

MEMORY

THE WORKING MEMORY MODEL

KEY TERMS

- Working Memory Model (WMM) - Representation of STM. Suggests STM is a dynamic processor of different information types using sub-units
- Central Executive (CE) - Component of WMM that coordinates activities of three sub-systems in memory. Allocates processing resources to those activities
- Phonological Loop (PL) - Component of WMM that processes information in terms of sound. Includes written and spoken material divided into phonological store and articulatory process
- Visuo-Spatial Sketchpad (VSS) - Component of WMM that processes visual and spatial information in mental space often called 'inner eye'
- Episodic Buffer (EB) - Component of WMM that brings together material from other subsystems into a single memory rather than separate strands. Also provides bridge between WM and LTM

THE WORKING MEMORY MODEL (WMM)

- Central Executive (CE) - Co-ordinates slave systems and allocates resources, very limited storage
- Phonological Loop (PL) - Auditory information. Phonological store and articulatory process (maintenance rehearsal)
- Visuo-Spatial Sketchpad (VSS) - Visual information. Visual cache (store) and inner scribe (spatial arrangement)
- Episodic Buffer - Integrates processing of slave systems and records order of events

EVALUATION

- Clinical Evidence - KF poor auditory memory but good visual memory. Damaged PL but VSS fine (Shallice and Warrington, 1970)
- Dual-Task Performance - Difficult to do two visual tasks at same time, but one visual and one verbal is fine (Baddeley *et al.*, 1975)
- Lack of Clarity over CE - Not yet fully explained, probably has different components (Baddeley, 2003)

MEMORY

EXPLANATIONS FOR FORGETTING: RETRIEVAL FAILURE

KEY TERMS

- Retrieval Failure - Form of forgetting. Occurs when we don't have necessary cues to access memory
- Cue - A 'trigger' that allows us to access a memory

RETRIEVAL FAILURE THEORY

- Encoding Specificity Principle - Tulving (1983) said cues most effective if present at coding and at retrieval, so may be a meaningful link
- Context-Dependent Forgetting - Godden and Baddeley (1975) said recall better when external contexts matched (deep-sea divers)
- State-Dependent Forgetting - Carter and Cassaday (1998) said recall better when internal states matched (antihistamine)

EVALUATION

- Supporting Evidence - Wide range of support. Eysenck (1961) claims retrieval failure is most important reason for LTM forgetting
- Questioning Context Effects - No forgetting unless contexts are very different, e.g. on land vs underwater (Baddeley, 1997)
- Recall Vs Recognition - Absence of cues affects recall but not recognition (Godden and Baddeley, 1980)
- Problems with Encoding Specificity Principle - ESP isn't testable, leads to circular reasoning
- Real-Life Applications - Baddeley (1997) suggests context-related cues worth paying attention to (e.g. forgetting what you go into a room for, then remembering later)