

What's New in False Memory Research

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At the recent annual meeting of the Association for Psychological Science in San Francisco (May 24-27, 2018), famed memory researcher Elizabeth Loftus Ph.D. reviewed thirty years of research into false memories, with some interesting new data. A false memory occurs when a person recalls with confidence something they supposedly witnessed or experienced in the past but which did not actually occur. One research approach Dr. Loftus uses is to stage a scripted dramatic event in public and then interview bystanders about what they witnessed. During questioning the interviewers lead the witnesses by including false information in their questions. For example, after witnessing a purse snatching incident, the witness may be asked, "Was the assailant's jacket a light color or dark color?" when in fact the assailant was not wearing a jacket. Even if the witness cannot name the color of the invented jacket, during later questioning they "recall" the jacket. The influence of planted information is even stronger if the interrogator is an authority figure, such as a police officer, or if other witnesses corroborate the false information.

Another false information paradigm involves asking people to talk about events from their early lives that they "may have forgotten." Probing for particular incidents leads many people to construct memories of them. Dr. Loftus found that one-third of her subjects recalled a near drowning experience, half recalled being attacked by a dog, and from 30 to 70% recalled committing a petty theft as a child, when there was no corroborating evidence for these activities. The percentages vary depending on personality and cognitive variables. Dr. Loftus noted that highly suggestible persons and those with low cognitive abilities are more susceptible to accepting false information as true. On the other hand, persons who score high on memory tests are no less susceptible to accepting false information.

Dr. Loftus noted that false memories can also affect our future behavior. For example, in one experiment people were planted with the idea that they disliked certain foods as children. Afterward they avoided those foods at a lunch buffet. Conversely people who falsely recalled liking certain foods as children selected those foods from the buffet.

So if other people can talk us into remembering false events, do we ever talk ourselves into believing them? Dr. Loftus provides evidence that repeated recollections of past events are likely to change their content. One experiment involved having individuals recollect memories that they had previously remembered. These secondary recollections sometimes embellished and sometimes contradicted information remembered earlier. Thus memory is not a photograph that we can pull out and look at from time to time. Memory is actually our mind's construction of a past event that we reconstruct each time we remember it. Such reconstructions may add, change, or delete details.

The bottom line from this research is that human memory is much more fragile and malleable than most of us realize. Neither our confidence about the memory, the abundance of detail in the memory, nor the emotional intensity of the memory is a good predictor of accurate memory.

Dr. Loftus's work has important implications for professionals as well as the general public. Criminal justice professionals are beginning to recognize that eye witness testimony is not a Gold Standard for evidence. Seventy percent of false convictions are based on faulty eye-witness testimony. Media interviews with famous persons or members of the general public should also be considered carefully. How reporters preface questions can introduce false information that may influence memories. Psychotherapists must also be mindful that the events described by their clients are actually recollections of events which may have been transformed by their ruminations about the events. Furthermore, leading questions by therapists may cause clients to falsely recall past experiences.

Dr. Loftus did not address strategies for improving memory accuracy at her APS presentation, but her work suggests that reviewing an event while it is still fresh in mind and before anyone starts asking you questions about it would improve accuracy. Writing down the event in detail or recording it orally is more likely to preserve the experience accurately. Persons who journal their activities on a regular basis can reference them to improve the accuracy of their later recollections. Current technology also offers the means to record daily activities, thoughts and feelings on our smartphones. Referencing such data when recollecting activities should improve accuracy.

Perhaps the best take-home lesson from the false memory research is that we should not feel too sure of ourselves when remembering events from the past. To some extent these memories are stories we tell ourselves. While the conclusions we draw from them may guide us through our daily lives, there may be another reality out there.

Loftus, E.F. May 24, 2018. The fiction of memory. Distinguished Plenary Address. Association of Psychological Science Annual Meeting. San Francisco