

# Knowledge Map: Memory

This topic looks at the how memory works, it's accuracy and the factors that effect the quality of our recall.

Memory	Perception	Development	Research methods	Social influence	Language thought and communication	Brain and neuropsychology	Psychological problems
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Multi-store model of memory	Murdock's serial position curve study	Reconstructive memory	Bartlett's 'war of the ghosts' study
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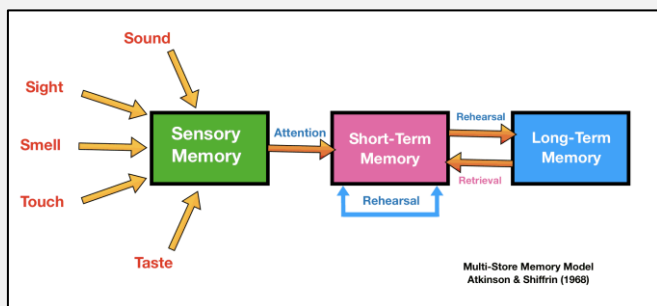
## Processes of memory *Encoding, storage and retrieval*

<b>Encoding</b>	Visual encoding
	Acoustic encoding
	Semantic encoding
	Other encoding (tactile, olfactory)
<b>Storage</b>	Declarative: Episodic memory
	Non-declarative: Semantic memory
	Non-declarative: Procedural memory
<b>Retrieval</b>	Recognition
	Cued recall
	Free recall

<b>Brain scans</b>	Brain scans (PET, fMRI) show that when memories are accessed blood flow is increased to specific areas. <ul style="list-style-type: none"> <li>• Episodic memory – right prefrontal area</li> <li>• Semantic memory – left prefrontal area</li> <li>• Procedural memory – motor area</li> </ul>
<b>Reductionist</b>	Some ideas are seen as reductionist – they oversimplify complex ideas.
<b>Amnesia</b>	Patients suffering from amnesia (such as Clive Wearing) show a link between damaged areas of the brain and they type of memories affected.

Declarative - conscious
Non-declarative – without consciousness

## Structures of memory *Modelling to describe the process of memory*



<b>Supporting research</b>	Baddeley's research on encoding and Murdock's serial position curve study supports the multi-store model.
<b>Reductionist</b>	Some ideas are seen as reductionist – they oversimplify complex ideas.
<b>Artificial methods</b>	Many studies that support the multi-store model use word lists which some see as not reflecting how memory is used in real life.

## Memory as an active process *Reassembling memories during recall*

<b>Reconstructive memory</b>	People rebuild memories as an active process.
<b>Inaccurate</b>	Memories are not an exact reproduction of experiences.
<b>Reconstruction</b>	A person records pieces of information which are then recombined.
<b>Social and cultural influences</b>	Storage and recall are affected by the world/culture we live in.
<b>Effort after meaning</b>	We focus on the meaning of events and make an effort to make sense of the fragments of memory.

<b>Realistic</b>	Using stories to test memory is far more reflective of real life.
<b>Accuracy</b>	Not all recall is inaccurate.
<b>Application</b>	Explains why eyewitness statements have been shown to show variation.

## Factors affecting the accuracy of memory *How memories become more or less accurate*

<b>Interference</b> Participants found it more difficult to remember a list of synonyms than a list of antonyms. Interference is caused by trying to recall two or more similar things (McGeoch and Donaldson, 1931)	<b>Information isn't forgotten</b> Participants have been able to recall information, previously thought forgotten, when given cues (Tulving and Psootka, 1971)
<b>False memories</b> 25% of participants recalled a false story as if it had really happened to them suggesting our memories are highly suggestable (Loftus and Pickrell, 1995)	<b>Ethical issues</b> Participants may be left with implanted false memories, causing distress.  <b>Application</b> Implications for eyewitness statements and police questioning.
<b>Context</b> Participants who learn information in the same place it is then recalled show increase recall. The environment acts as a cue (Godden and Baddeley, 1975)	<b>Artificial methods</b> Many studies use word lists which some see as not reflecting how memory is used in real life.