

Autobiographical Memory

Older "Faculty of Mind" Theories: Memory

Before the 20th century, theologians, philosophers and early proponents of psychology conceptualized that the mind consisted of a limited number of "mental faculties." The *APA Dictionary of Psychology* explains what faculty psychology meant:

“any approach to psychological issues based on the idea that mental processes can be divided into separate specialized abilities or powers, which can be developed by mental exercises in the same way that muscles can be strengthened by physical exercises. Faculty psychology was formulated in the 18th century by Scottish philosophers Thomas Reid (1710–1796) and Dugald Stewart (1753–1828), who held that will, judgment, perception, conception, memory, and so forth could be explained simply by referring to their active powers; for example, individuals remember because they possess the faculty of memory” (emphasis added) (<https://dictionary.apa.org/faculty-psychology>)



Often the list of these faculties included six important abilities: **imagination, perception will, memory, intuition, and reason**. While these abilities may seem somewhat like the different mental functions associated with localized areas of the brain, the underlying belief was that each faculty was a kind of singular or general ability over all. Memory as a faculty of mind wasn't broken down into multiple different types.

Faculty psychology in the late 18th and 19th century sometimes took the form of the so-called science of "**phrenology**." The Encyclopedia Britannica summarizes the basic five ideas of phrenology:

"(1) the brain is the organ of the mind; (2) human mental powers can be analyzed into a definite number of independent faculties; (3) these faculties are innate, and each has its seat in a definite region of the surface of the brain; (4) the size of each such region is the measure of the degree to which the faculty seated in it forms a constituent element in the character of the individual; and (5) the correspondence between the outer surface of the skull and the contour of the brain-surface beneath is sufficiently close to enable the observer to recognize the

relative sizes of these several organs by the examination of the outer surface of the head.” (<https://www.britannica.com/topic/phrenology>)

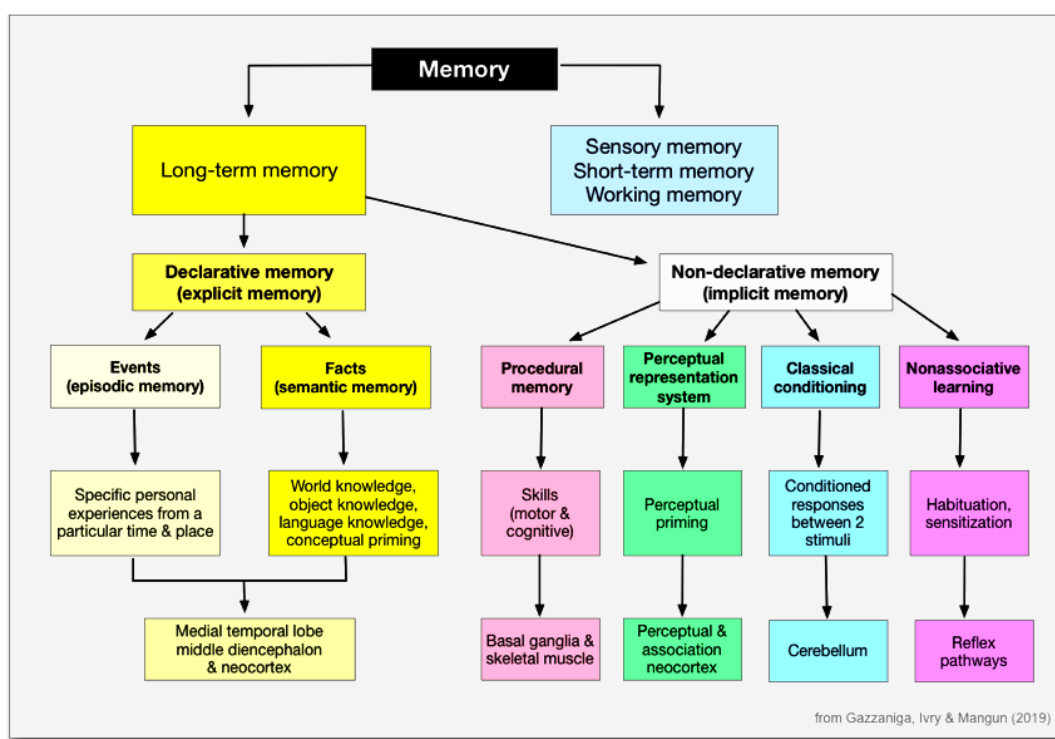
In comparison to small number of faculties of mind suggested by the Scottish tradition as conceived by Thomas Reid and others, phrenology argued that there were many more individual faculties. Johann Gaspar Spurzheim (1776-1832) and George Combe (1788-1858) who were major proponents of phrenology in the United States suggested that there were 34 separate faculties which included “memory of things”

What is memory? Contemporary Perspective

The *Penguin Dictionary of Psychology* (Reber & Reber, 2001) offers three definitions for the concept of *memory*. These are

1. The mental function of retaining information about stimuli, events, images, ideas, etc. after the original stimuli are no longer present.
2. The hypothesized system in the mind/brain that holds this information.
3. The information so retained (p. 423).

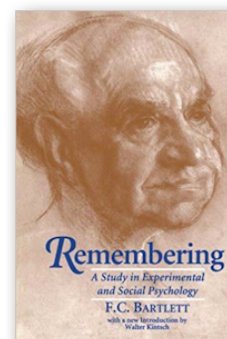
The complexity of memory can be illustrated by the chart below which outlines the general model of memory which cognitive and biological psychologists currently propose



What is memory? The contribution of Frederic C. Bartlett

British psychologist, Frederic C. Bartlett (1886-1969) served as the first chair of the department of experimental psychology at Cambridge University in the UK. He was enormously influential in proposing that our memory itself is not a mechanism simply to record and then recall data (visual, auditory, etc.) from the world around us. Memory does not work as a camera might do in taking a picture of a scene. Rather, the processes of encoding and recall in memory are profoundly affected by the cultural norms and mental mindsets (schemas) that a person brings to the task.

His contribution to understanding memory came in the 1932 publication of *Remembering: A Study in Experimental and Social Psychology* (that is his face on the cover of the book shown here). In an article (Hevern, 2012), I summarized this book in this fashion:

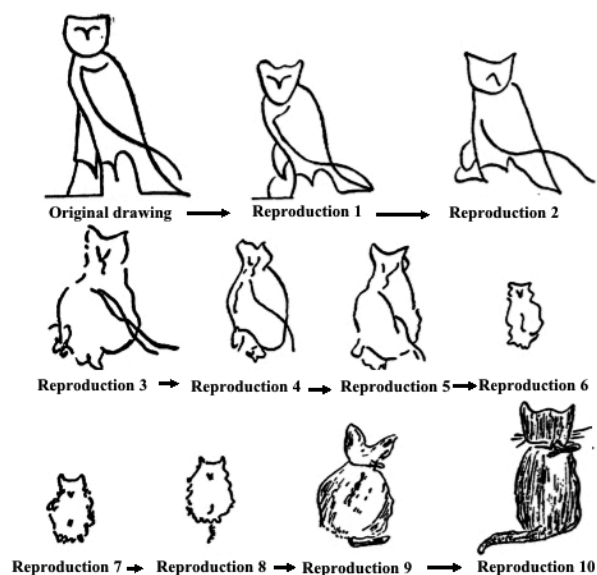
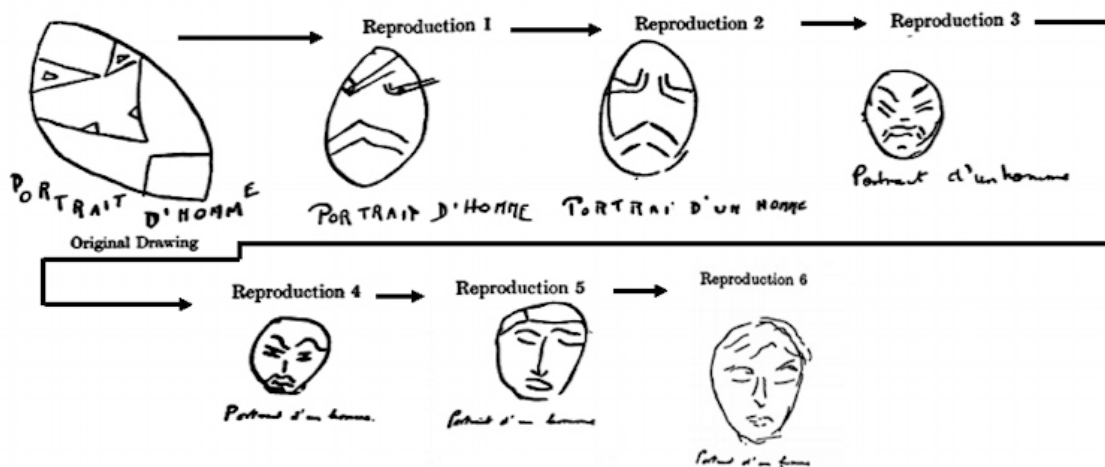


Bartlett (1932) “challenged prevailing laboratory-based theories of memory, particularly that of the German experimental psychologist Hermann Ebbinghaus (1850-1909) and the notion of memories as mental “traces.”

... [As] his book’s title alludes, [he] argued that memory is an active process of building rather than a static object to be recovered. His experimental method confronted English-born adults with a range of meaningful materials – stories, prose passages, and drawings – which they were asked to reproduce either at multiple sequential intervals or via serial transmission from one subject to another (similar to the American game of “Telephone”). He analyzed the qualitative changes and stabilities in his subjects’ reproduction of these materials, particularly their responses to a decidedly singular Native American folk tale (“The War of the Ghosts”) taken from [the American anthropologist Franz] Boas. He pointed out the ways his participants tended to assimilate experimental stimuli to their own cultural frameworks. In recounting the ghost story, notions at odds with its listener’s cultural knowledge tended to be “conventionalized” or ignored, and unfamiliar or singular emotions flattened or recast. To explain these findings, Bartlett used the concept of *schema*. ... Individuals actively deploy their own attitudes, beliefs, and past experiences (their *schemata*) to make sense of the materials they are remembering. Hence, Bartlett argued, *memory is a fundamentally reconstructive rather than reproductive act.*

Bartlett (1932) illustrated this insight by describing one experiment in viewing, recalling, and then drawing a visual image by a group of individuals. Each individual was shown, in turn, the image produced by the previous individual (B saw A's drawing; C saw B's drawing, etc):

Whenever material visually presented purports to be representative of some common object, but contains certain features which are unfamiliar in the community to which the material is introduced, these features invariably suffer transformation in the direction of the familiar. This constitutes a kind of analogue in the case of picture material to rationalization in the case of the prose passages. The principle is admirably illustrated in the following series. (p. 178)



Notice in the sequence of reproducing visual images that (1) details are lost and images may become simplified, and (2) what is unfamiliar is transformed into something that is more familiar.

What is autobiographical memory?



**Endel Tulving
APA Toronto 2003**

In 1972 the Canadian psychologist, Endel Tulving (1927-2023), first proposed that long-term memory consists of two separate systems that process different kinds of information: *episodic memory* involving events and *semantic memory* involving facts. He argues that “semantic memory registers and stores knowledge about the world in the broadest sense and makes it available for retrieval...(while) [e]pisodic memory enables a person to remember personally experienced events as such” (Tulving, 1993, p. 67). Tulving (1993) clarifies the experience of episodic memory by noting, ““The act of remembering a personally experienced event, that is, consciously recollecting it, is characterized by a distinctive, unique awareness of re-experiencing here and now something that happened before, at another time and in an other place.” (p. 68) He labels this experience as *autonoetic awareness* (vs. *noetic awareness* for facts in semantic memory).

Tulving elaborated that the episodic memory system is probably unique to humans and “permits us to travel backward mentally in time to experience earlier events through remembering. The system also permits us to think about possible future scenarios and to think about and plan our futures, a capacity that may again be unique to humans and that may have helped pave the way for humans to have developed complex civilizations unlike those of any other animal (Marsh & Roediger, 2013, p. 472). Tulving called episodic memory *mental time travel*.

So, what is autobiographical memory (AM) and is it different from episodic memory? A contemporary view argues that AM is obviously about one’s own experiences. But, AM involves more for it “consists of many different types of knowledge, and it is not limited to episodes but also includes procedures and facts” (Marsh & Roediger, 2013, p. 483). For example, we remember that we know how to drive a car or play soccer or how to cook some type of food—all forms of procedural memory—even though we do not necessarily remember learning to do so. We may also remember that we were born in a particular hospital in a particular place—a type of semantic or factual memory—even though, obviously, we don’t actually remember our own birth!

What is the relationship between self and memory?

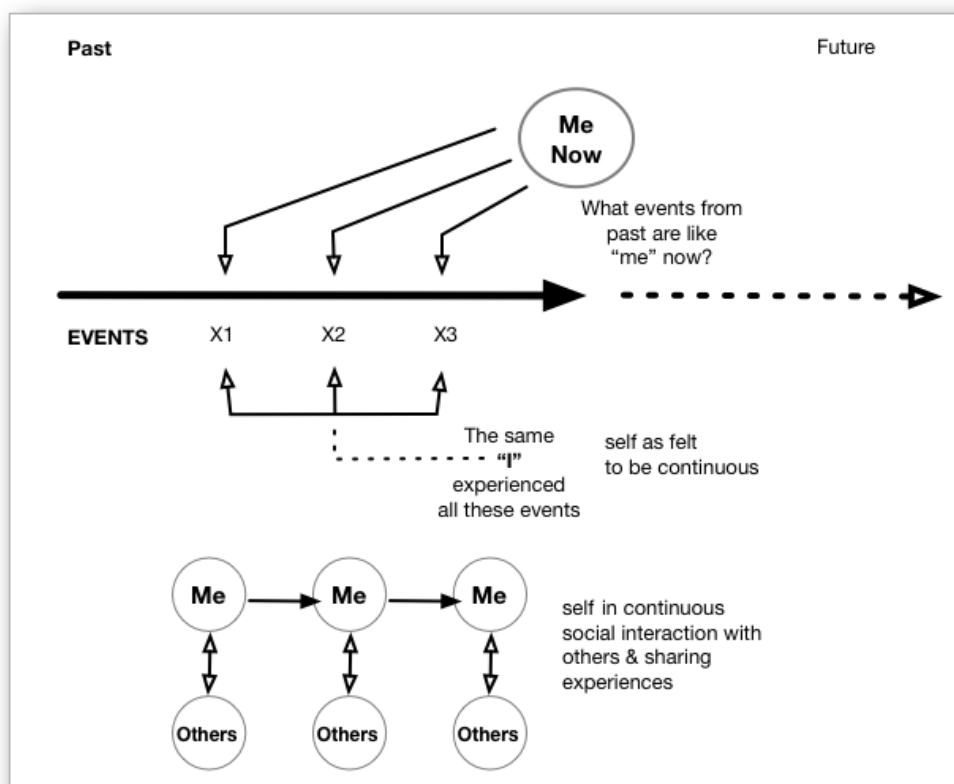
There appear to be three general approaches to answering the question “what is the relationship between autobiographical memory and the self?” with subtle differences among them (Guerini et al. 2019)

1. Endel Tulving: “Remembering past events serves to establish the sense of continuity of our self over time by virtue of a specific phenomenal quality (i.e., the immediate feeling that “I” experienced the remembered event” (p. 2, Guerini et al. 2019)
2. Martin Conway (1952-2022) is opposite of Tulving: “it is the conceptual self (the present Me) that selects and also distorts personal memories so as to increase the sense of personal continuity. As a consequence, self-continuity is not ‘provided by the identity of the remembering I, but by the perceived similarity of the present and past Me’ [Habermas & Köber, 2015, p. 153]” (p. 2, Guerini et al., 2019)

**Martin Conway
(1952-2022)**
3. Katherine Nelson (1930-2018): Autobiographical memory is a subclass of episodic memories which involve a reference to the self, which is viewed however from a social interactionist standpoint. The sense of self in time originates then from social-communicative interactions, and especially from sharing memory narratives which progressively lead children to rationalize memories of their experience in autobiographical terms. Nelson stresses more than other authors the role of relationships in constituting a sense of self, placing herself in the wake of an important and heterogeneous tradition going back...to Vygotsky and, in the infant research and clinical domain, to the object relation and attachment theories” (p. 2; Guerini et al., 2019)

**Katherine Nelson
(1930-2018)**

(see diagram on next page)



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