## Chapter 10 Key Terms

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[CHARM](#CHARM)

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**ACT**  Adaptive Control of Thought; a network model of memory in which knowledge is stored in a [propositional network](#propositional) and is retrieved through [spreading activation](#spreadact)

**catastrophic forgetting** A failure of connectionist networks in which new items change the network weights causing the network to lose its prior knowledge

**CHARM** Composite Holographic Associative Retrieval Model; a model of memory designed to account for memory of item and associative information as well as serial order

**Collins and Quillian’s network model** A network model of semantic memory in which nodes represent simple concepts, and links to other nodes convey properties or relationships

**connectionist models**  See parallel distributed processing models

**correct for guessing** A component of the threshold model that accounts for the probability of giving a correct response by chance

**correct rejection** A correct “no” response to a new memory item in a recognition test

**distributed storage models**  Models of memory that assume that information in memory traces are distributed across a large set of relatively simple individual units

**dual process theories**  Models of memory that assume there are two retrieval processes: an automatic activation one and a deliberative search one

**echo** In [MINERVA 2](#MINERVA), a memory trace representing a weighted composite of all activated traces

**echo content** In [MINERVA 2](#MINERVA), the weighted average of the contents of all memory traces activated by a probe

**echo intensity** In [MINERVA 2](#MINERVA), the activation strength of retrieval

**false alarm** An incorrect “yes” response to a new memory item in a recognition test

**familiarity** A retrieval process in which information is recognized if it exceeds a threshold

**formal model** A model of memory that uses mathematics to describe its qualities and make predictions

**generate-recognize model** A model of recall that assumes a two-stage process: first, a generate component in which a set of memory cues that can be reported is made; second, a recognition process in which items that exceed a threshold are reported

**global matching models**  Models of memory that assume that memory retrieval occurs through a massively parallel process in which all memory traces are compared with information in a memory probe but for which only some are activated

**hit** A correct “yes” response to a memory item that is old in a recognition test

**hydrogen model** A model of memory that includes inhibition of inappropriate memory traces

**links** Parts of a network that join nodes together

**Latent Semantic Analysis (LSA)** A formal memory model that takes a very large number of inputs to create a high dimensional (over 300) space to represent meaning

**MINERVA 2** A multiple trace model of memory in which memory traces are strings of event features; each feature is represented by a value indicating its presence or absence

**miss** An incorrect “no” response to a memory item that is old in a recognition test

**multiple trace models** Models of memory that assume that knowledge is stored as separate memory records

**network theory**  A theory of memory that assumes that associative relations among concepts are stored directly in long-term memory

**neural networks**  See parallel distributed processing models

**nodes** Parts of a network that represent concepts or other mental representations

**Occam’s razor** A rule of thumb that says, all else being equal, accept the simplest solution

**parallel distributed processing models**  Theories of memory that assume that information is represented in a massively interconnected network in which information is encoded by the strength of the associations among the units

**priming**  A process of making some memories more available by previously retrieving memories that are similar to them in some way

**production memories** Mental steps through which people proceed to move from one state of knowing to another; they can be thought of as a series of “if…then” statements

**propositional network** A network in which simple idea units, represented by two nodes and a link, represent knowledge

**recall**  A type of memory that requires a person to generate information

**recognition**  A type of memory that requires a person to assess whether information that is presented has been encountered before

**recognition failure**  Information that is recalled but not recognized

**recollection** A retrieval process in which information is consciously activated and retrieved

**REM** Retrieving Effectively from Memory; a model of memory that combines properties of [SAM](#SAM), [MINERVA 2](#MINERVA), and other sources. It assumes there is a probability of error in the information stored in a memory trace

**SAM** Search of Associative Memory; a multiple trace model of memory in which traces contain content, associative, and contextual meaning, and remembering occurs when overlap with trace features activates them, allowing for retrieval

**SARKAE** Storing And Retrieving Knowledge And Events; a multiple trace model of memory which accounts for specific and general knowledge

**signal detection theory**  A data analytical approach that allows researchers to separate out the influences of discrimination and bias on performance

**speading activation** Activation that moves from one concept to related concepts through their associated links

**threshold model**  A model of memory that assumes that retrieval occurs when the activation of a memory trace exceeds some preset level

**TODAM** Theory Of Distributed Associative Memory; a model of memory designed to account for memory of item and associative information as well as serial order

**token nodes** Nodes that represent specific instances of a concept

**Tulving–Wiseman function**  A formal, mathematical function that describes recognition failure

**type nodes** Nodes that represent general concepts