Why Your Memory Is Not Nearly As Good As You Think It Is

False memories have gotten a lot of attention lately with the documentary series "Making a Murderer." The series chronicled Steven Avery, a man falsely imprisoned for 18 years on the word of eyewitness testimony. The eyewitness testified that she was positive that Avery was the man who had raped her. Later, DNA evidence proved that Avery was not her assailant.

How does this happen? The eyewitness had nothing against Avery personally. So why would she accuse him with such certainty of a crime he did not commit? Because she absolutely believed that she was telling the truth.

We tend to think that our memories are ironclad, like a film that's in cold storage, completely accurate and intact, just waiting for us to hit play and see that moment in time replayed.

Unfortunately, the more we learn about memory, the more we have begun to understand that this isn't how it works. One example of this is what we call "False Memory."

Rather than being an anomaly, a little digging shows that it is not an uncommon tale at all. The truth is, eyewitness testimonies are *frequently* wrong.

Psychologist Elizabeth Loftus has been pointing out this flaw in our memory—and by extension our legal system—for years.

Through a series of experiments, Loftus found that simple semantics changed the testimony of a witness.

If an individual was asked how fast a car was going when it "smashed" into another vehicle versus how fast a car was going when it "hit" another vehicle, the witness would raise the mph

of the car because the word "smash" implies more force. Same accident, different wording equaled different memory of the events.

Loftus decided to take the susceptibility of our memory to alteration one step further. She decided to see if a completely false memory could be planted.

Through a series of experiments, she found that, absolutely, we can come to believe that things happened that never happened. She calls this the misinformation effect.

For instance, if an individual is told that when he was very young he became separated from his parents in a mall and that he wandered terrified and lost, the individual is likely to begin "remembering" details of the event—even though it never actually happened.

As a Psych professor, I decided to try a similar (informal) experiment with my students, who were asked to rate the accuracy of a given memory on a scale of one to ten. The experiment went like this:

The memory had to be one in which another individual was involved. [Students] were then to interview that individual and record their version of the memory in as much detail as the individual remembered it. They were then told to compare the two sets of memories.

The next part of the assignment was even more interesting. They were told to try to sew misinformation. The goal was to plant false memories and to see if they were believed. To aid the success of the experiment, they were told that they had to come up with plausible additions, things that easily could have happened.

The result? Students realized their memories were not nearly as reliable as they thought.

Does this mean we should not trust our own memories? No. We should merely be aware that they are highly susceptible to suggestion.

Because memories can be easily altered, they should not be treated as an irrefutable chronicle of events. Rather, they should be treated more like a Wikipedia, a source that has valuable information but one that needs to be used prudently, since others are able to edit, change, and add information to it.

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