

A controversial take  
on the effects a  
possible self-inflicted  
amnesia might  
have ...



The movie *The Eternal Sunshine of the Spotless Mind* by Michel Gondry displays an array of terms and concepts having to do with memory and processing within our brains. In the film, the company Lacuna, offers procedures that completely remove a certain or specific event from one's memory. The main character, Joel Barish and his ex-girlfriend Clementine Kruczynski both opt to have this procedure to erase the memories they have with each other after they break up. The procedure performed demonstrates a concept known as amnesia, which is the loss of memory. Where many individuals suffer amnesia from traumatic events, Joel and Clementine both personally choose to go through the process of completely clearing their memories of each other. It may almost even be looked at as self-inflicted amnesia.

The film successfully shows how associations work and keep memories interconnected. Associations still exist for both Joel and Clementine even after the memories they were associated with were deleted through the procedure. In the beginning of the film, Joel goes through a process of brain mapping with the help of certain objects and memories from his relationship with Clementine in order to pinpoint the location and target the memories within the brain. They display his brain on the monitor and can therefore observe where the memories are located in relation to the object he is shown from his past relationship. The technicians who pioneered the procedure in the film most likely altered or messed with their patients' hippocampus, as the hippocampus is a neural center that is located in the limbic system and helps process explicit memories for storage.

The film does not run in a linear matter, rather through paths constructed earlier as the erasing procedure takes place in Joel's mind. It is most likely that the memories in which Joel wanted to erase were long-term memories, as these are relatively permanent and limitlessly stored in the brain. Long-term memory also includes knowledge, skills, and of course experiences in which Joel and Clementine both were trying to erase.

In one scene in the film, Joel is getting the mail and see's his friend named Frank. The scene continues as they have a conversation for a minute or so. In the next scene, Joel relives the same moment as if it were happening all over again. He can even mouth the exact words, which were going to come out of Frank's mouth. This scene exhibits a concept known as déjà vu. Déjà vu is the eerie sense where you feel like you have experienced something already before. Cue from the current situation may subconsciously trigger retrieval of an earlier experience.

Strong emotions such as stress can strengthen memory function. In the film, Joel realizes that he does not want to continue with the memory erasing process and wants to wake up and be with Clementine. While he is trying to wake himself up, he goes through a process of trying to retrieve his memories, including processes of recall, recognition, and relearning. When Joel and Clementine are lying down face up on the frozen lake, Joel goes through a period of recall because he remembers doing the exact same thing with Clementine before they both went through the procedures.

There is a specific seen in the movie in which Clementine suggests that in order for Joel not to completely lose his memory of Clementine, that he store

a memory of her somewhere where she doesn't belong, somewhere deep in the brain where the prober wont find her. Joel stores a memory of her and suddenly the two are back to Joel's infant and teenage years and memories. The flash to an explicit memory, a memory of facts and experiences one can consciously know and declare. When they flash back to the scene of Joel in bed by himself or Joel walking around the kitchen with Clementine as the babysitter, these can all be considered explicit memories.