## **Semantic Memory**

Episodic memory: memories for events in specific temporal and spatial context

Semantic memory: Conceptual knowledge, linguistic knowledge, Memories for general facts → Impairments in semantic memory → cant comprehend meanings of words or pictures or express ideas.

Experiments on semantic memory organization

Early studies used the sentence verification task with the dependant variable to find reaction time.

Sentence Verification Task

Subject - Predicate: A Canary is a bird

**Network Models** 

Concepts represented by nodes (localist representations)

Relationships between conflict by links

> set conclusion

> property attribution

Hierarchical Network model

Concepts are organized in a hierarchy.

Cognitive economy

Problems with hierarchical network model

- Challenge to cognitive economy
- Conrad (1972)
  - Argued that RT data are better explained in terms of frequency of cooccurrence of concept and property rather than levels.
- The Hierarchical mode does not predict:
  - > RT's do not always mirror hierarchical relationship
  - Within-category typically effects
  - Negative judgements are not faster for closer concepts: in fact, the opposite

Spreading Activation Model

(Collins & Loftus 1975)

- Concepts are organised non-hierarchical → explains the lack of hierarchical effect
- Links vary in associative effect → Explains typically effect
- Activation of a concept spreads to other concepts linked out → explains semantic priming effect

Semantic Priming Effect

Response to a word is faster following a semantically related word

Semantic priming effect is used to study:

- Organisation of semantic memory
- Automaticity

*Further comparison model* 

- Network models assume knowledge is represented within a concept node (localist representation)
- Feature comparison mode (assumes concept is represented as distributed features in semantic space

Explaining sentence verification data with feature comparison model

- Two stage decision model