



FORGETTING THEORIES

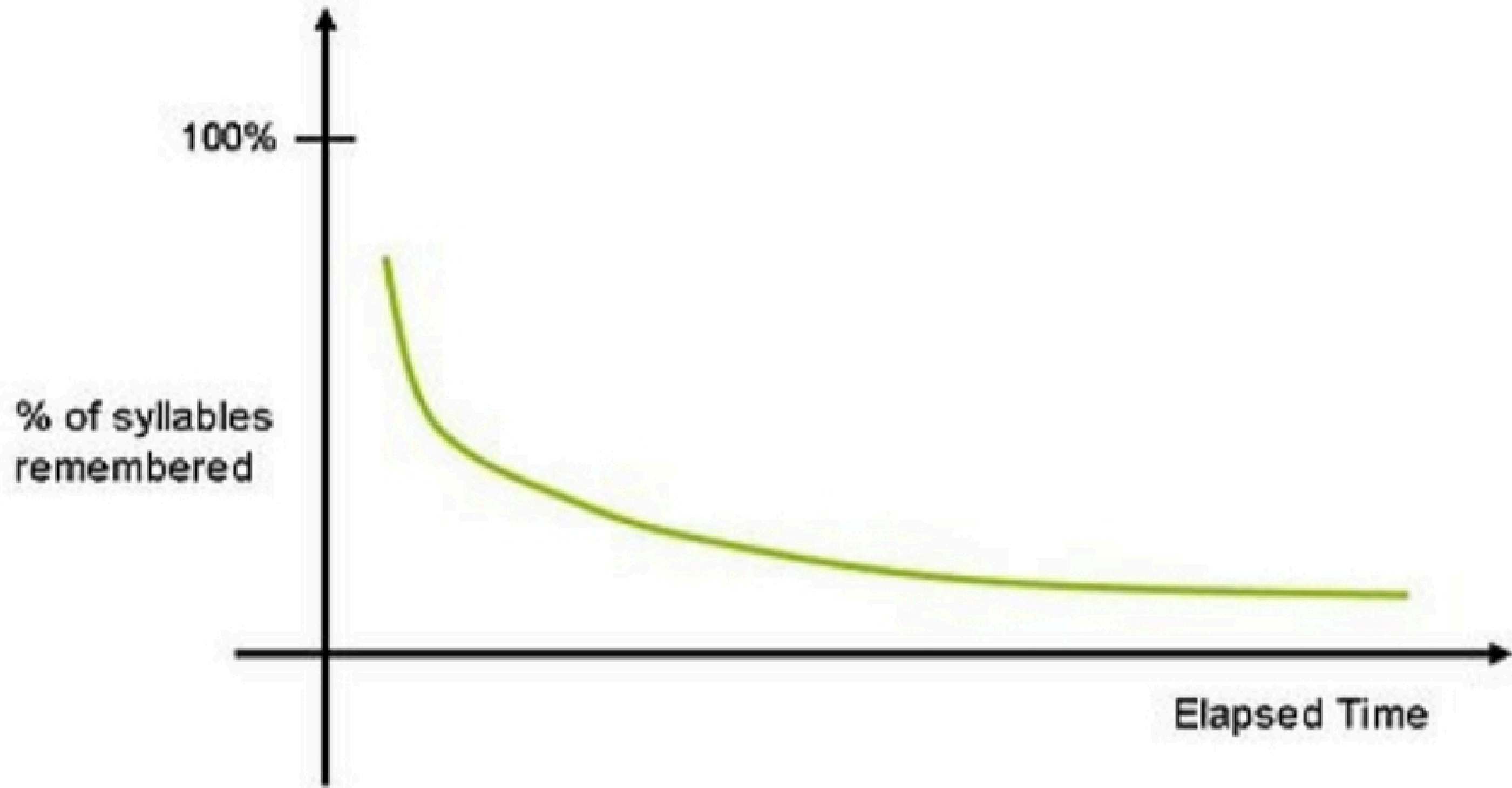
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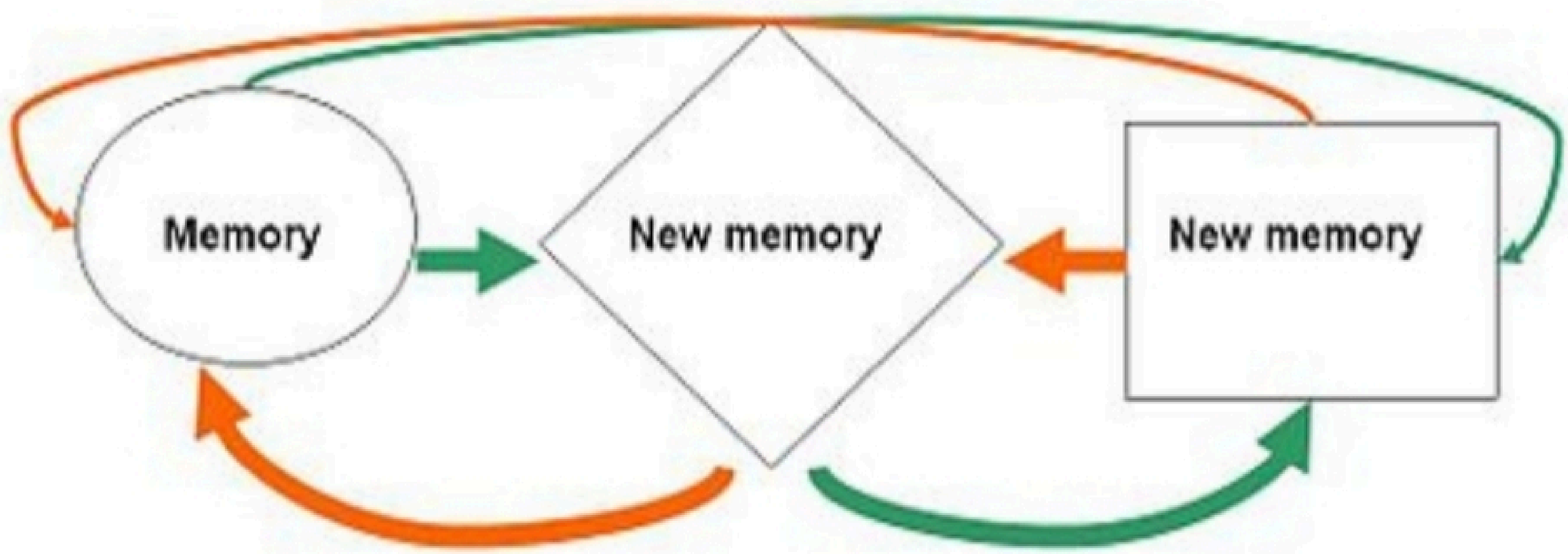
Y **Trace Decay Theory**

- Y The trace decay theory of forgetting states that all memories fade automatically as a function of time. Under this theory, you need to follow a certain pathway, or trace, to recall a memory. If this pathway goes unused for some amount of time, the memory decays, which leads to difficulty recalling, or the inability to recall, the memory.
- Y Rehearsal, or mentally going over a memory, can slow this process. But disuse of a trace will lead to memory decay, which will ultimately cause retrieval failure. This process begins almost immediately if the information is not used: for example, sometimes we forget a person's name even though we have just met them.



Υ **Interference Theory**

- Υ It is easier to remember recent events than those further in the past. ”
Transience ” refers to the general deterioration of a specific memory over time.
Under interference theory, transience occurs because all memories interfere with the ability to recall other memories. Proactive and retroactive interference can impact how well we are able to recall a memory, and sometimes cause us to forget things permanently.



Time



Y Proactive Interference

- Y Proactive interference occurs when old memories hinder the ability to make new memories. In this type of interference, old information inhibits the ability to remember new information, such as when outdated scientific facts interfere with the ability to remember updated facts. This often occurs when memories are learned in similar contexts, or regarding similar things.
- Y It's when we have preconceived notions about situations and events, and apply them to current situations and events. An example would be growing up being taught that Pluto is a planet in our solar system, then being told as an adult that Pluto is no longer considered a planet. Having such a strong memory would negatively impact the recall of the new information, and when asked how many planets there are, someone who grew up thinking of Pluto as a planet might say nine instead of eight.





Y **Retroactive Interference**

- Y Retroactive interference occurs when old memories are changed by new ones, sometimes so much that the original memory is forgotten. This is when newly learned information interferes with and impedes the recall of previously learned information. The ability to recall previously learned information is greatly reduced if that information is not utilized, and there is substantial new information being presented. This often occurs when hearing recent news figures, then trying to remember earlier facts and figures. An example of this would be learning a new way to make a paper airplane, and then being unable to remember the way you used to make them.



Y **Cue-Dependent Forgetting**

- Y When we store a memory, we not only record all sensory data, we also store our mood and emotional state. Our current mood thus will affect the memories that are most effortlessly available to us, such that when we are in a good mood, we recollect good memories, and when we are in a bad mood, we recollect bad ones. This suggests that we are sometimes cued to remember certain things by, for example, our emotional state or our environment.
- Y Cue-dependent forgetting, also known as retrieval failure, is the failure to recall information in the absence of memory cues. There are three types of cues that can stop this type of forgetting:

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- Y Semantic cues are used when a memory is retrieved because of its association with another memory. For example, someone forgets everything about his trip to Ohio until he is reminded that he visited a certain friend there, and that cue causes him to recollect many more events of the trip.
 - Y State-dependent cues are governed by the state of mind at the time of encoding. The emotional or mental state of the person (such as being inebriated, drugged, upset, anxious, or happy) is key to establishing cues. Under cue-dependent forgetting theory, a memory might be forgotten until a person is in the same state.
 - Y Context-dependent cues depend on the environment and situation. Memory retrieval can be facilitated or triggered by replication of the context in which the memory was encoded. Such conditions can include weather, company, location, the smell of a particular odor, hearing a certain song, or even tasting a specific flavor.



Thank you