



# TO ENHANCE JUSTICE:

## The Risk and Reward of Studying Memory

By Elizabeth F. Loftus

**ELIZABETH F. LOFTUS** is one of the nation's leading experts on memory, eyewitness testimony, and courtroom procedure. She has been an expert witness or consultant in hundreds of cases, including the McMartin preschool case, the trials of Oliver North and of the officers accused of beating Rodney King, the Bosnian War trials in the Hague, the Oklahoma Bombing case, and litigation involving Michael Jackson, Martha Stewart, Scooter Libby, and the Duke University Lacrosse players.

Loftus studied math and psychology at UCLA and got her PhD in psychology from Stanford. The author of twenty-three books and over five hundred scientific articles, she is currently a distinguished professor at the University of California, Irvine, where she holds positions in the departments of psychology and social behavior; criminology, law, and society; cognitive science; and the School of Law.

The following is adapted from the speech Loftus gave in accepting the Isaac Asimov Science Award on Saturday, May 28, 2016, at the American Humanist Association's 75th Annual Conference in Chicago, Illinois.

I am immensely proud to be receiving the Isaac Asimov Award from the American Humanist Association. An organization that embraces the worldview that says that science and reason are the best ways to understand the world is my kind of organization. And an organization that names one of its major awards after a world-renowned author who has so thoroughly embraced the value of science is my kind of organization.

Asimov once famously said: The most exciting phrase to hear in science, the one that heralds new discoveries, is not "Eureka!" (I've found it!), but "That's funny..."

In my own scientific research, which happens to be about human memory, I've periodically gotten to experience the "that's funny" or "that's odd" feeling, and sometimes even "that's amazing!"

My research collaborators (graduate students, postdocs, colleagues, and others) and I have shown that you can take people who've seen crimes or accidents or other important events, and you can change their memories of what they saw. We've convinced people that they saw a car go through a stop sign rather than a yield sign, or that the thief wore a brown jacket instead of a green one. In later studies we planted entire events in the minds of people, like making them believe and remember that they were lost in a shopping mall, or that they witnessed a person being demonically possessed.

Taken together, these studies reveal a significant truth about memory, namely, that it is malleable. In the past I've likened it to a Wikipedia page: you can go in there and change it, but so can other people. If I've learned anything about memory after decades of study, it's this: just because someone tells you something with a lot of detail, with confidence,

with emotion, it doesn't mean that it really happened. You need independent corroboration to know whether you're dealing with a real memory, or something that is a product of imagination, inference, or some other process.

I believe that this science has advanced humanist values and has improved the human condition in that it's been used to enhance justice. Research on faulty memories has educated the legal field about the importance of handling eyewitness testimony carefully so that it doesn't lead to the conviction of innocent people. It has educated the mental health field about how to avoid suggestive therapy that can lead people to develop false memories of past abuses, which can lead to false accusations and cause great misery for innocent people and for their extended families. This research has educated the public about the importance of treating memories delicately so they don't capture the innocent and leave the guilty roaming the streets committing more havoc and crime. I'm pleased to say that a growing collection of scientists now work on these issues, and it is actually an enormous tribute to the growing strength and power of the collective work that it has become so relevant to what we charmingly call "the real world."

Yet our success has a price. The more relevant our research is, the more enemies we make. You can find yourself in big trouble—first, from people whose political sensibilities you offend, on the Right or the Left. Second, from people whose livelihoods you threaten, because your research contradicts their claims and methods. Third, from people who have enormous ideological or intellectual vested interests in their theories, which your work disputes.



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Asimov was right on when he said: "The saddest aspect of life right now is that science gathers knowledge faster than society gathers wisdom."

In my own case, I spent years having to contend with a bevy of enemies who got angry about my research on memory, and, in particular, my efforts to communicate the problems of recovered-memory therapy. The harm to innocent people that I have seen first-hand is beyond measure.

Take the case of Shirley and Ray Souza from Massachusetts. They were an elderly couple whose daughter underwent repressed memory therapy and came to believe she'd been sexually abused as a child. Then the Souza's four- and five-year-old grandchildren became convinced that they too had been abused in rather incredulous ways. One claimed that her grandparents put "their whole hands" and even their heads inside her vagina, that they put her in a giant cage in the basement, forced her to drink a foul green potion, and more. The Souza's were convicted and sentenced to nine to fifteen years in prison. They spent nearly nine years under house arrest.

Right before their release, Shirley emailed me: "Ray and I are okay, and are patiently waiting the date of our freedom. On May 10, the officers will come to our home and remove all of this awful equipment. The most unwelcome piece being the ankle bracelet that we have been saddled with night and day for nearly nine years."

She went on to say: "Our two daughters remain entrenched in the recovered memory belief and I am saddened that they are there.... Perhaps one day it will dawn on them that they have been duped by the therapists in whom they placed their trust. It is truly very sad for them and the children involved."

At first I tried to understand and empathize with the repressed memory enthusiasts. I had long meetings and a few meals with a number of them, and I wrote what some people considered were very balanced articles. Of course, the enemies didn't see it that way. In the olden days, when your enemies disagreed with you, they did the proper scholarly thing: they called you a moron. They wrote eloquent insults, as writer Mary McCarthy did of fellow writer

Lillian Hellman: “Every word she ever wrote was a lie, including ‘and’ and ‘the.’”

But today the stakes seem higher. In my case, people have written countless threatening letters. They’ve tried generating letter writing campaigns to the chair of my department, the president of my university, and even the governor of my state, trying to get me fired from my academic position. They’ve threatened violence at universities, conference sites, and other places where I’ve been scheduled to speak, prompting the organizations to provide armed and unarmed guards to accompany me during those speeches. People spread defamatory insults in their own writings, in newspaper columns, and, of course, on the Internet.

But the most prolonged and upsetting ordeal involved a lawsuit filed against me in 2003 by a woman who had recovered memories of her mother molesting her when she was a child. Nicole Taus sued me (and others) regarding an investigation that we had conducted into the authenticity of her published accusations, at one point asking for \$1.3 million in damages. Taus was referred to in the original case study and in our examination (published in the *Skeptical Inquirer* in 2002) as “Jane Doe.” Her real name was never revealed until she filed a lawsuit in that name. Over the course of nearly five years, a trio of California courts threw out twenty of the twenty-one allegations against us, basically saying that we scholars had the right to gather information on an important topic, and the public had the right to know the results of the investigation. The one remaining claim, namely that I had allegedly misrepresented who I was in order to obtain an interview, was all that was left to go to trial.

With her overall case in such jeopardy, Taus offered to withdraw the lawsuit in return for a payment of \$7,500. I would have preferred to have a jury weigh the evidence so there would be complete vindication, but the insurance company decided that the cost of a trial would far outweigh the amount of the “nuisance settlement.”

The case was not yet over. The trial court, under an order by the state Supreme Court, then determined the exact amount that Taus would have to pay for attorney’s fees and court costs incurred by other defendants before the claims against them were dismissed. The co-defendants included, among others, my coauthor Mel Guyer, the *Skeptical Inquirer*, and psychologist Carol Tavris, whom we thanked in a footnote for her help with the essay. The trial judge awarded them nearly a quarter of a million dollars, and Taus then filed for bankruptcy.

In 2008 Tavris wrote a piece about the Jane Doe lawsuit for the *Skeptical Inquirer*. She ended by asking:

Who abused Jane Doe—and whom did she abuse? She wanted her story told her way, as everyone does; and when others disputed her version of events, she took out her anger the American way: by suing. Fortunately, this time, the result was an undeniable victory for free speech and scientific inquiry.

I have much more to do in this arena, especially to expose a new truth that I had to discover the hard way, namely that scientists and others are increasingly unprotected by their institutions. This is partly because the “institutional” firewalls between research and politics are themselves under siege.

If you want to read more about this and soak yourself in horror stories, I suggest *Galileo’s Middle Finger* by Alice Dreger. A historian of science, Dreger writes about what happens when science and dogma collide. When science makes a claim that doesn’t fit into an activist community’s accepted worldview, or when scientists reach conclusions that don’t line up with politically correct orthodoxies, the scientists themselves often face dire, career-threatening consequences simply for doing their jobs. And their institutions don’t always have their backs.

By the way, Dreger interviewed me for her book. She wanted to know how I had survived the long Jane Doe ordeal. If you can’t turn to God, I asked, what do you do, and I told her what my strategies were. Dreger wasn’t surprised by some of them: keep working hard, get comfort from close friends and colleagues, and seek the advice of good lawyers. But what did surprise her was the habit I developed of watching Lifetime Television. In those Lifetime TV movies there’s a common story theme, usually a woman facing tremendous adversity. She is conned by some devious man, but she sticks it out, he is slayed, and she survives. Dreger said she had to laugh at the image of a “famous psychologist” obsessively watching a genre of television that used such repetitive and base psychology. But she concluded her section on my case by saying, “What had happened to Loftus wasn’t funny.”

So, members of American Humanist Association, I am much happier talking with you than curling up on a couch in front of a Lifetime Television movie. And I am honored to receive the Isaac Asimov Science award, which is so special to me coming from this group. Thank you so much.





**Q:** I'm just wondering, with all of the work that you've done in the legal realm, do you think that part of what's going on when a horrible crime is committed is an irrational desire to catch somebody, even if they're not really the person who committed the crime?

**A:** I think that's true. People want the crimes to be solved, they want calm in the community. Your question also makes me think about a tension between the legal field and the scientific field, because we in science realize that we can move along slowly, we can revise our ideas when they need to be revised, and we can take in new evidence and incorporate it into our theories and modify those theories. We have time on our side. But the legal field has to resolve the conflicts quickly, and so they don't necessarily have the time for science. And that may be a problem with this intersection between science and law.

**Q:** This is just a brief comment. I have no problem telling many people that I'm an atheist and a humanist but I've never admitted to anybody that I watch Lifetime Television. I sit with my wife and we watch it together. So, thank you for giving me the courage to make that announcement.

**A:** Thank you—let's have some more confessions!

**Q:** I'm not going to make a confession but I have a question about research showing that perhaps a significant percentage of people who have suffered sexual abuse do indeed forget, particularly if they've been abused by a close family member, and sometimes they spontaneously recover that memory later in life. Do you worry that your research, as well as identifying false positives, might incorrectly identify some true positives as false positives?

**A:** My question for you is, what's your evidence that people forget and recover? People do stop thinking about things for a long time and get reminded of them. Most memory scientists would say it's a result of a retrieval cue. All you need to do is go to a high school reunion and you can experience that for yourself.

But whether there is massive repression—years of brutalization banished into the unconscious and you need to somehow go into psychotherapy to recover all these memories in order to cure your problems—there's no credible scientific support for that. This is the repression folklore.

**Q:** I'm involved with an organization in my community working on criminal justice reform and dealing with issues brought out by Michelle Alexander's book *The New Jim Crow*, and I was wondering if any of your research

is applicable to police interrogation techniques—the famous “good cop-bad cop.” I understand that recent scientific research has indicated that a more effective method is to allow a suspect to talk and talk and talk and develop a rapport with them to draw out information.

**A:** That's fascinating. A month or so ago we published a paper in *Proceeding of the National Academy of Sciences* on false confessions and sleep deprivation. One of the tactics, particularly in the Guantanamo interrogation world, is to deprive people of sleep, as well as other things to get information out of them. But people are four times as likely to confess to something they didn't do when they've been sleep deprived.

Regarding the specific method you asked about, I think it has a growing bit of scientific foundation—not work of mine, but work I've read about or talked to the investigators about, which is instead of being hostile to the people you're interrogating you just get them to talk. The method is sometimes called “SUE” for “strategic use of evidence,” because you get information and then you can find contradictions in the stories. It's a much more profitable way to get information from people who might be trying to conceal it.

**Q:** I'm familiar with your work and I think that you've provided a really great service because there was a time when mere allegations were taken without being subjected to further analysis. But some criticism suggests that the pendulum sort of swung back in the other direction when your work was given greater currency, and that accusations of abuse were met with greater skepticism and thus legitimate cases were dismissed without being subjected to proper scrutiny. Could you speak to that please?

**A:** I certainly wouldn't be surprised if people who were guilty would deny their guilt and would cry false memory. I'm sure that's going to happen. But I wouldn't say the pendulum has swung back. I think we've had a correction to at least a little bit more skepticism, but I still think we live in a world where you walk up to the ATM machine and you say the word “abuse” and out spews all kinds of money and prosecution of innocent people. There are plenty of people worrying about the genuine victims, of which there are many, and providing the sympathy and maybe compensation and treatment and attention they deserve, but I don't think there are enough people worrying about the falsely accused.

Thank you all. 