. Although the Bruce and Young model on face recognition has provided valuable contribution to be a basis for further study including the IAC model (Burton et al, 1990).

The IAC model is more descriptive than the Bruce and Young model and therefore provides more help in understanding facial perception. The IAC model helps us to understand the processes which allow us to recognise a person's face, remember their identity and remember facts about them.