

Retrieval Time from Semantic Memory¹

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To ascertain the truth of a sentence such as "A canary can fly," people utilize long-term memory. Consider two possible organizations of this memory. First, people might store with each kind of bird that flies (e.g., canary) the fact that it can fly. Then they could retrieve this fact directly to decide the sentence is true. An alternative organization would be to store only the generalization that *birds* can fly, and to infer that "A canary can fly" from the stored information that a canary is a bird and birds can fly. The latter organization is much more economical in terms of storage space but should require longer retrieval times when such inferences are necessary. The results of a true-false reaction-time task were found to support the latter hypothesis about memory organization.

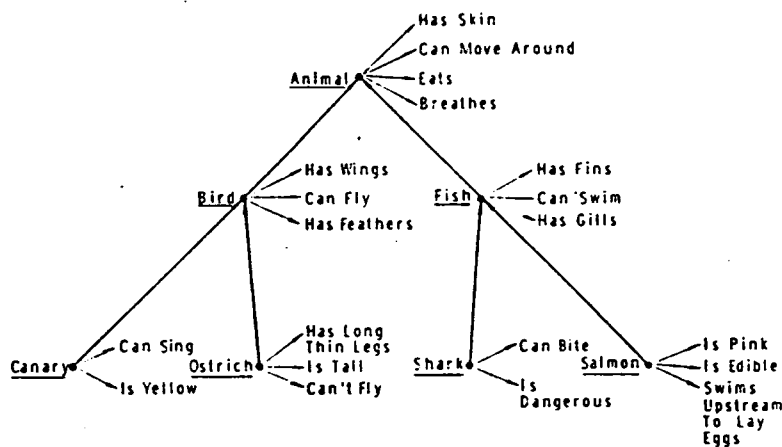


FIG. 1. Illustration of the hypothetical memory structure for a 3-level hierarchy.

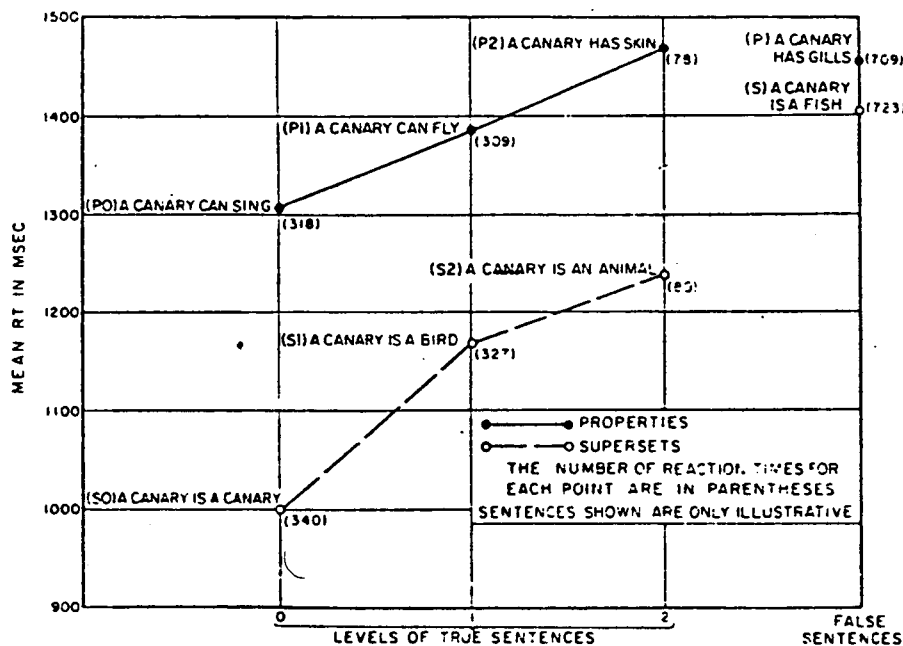


FIG. 2. Average reaction times for different types of sentences in three experiments.