

lack of forthcoming evidence to support PDP models as a mirror of neural processes in the brain. He reminded us that there is little reason to believe a single processor model will be sufficient to model brain functions. After all, "the evolution of the brain has not yielded a machine of uniform design like a digital computer but rather a melange of systems and subsystems of different evolutionary ages" (Estes, 1988, p. 206). He concluded that the final test of any theory will come in the record of extended research that follows from it.

Table 3.2 presents a summary of the models that have been proposed to account for how learned information is represented in memory. To this point, however, only verbal and procedural information have been addressed. What about memory for information of a visual or olfactory nature?

TABLE 3.2 Summary of Models Proposed to Account for the Storage of Information in Long-Term Memory

Proposed Model	Characteristics	Data the Model Explains	Difficulties Faced by the Model
Network model	Memory represented as a web of nodes (concepts) connected by relations between concepts	Individual differences in memory Swift recognition of class and property relationships (e.g., bird has wings)	Cannot explain typicality of concepts (e.g., faster to recognize canary than penguin as birds)
Feature comparison model	Memory represented as sets of concept features	Typicality of concepts and "fuzzy sets"	Unwieldy and fails to account for semantic flexibility
Propositional model	Memory represented as network of propositions	Memory for gist Procedural as well as declarative knowledge	May be too complex to definitively test or falsify
Connectionist or PDP model	Memory represented as connections among subsymbolic units of processing	Incremental, dynamic nature of learning Possibility of hard-wiring of memory in the brain	A single model may be insufficient to represent brain functions