Chapter 8

In Pursuit of Memory

* Explicit memory: conscious, intentional recollection of an event or of an item of information
* Recall: The ability to retrieve and reproduce from memory previously encountered material.
* Recognition: The ability to identify previously encountered material
* Implicit memory: unconscious retention in memory, as evidenced by the effect of a previous experience or previously encountered information on current thoughts or actions.
* Priming: A method for measuring implicit.
* Relearning method: a method for measuring retention that compares the time required to relearn material with the time used in the initial learning of the material.
* Parallel distributed processing(PDP) model: a model of memory in which knowledge is represented as connections among thousands of interacting processing units, distributed in a vast network, and all operating in parallel.

The three-box model of memory

* Sensory register: A memory system that momentarily preserves extremely accurate images of sensory information.
* Short-term memory: in the three-box model of memory, a limited-capacity memory system involved in the retention of information for brief periods; it is also used to hold information retrieved from long-term memory for temporary use.
* Chunks: a meaningful unit of information; it may be composed of smaller units.
* Working memory: in many models of memory, a cognitively complex form of short-term memory that involves the active mental processes that control retrieval of information from long-term memory and interpret that information appropriately for a given task.
* Long-term memory (LTM) in the three-box model of memory, the memory system involved in the long-term storage of information.
* Procedural memories: memories for the performance of actions or skills(“knowing how”)
* Declarative memories: memories of facts, rules concepts, and events (“knowing that”); they include semantic and episodic memories.
* Semantic memories: memories of general knowledge, including facts, rules, concepts, and propositions.
* Episodic memories: memories of personally experienced events and the contexts in which they occurred.
* Serial-position effect: the tendency for recall of the first and last items on a list to surpass recall f items in the middle of the list.

The Biology of Memory

* Long-term potentiation: A long-lasting increase in the strength of synaptic responsiveness, thought to be a biological mechanism of long-term memory.
* Consolidation: The process by which a long-term memory becomes durable and stable.

How we remember

* Maintenance rehearsal: Rote repetition of material in order to maintain its availability in memory.
* Elaborative rehearsal: Association of new information with already stored knowledge and analysis of the new information to make it memorable.
* Deep processing: in the encoding of information, the processing of meaning rather than simply the physical or sensory features of a stimulus.
* Decay theory: the theory that information in memory eventually disappears if it is not accessed; it applies better to short-term than to long-term memory.
* Retroactive interference: forgetting that occurs when recently learned material interferes with the ability to remember similar material stored previously.
* Proactive interference: Forgetting that occurs when previously stored material interfere with the ability to remember similar, more recently learned material.
* Cue-dependent forgetting: the inability to retrieve information stored in memory because of insufficient cues for recall.
* State-dependent memory: The tendency to remember something when the rememberer is in the same physical or mental state as during the original learning or experience.
* Mood-congruent memory: the tendency to remember experiences that are consisten with one’s current mood and overlook or forget experience that is not.
* Repression: in psychoanalytic theory, the selective, involuntary pushing of threatening or upsetting information into the unconscious.
* Childhood (infantile) amnesia: The inability to remember events and experiences that occurred during the first or three years of life.