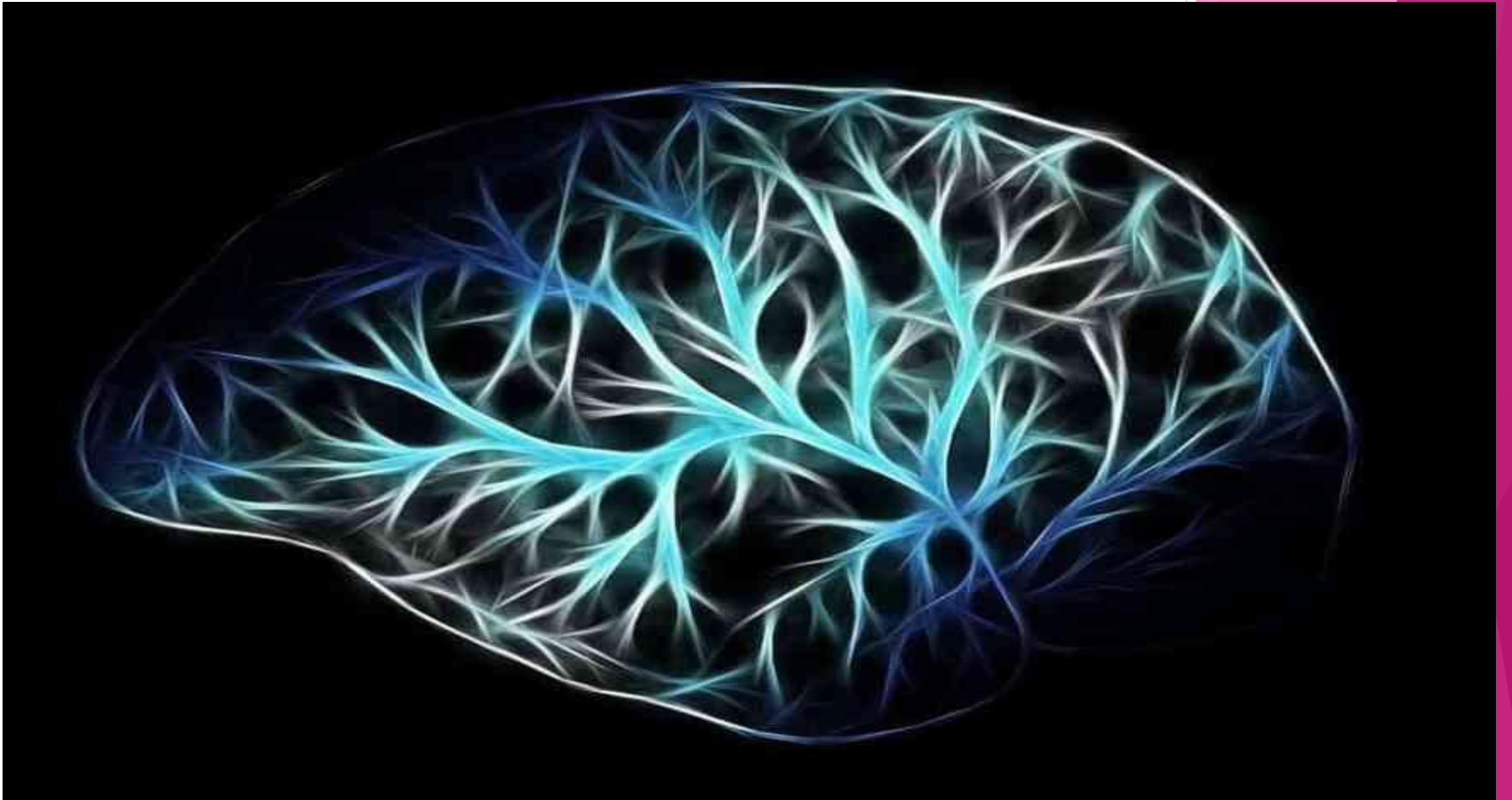


Series of Human Memory and The Brain

Presented by
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- ▶ Definition of Memory
- ▶ Long term VS Short term Memories
- ▶ Classification of Long-Term Memories
- ▶ Parts of Brain involved in Memory processes
- ▶ Memory Storage in Brain
- ▶ Role of Memory Retention in Daily tasks
- ▶ Memories shape our Perception and Reality
- ▶ Memories are triggered by Senses
- ▶ False Memory and Memory implantation
- ▶ Reasons behind Forgetting things_Motivated Forgetting
- ▶ The Memory Palace
- ▶ The Horrors of Dementia
- ▶ Summary



Human Memory

- ▶ Types
- ▶ ways stored in the brain
- ▶ factors trigger memory storage
- ▶ reasons person forgets certain events.
- ▶ many more.

Definition of Memory

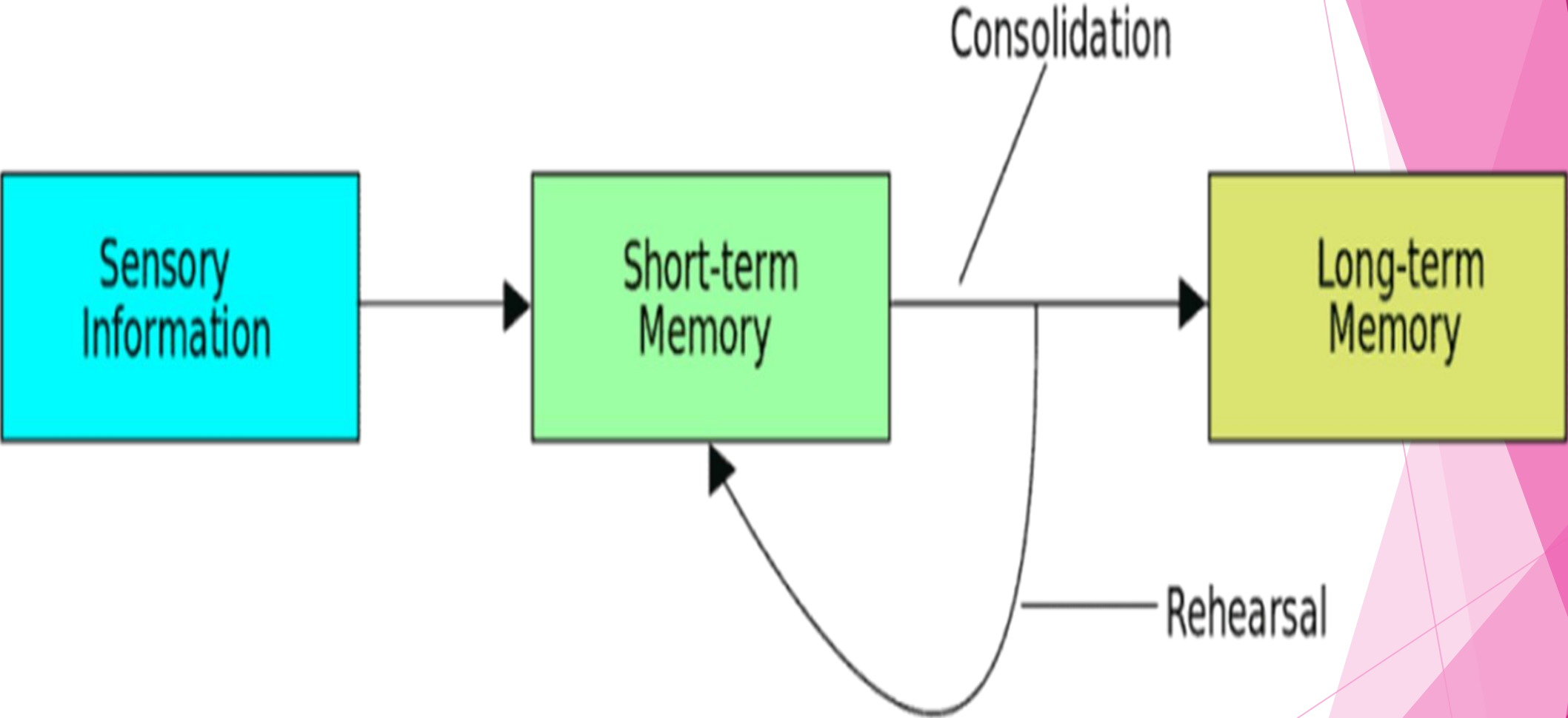
- ▶ In scientific terms, memory is defined as the encoding, storage, and retrieval of an experience. In a simpler meaning, it is a recollection of the past. Remembering a number just long enough to dial it and the complete mental image of your wedding day or the trip to Greece decade ago are all



- ▶ Something as simple as remembering the day's task involves complex brain work at the back end. The complete archive of it stored in the brain defines who we are—our behaviours, perceptions, and beliefs. Ordinary tasks of daily routine and complex ones like learning a new language are all memory-based. In broader terms, memory is something that has got the human race on the top of the evolutionary chain.

Long term VS Short term Memories

- ▶ If we try to look into the depth of what memories are there can be two types. Based on the time limit, memories can be broadly classified into long and short-termed memories.



- ▶ **A short-term memory** has the time span ranging from seconds to a few minutes. They are stored temporarily and then either get to the long-term memory storage, or they are discarded. Let us say someone gives us the mobile number. As the number is new so our memory will retain it for the short term. There are the possible chances that we are going to forget about this number after few moments.

Long Term Memory

- ▶ These are the memories stored in the brain over a more extended period. They are several short-term memories organized to form a long memory that is stored permanently. Depending upon the importance and number of recalls, it can fade or be remembered forever. For example, you can recall your 18th birthday but not what you ate on Monday three weeks ago.

Classification of Long-Term Memories

- ▶ There are several kinds of memories. Depending upon the portion of the brain involved and type of information, they can vary a great deal. Here is a more in-depth look into the classification of long-term memories.
- ▶ Long term memories can be explicit or implicit. Explicit memory can be further divided into episodic or semantic, and implicit memories can be procedural.

Explicit Memory

- ▶ These are the memories that require the conscious effort of recalling. As a friend, baby shower three years ago or the knowledge like the earth is a planet.

- **Episodic:** These comprise the events of one's life. For example, the graduation day, a particular Christmas morning, etc. These memories are edited by brain overtime when we recall them in specific contexts. They are not very reliable. Brain's ability to retain episodic memory depends on the number of sensory stimuli involved and emotions.

- **Semantic:** These memories are the general facts and knowledge of things around us. Like cats are mammals, earth has one moon, and a year has twelve months. These memories get updated with new pieces of information. The phenomenon of forgetting is involved in making a place for new facts without cause cognitive dissonance.

Implicit memory

- ▶ These memories do not involve active or conscious recalling. They are mostly procedural. For example, shift car gear, riding a bike.

To be continue

Thank You