Lecture 1 (16/11/15) - Introduction to the cognitive psychology of human memory

Why study memory?

Encoding and retrieving information, even in an automatic way, is a critical part of mental life. Clive Wearing (suffered with brain damage from an infection called herpes simplex encephalitis in 1987 at age 47) - he has a short term memory of only a few seconds, and nearly no long term memory.

How to think about memory? With metaphors

A metaphor is a figure of speech, and can be used to describe the human mind.

Spatial metaphor – memory as a space

Pre-scientific metaphor (philosophy) – eg. Plato’s birdcage, which suggests that varieties of knowledge in memory can be grouped based on association.

Memories as impressions eg. Memory foam, writing, photography, a physical action, your opinion.

Computer metaphor is led on from advances in technology. It is spatial but also processes information. (CD-R read only/ CD-RW read and write)

How to study memory

Cognitive-experimental approach

Treats the brain as an information processing system, which memory is a part of; it contains many sub-systems and smaller processes within processes. The aim is to find out exactly how this works in detail.

Systematic manipulation can be used on factors that we believe are influential in processes such as encoding, storage and retrieval.

A modular theory of memory

Memory deficits are selective, suggesting memory is a collection of distinct memory systems.

Multi-store Model (Atkinson and Shiffrin, 1968)

This model is still extremely influential, and often acts as a framework for research that followed which continues to refine the model.

Sensory Memory

The first port of call for information entering our mind; the interface between perception and memory. Sight (vision- iconic), hearing (audition- echoic), touch (proprioception), smell