

The Memory Illusion

If you think all of your memories are real and accurate, think again

By [Julia Shaw](#)

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In my book [The Memory Illusion](#) I cover a wide spectrum of ways in which our memories can betray us, and why you may not be who you think you are. In celebration of the book's publication, I'm pleased to share with you a taste of some of the concepts that it explores in depth. You can also watch a [short animated video about the book here](#).

Can you trust your memory?

Picture this. You are in a room full of strangers and you are going around introducing yourself. You say your name to about a dozen people, and they say their names to you. How many of these names are you going to remember? More importantly, how many of these names are you going to *misremember*? Perhaps you call a person you just met John instead of Jack. This kind of thing happens all the time.

Now magnify the situation. You are talking to a close friend, and you disclose something important to them, perhaps even something traumatic. You might, for example, say you witnessed the Paris attacks in 2015. But, how can you know for sure that your memory is accurate?

Like most people, you probably feel that misremembering someone's name is totally different from misremembering an important and emotional life event. That you could *never* forget #JeSuisParis, and will *always* have stable and reliable memories of such atrocities.

I'm sure that is what those who witnessed 9/11, the 7/7 bombings in London or the assassination of JFK also thought. However, when experimenters conduct research on the accuracy of these so-called "flashbulb memories," they find that many people make grave errors in their recollections of important historical and personal events. And these errors are more than just omissions.

Confidently wrong

Much like our ability to switch the name John with Jack without realizing, we can quite easily change details of more important events in our memories without noticing. We can come to remember seeing and doing things that never happened, and the sneaky part is that in our minds these errors look and feel just like our other memories. These kinds of memory errors are called "false memories," and they are the subject of considerable study around the world.

According to the science of false memories, as I discuss at length in my book, *all* of your memories, even those you most cherish, are prone to corruption and distortion. Even now, if you were to try to recall exactly what happened during the Paris attacks, you would probably get some important details wrong. If I asked you in 20 years time, your errors would almost certainly be even worse. Yet, despite this erosion in memory accuracy, research shows that you are likely to remain stubbornly confident in your memories. As our memories fade we often become confidently wrong.

Making matters worse, some people can hijack this process. When I say that people can hijack our memories, I mean that they can convince us that we experienced things that either did not happen to *us*, or did not happen *at all*.

Bad Therapy

False memories can be generated by family members, police interview tactics or in therapeutic settings. Some popular psychological treatments, particularly "psychoanalysis" and "regression therapy," are particularly problematic.

In the 1980s and 1990s the world erupted into what was referred to as the *Satanic Panic* because therapists were sending their patients home with memories of horrendous things, like childhood sexual abuse. The therapists, not fully understanding how flexible our memories are, thought they had uncovered real traumatic events that could explain the mental problems from which their patients were suffering.

However, as it turned out, many therapists had unintentionally implanted false memories into their patients. The therapists had used a problematic mix of assumptions about their clients' pasts (that there must be trauma to explain the psychosis) and imagination exercises, whereby they asked the patients to picture what it could have been like to be abused. Repeated over many weeks, and with the therapist reinforcing any details the patients generated, these memories had the chance to grow into monsters.

The same kinds of techniques that can allow therapists to implant false memories are also relevant for friends, family and the police. Mistaking imagination for memory can happen quickly and unknowingly.

We should be very cautious when other people try to convince us of their version of reality. If we aren't careful, their version of reality might become ours.

Memory Hacking

While most false memories are generated unintentionally, some are intentional. I like to call those who intentionally mess with our memories "memory hackers."

I am one of these memory hackers. I recently conducted a study that elucidates this, published in the academic journal *Psychological Science*. Through a series of three interviews, my participants came to believe they experienced a highly emotional event that never happened.

Simply by using a magic memory mix of misinformation, imagination and repetition, 70 percent of my sample came to create a memory that they committed a crime, and 77 percent created false memories of other kinds of highly emotional events.

I found that not only did most participants give me many details about the events, but often the details were even "multi-sensory." Participants reported they could remember seeing, hearing, smelling, feeling and even tasting things in the memory. My sample was comprised of young adults who had no noticeable intellectual disabilities or mental illnesses. Even their personality measures were normal.

To me, and to other researchers who have done similar work, this suggests that richly detailed false memories of important life events can probably be created in just about anyone, given the right circumstances.

On being human

Whether your own memory is messing with itself, like when you mix up names or details of historical events, or others are interfering with your memory, it seems that your memories are nothing but an illusion.

But if you think this declaration sounds bleak, then you misunderstand me. I think that the flexible and creative heap of brain cells that form the foundation of your memories is the most beautiful thing about us. The plasticity of it means that we can think abstractly, by making associations between things that didn't happen in real life, and it allows us to solve puzzles by thinking about many different possible solutions.

Without the flexibility that comes with our memories we would also be unable to learn and would always be stuck with old memories. Instead, we are able to rewrite information when better information comes along. We can update our memory banks regularly. We can learn from our mistakes.

I encourage you to embrace your clumsy, flimsy, faulty memory. If you want to learn more about how false memory, including how social media influences your memory, why secret agents need memory training, and what you can do to avoid memory errors, then read my new book [*The Memory Illusion*](#).

The Memory Illusion will be released in June 2016 in English by Penguin Random House and by Doubleday Canada, and translated and released in German, Dutch, Portuguese, Italian, Taiwanese, Japanese, Chinese, Russian, Serbian, and Czech. It will also appear as an ebook and as an audio book. [Find out more here.](#)