

Memory Systems:

Sensory, Short-Term and Long-Term Memories

Sensory Memory:

The incoming information first enters the sensory memory. Sensory memory has a large capacity. However, it is of very short duration, i.e. less than a second. It is a memory system that registers information from each of the senses with reasonable accuracy. Often this system is referred to as sensory memories or sensory registers because information from all the senses are registered here as exact replica of the stimulus. If we have experienced visual after-images (the trail of light that stays after the bulb is switched off) or when we hear reverberations of

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a sound when the sound has ceased, then we are familiar with iconic (visual) or echoic (auditory) sensory registers.

Short-term Memory:

Information that is attended to enters the second memory store called the short-term memory (abbreviated as STM), which holds small amount of information for a brief period of time (usually for 30 seconds or less). Atkinson and Shiffrin propose that information in STM is primarily encoded acoustically, i.e. in terms of sound and unless rehearsed continuously, it may get lost from the STM in less than 30 seconds. The STM is fragile but not as fragile as sensory registers where information decays automatically in less than 2 seconds.

Long-term Memory :

Materials that survive the capacity and duration limitations of the STM finally enter the long-term memory (abbreviated as LTM) which has a vast capacity. It is a permanent store house of all information that may be as recent as what we ate for breakfast yesterday to as distant as how we celebrated our ~~sk~~ sixth birthday. It has been shown that once any information enters the long-term memory store it is never forgotten because it gets encoded semantically, i.e. in terms of the meaning that any information carries. What we experience as forgetting is in fact retrieval failure; for various reasons we cannot retrieve the stored information.