Twenty years ago, I wrote a book with a simple title: Memory (Loftus, 1980). There I invited readers to imagine a future world in which people could go to a special kind of psychologist or psychiatrist—a memory doctor—and have their memories modified (p. xiv). The setting for this “thought experiment” was a world that preceded the election of Ronald Reagan to the presidency. It was a world in which the chairman of Digital Equipment Corporation had recently made a prediction about computers when he addressed the World Future Society: “There is no reason for any individual to have a computer in their home” (Celente, 1997, p. 20). Because futurist thinking is known to have some beginner’s errors, my readers shouldn’t have expected much better from me. But here’s what I “predicted” and how I was eventually partly right and partly wrong.

Back in 1980, I invited readers to imagine a place where one could go once a week or once a month to have some particularly difficult memory altered. Why would anyone do this? I asked. Purely speculating, I suggested that depressed people might find it of therapeutic value. If a patient were plagued by feelings of deep sadness or worthlessness, the memory doctor could simply modify the memories leading to the feelings. If patients were having marital problems, the memory doctor might be called on to enhance pleasant memories of past events involving the spouse. On a larger scale, such doctors might even be useful for curing societal ills such as social prejudice. To the extent that prejudice is based on a few incidents involving a unique group of people, the memory doctor could wipe out or alter memory of these incidents. “These memory modification specialists would be omnipotent,” I mused. “They would hold the key to total mind control” (Loftus, 1980, p. xiv).

I admitted at the time that all this might have sounded far-fetched because we obviously couldn’t at that time modify memory on com-
mand. But I used this metaphoric notion to lead into the then-contemporary work on memory distortion, which showed that memory could be at least partially modified. There was ample evidence at that time that our memories of past events can change in helpful ways, leading us to be happier than we might otherwise be. But memory also changes in harmful ways and can occasionally land us in serious trouble. The research that prompted my musing about the memory doctors consisted of a sizable body of work showing that new, postevent information often becomes incorporated into our memory, supplementing and altering our recollection. The new information invades the mind, like a Trojan horse, precisely because we do not detect its influence. At the time I speculated about memory doctors, scores of studies on memory distortion had been conducted with a wide variety of materials. With many collaborators, I showed that people could be induced to recall nonexistent broken glass and tape recorders, a clean-shaven man as having a mustache, straight hair as curly, and even something as large and conspicuous as a barn in a bucolic scene that contained no buildings at all.

Taken together, these findings revealed that misleading postevent information can alter a person's recollection in powerful, predictable ways. In the real world, such misinformation was often available when people who experienced the same event talked to one another or gained access to information from the media, interrogators, or other sources. After years of investigating the power of misinformation, I and many other psychological scientists had unearthed a fair amount about the conditions that made people particularly susceptible to its damaging influence. People were particularly prone to having their memories modified when the passage of time first allowed the memory to fade. In its faded, weakened condition, memory—like the disease-ridden body—becomes especially vulnerable to misinformation.

While musing about the hypothetical memory doctor in 1980, I could not have known that a version of the memory specialist was in the making. These "repressed memory therapists" would go out and prospect for early childhood memories of trauma, and in the process they inadvertently created false memories of the most unimaginable kind. The memory doctors I had speculated about in 1980 were supposed to use their talents to help people. The memory doctors of the 1990s went in the wrong direction.

In the 1990s concerns were raised (by me and others) about some of the memories that were being created in psychotherapy, particularly memories that emerged in adulthood after extensive "memory work." Popular techniques for "recovering" memories included age regression, body memory interpretation, suggestive questioning, guided visualization, sexualized dream interpretation, aggressive sodium amytal interviews, misleading bibliotherapy, and more. These techniques were lead-
ing patients to “memories” of childhood molestation that were supposedly totally repressed. In some cases, what surfaced was an endless number of violent traumas spanning years of the patient’s life. In other cases, the de-repressed memories were from the first 6 months of life or even from the prenatal period. On the basis of these newfound “memories,” people were falsely accused of abuse, families were destroyed, and more than a few individuals went to jail (Johnson, 1997; Lindsay & Read, 1994; Loftus, 1993). It was exactly the sort of try-it-and-see-if-it-works approach that medicine had often relied on—but the hazards are well known, at least in medicine. What happened with the repressed memory doctors appeared to be another example of the “cure” being worse than the disease.

Battling the “Establishment”

My role in this controversy began when I was asked to consult on a court case in which a man was accused of a 20-year-old murder (and years of sexual abuse) based on “de-repressed” memories of his daughter (Loftus & Ketcham, 1994). It was the first time that I made a serious investigation into the evidence for the repression folklore—the idea that memories of severe, repeated brutalization are repressed into the unconscious, that they can be reliably excavated, and that this must be done in order to cure the patient. I could find not a shred of credible scientific support for this claim. I said so. As a result I began to hear from hundreds of desperate people. A woman from Maryland wrote,

We were suddenly and inexplicably accused four years ago by our now 28-year-old daughter of having sexually . . . molested her, i.e., her father raped her as of age 2 months, I raped her repeatedly as of a very young age, one of her two older brothers raped her consistently. It is like a nightmare situation, where I feel that my daughter’s mind has been replaced with another's. (Loftus & Ketcham, 1994, p. 6)

“Please help us,” a woman from Canada wrote. “I am not a baby-raper . . . how could my daughter say these things about me?” an accused father asked me, tears running down his cheeks. I became overwhelmed with hundreds of anguished appeals for help.

The public exposure of false-memory cases, and the fascination with bizarre memories expressed by some litigants, helped lead to a new kind of study of the power of suggestion to influence memory. Instead of merely distorting memory for the details of a past event that was in fact experienced (changing a stop sign into yield sign or adding barns to memory), the 1990s researchers asked about the planting of entirely
false memories. We convinced people that they had been lost in a shopping mall at the age of 5 for an extended time and rescued by an elderly person (Loftus & Pickrell, 1995). We convinced people that they had been born left-handed (Kelley, Amadio, & Lindsay, 1996), that they spilled punch over the parents of the bride at a wedding (Hyman, Husband, & Billings, 1995), or that they were victims of a serious animal attack (Porter, Yuille, & Lehman, 1999). It took a fairly strong form of suggestion to plant these memories. But even with simple encouragement to engage in imagination, people could be led to be more confident that they had childhood experiences that they probably did not have, for example, that they broke a window with their hand (Garry, Manning, Loftus, & Sherman, 1996) or that they fell off a bicycle and got stitches in their leg (Heaps & Nash, 1999) or that they witnessed demonic possession at a young age (Mazzoni, Loftus, & Kirsch, 2001). The newer studies showed that suggestions, strong and subtle, could be powerful in terms of making people believe that they had experiences in childhood that they almost certainly did not have. These sorts of findings enhanced our understanding of the many documented case histories in which therapy patients, at the hands of unwitting 1990s-style memory doctors, may have developed full-blown false memories for excruciatingly violent episodes (including rapes, animal torture, baby breeding, baby sacrifice, and more).

Through the combination of research and case histories, we have learned a great deal about the flimsy curtain that separates our memory from our imagination, and we are on our way toward being able to write the exact recipes for creating false memories of almost any size and shape. We know more than ever about the steps that are involved in creating false memories. We know, for example, that the recipe probably involves a multistage process (see Mazzoni & Loftus, 1998). Planting a false memory might first require making a person believe that a suggested event is a plausible one. The next step involves convincing the person to believe that the suggested event happened. From there, one can engage the person in various activities (e.g., visualization) that lead them to subjectively “remember” the suggested experience. Pressure for details often produces extensive and idiosyncratic elaborations. Thus, from this collective effort, we almost have a recipe for false memories in the making.

The Opposition and the Response

As I expressed doubts about the repression theory, spoke up about the dubious forensic cases, and presented and published my new research
findings, I encountered opposition that I was not used to. People wrote to warn me that my reputation and even my safety were in jeopardy if I continued along these lines. People completely misinterpreted my writings and put words in my mouth that I had never spoken. People filed ethical complaints and threatened to sue organizations that invited me to speak. People spread defamatory falsehoods in writings, in newspapers, on the Internet, and in myriad other arenas. The fighting was not the clean, intellectual type that I was used to; it was downright dirty. It became impossible to respond to every assault and hard to know which ones to overlook and which ones to spend time on. After all, every minute, every hour spent responding to some irritated true-believer was an hour taken from the activities I truly valued: research, teaching (which I began to see, in part, as a way of creating new warriors), and helping the falsely accused.

When nasty comments and other verbal assaults come my way, I face the question of whether to respond. That is the same question faced by those who have become victims of a different sort of verbal attack: the peculiar literary genre known as the “revenge memoire.” According to Merkin (2000), these memoirs are often written by unhappy and lonely children who look back on their earlier life in anger and express it by exposing various skeletons, some real and some make-believe, from the family closet. Is it healthy or destructive? Is it motivated by candor or by greed? Should the person at the heart of the recollection respond? Should the person being attacked remain silent as though it were beneath her to join in such a transparently contemptible enterprise?

It was one thing when the attacks came from the recovered-memory patients themselves. After all, they were experiencing real pain, even if perhaps they didn’t have the cause quite right. They were feeling disbelieved and had perhaps had few ways of expressing their hurt. But it was quite another thing when the attacks came from individuals who were supposed to be respectable professionals. For example, two colleagues, who made a considerable contribution to the repressed-memory movement in North America, wrote a piece in the Harvard Mental Health Letter, referring to my recently published essay as “social backlash” (Herman & Harvey, 1993). They claimed that academic researchers “have questioned the veracity of delayed memories of childhood sexual abuse and speculated on the possibility that these memories might be fictions inculcated by naive or manipulative psychotherapists” (p. 4). Furthermore, they stated,

The notion that therapists can implant scenarios of horror in the minds of their patients is easily accepted because it appeals to common prejudices. It resonates with popular fears of manipulation by therapists and popular stereotypes of women as
irrational, suggestible, or vengeful. It appeals to the common wish
to deny or minimize the reality of sexual violence. (p. 4)

Nothing could be further from the truth, as my revelations about my
own abuse in childhood should have made evident (Loftus & Ketcham,

Another colleague thoroughly misrepresented my views:

Loftus uses theoretical constructs and methods that were
developed from research on adults, whose memories and other
cognitive functions do not follow the same developmental
patterns as those of children, to demonstrate that children’s
memories can be altered by new information. . . . She then
concludes that children are so confused by their suggestible or
malleable memories that their accusations cannot be trusted.
(Walker, 1994, p. 83)

By the time her critical remarks had been published, I had already pub-
ilished at least a half dozen studies on children’s memory and had never
reached a conclusion that even resembled her claim. After explicit ref-
ERENCE to my work, this dissenter then asked why people like me would
contradict the clinical or research evidence for memory problems and
invoked such motivations as “personal biases, such as distrust of ther-
apists, desire to support male perpetrators, . . . enjoyment of the rec-
ognition provided by groups that rally around men who are allegedly
falsely accused” (Walker, 1994, p. 85). She then insinuated that “adult
memory researchers” like me are overly gullible in accepting stories of
accusations of abuse that are presented by “poorly trained therapists or,
for whatever reason, by female abuse victims” (p. 85). She insinuated
that we were part of a profession that chose denial over accuracy, just
as Freud “turned away from the truth” (p. 85).

A Bosnian War Crimes Trial

The attacks from a few entrenched professionals continued throughout
the decade, even insinuating themselves in unexpected ways. In the
mid-1990s I consulted on a number of cases arising out of the Bosnian
war crimes trials. The first was a consultation for the prosecution in the
trial of Dusan Tadic, a Bosnian Serb and former café owner accused of
killing two policemen and torturing Muslim civilians. The accusations
involved the rape of a woman and a charge that he forced one prisoner
to emasculate another with his teeth. The relevant psychological issue
concerned the ability of witnesses to identify people who were not sim-
ply strangers, but acquaintances (Loftus, 1997). Tadic became one of the
first individuals to be convicted by the Yugoslav War Crimes Tribunal.
My involvement for the prosecution in the Tadic case was not cited in a recent attack on me by another irate professional. Instead, she focused on a later case. Here are the facts. Back in 1993 a Muslim woman (known as Witness A), who lived in a once-peaceful part of Bosnia, was kidnapped and spent months in a house where numerous soldiers raped her over and over. Not surprisingly, this nightmarish incident left her in shock, depressed, and plagued with physical symptoms such as skin rashes and stomach pains (Simons, 1998). The actual rapists had not been captured, but one man, Anto Furundzija, was captured and charged with aiding and abetting one of the rapes. Furundzija was accused of being present at the time Witness A was first interrogated and doing nothing to stop an attack on her. The issue at trial was not whether Witness A had been horribly victimized—no one doubted that she had. The only issue was whether Furundzija was present briefly at the beginning of her ordeal and whether he was aware of the beginning of one of the first assaults.

I testified at Furundzija’s trial in The Hague in the summer of 1998 on the subject of eyewitness identification. I agreed to do so after a thorough examination of the specific eyewitness statements and out of a belief that psychological science could shed important light on the eyewitness issues in the case. Diana Russell (2000), author of a well-known book on incest, took exception to my decision to even consult on the case, calling me “one of the major hired guns of the false memory movement” (p. 13). In her article, she stated that I “served as an expert witness for the defense of Anto Furundzija, a member of the Croat armed forces, who was accused by a woman referred to as Witness A, of being her principal interrogator and torturer” (p. 13). She reiterated the horrors that Witness A had endured but misrepresented Furundzija’s participation. She went on to claim that I told the court that “those who suffer from post-traumatic stress disorder (PTSD) are more likely to be ‘especially vulnerable to post-event suggestions’—i.e., false memories” (p. 13) and that I “cited no research to support this conjecture” (p. 13). When referring to my service in this case, Russell wrote, “yet she is willing to contribute her expertise to create doubt about the validity of the memories of a known torture/rape victim in an infamous genocidal and femicidal war” (p. 13).

What’s the real story? Witness A’s nightmare began in May of 1993. She endured horrific abuse, and sometime after she was interviewed she reported that a particular individual had been present on the first day. At first (2 years later), she described him as 172 cm, with blond hair and small features. At trial (3 years after that day in May 1993), she described him as 180 cm with chestnut to black hair, a description that resembled the defendant. In between providing the two descriptions, Witness A had seen a photograph of the accused showing clearly
his dark hair. I testified about the phenomenon of postevent information, that postevent information can contaminate one’s recollection, and that the impact of postevent information can be even greater when the memory has faded significantly. I pointed out that viewing a photograph of someone after an event is the kind of postevent information that can be absorbed by a witness and can cause a distortion “in the memory of a witness who is otherwise trying to be as honest as she can be” (Furundzija case, 1998, p. 614).

As for my alleged testimony about people who experience PTSD being especially vulnerable to false memories, here is exactly what I said:

> When someone has experienced a horribly traumatic event, there are sometimes, many times, very serious consequences from that experience. And post-traumatic stress disorder is usually diagnosed when certain symptoms are present, such as depression, anxiety, suicidal ideation or thoughts about suicide, nightmares, and so on. (p. 614)

I was then asked, “Do you have an opinion... as to the relationship between post-traumatic stress disorder and post-event information?” (p. 614). After acknowledging the clear evidence for Witness A having a strong reaction to a very horrible set of circumstances and clear evidence of symptoms of PTSD, I answered,

> Now, there has been no explicit study of comparing a PTSD patient’s susceptibility to post-event information to a person without PTSD. But based on other considerations, based on the fact that we know that when people are not processing information particularly well, are not able to notice discrepancies between what is being suggested to them and what is part of their memory, and to defend against these discrepancies, under those conditions, people are more susceptible to suggestive influences or to post-event information. In my opinion, this would be a situation where someone would be vulnerable to post-event suggestions and, perhaps, especially vulnerable. (p. 615)

There was other “indirect evidence” to support the possibility that people with PTSD might be more susceptible to suggestion than those without it. Although not explicitly mentioned in my court testimony, I am referring to evidence from the dissociation literature that shows a connection between dissociation and the production of false memories (e.g., Winograd, Peluso, & Glover, 1998).

Numerous publications now report research that shows that people who experience PTSD are more vulnerable to false memories. One study, for example, compared traumatized individuals with PTSD with
traumatized individuals without PTSD and with nontraumatized control individuals. Those with PTSD generated more false recalls of nonpresented information than did the other groups (Zoellner, Foa, Brigidi, & Przeworski, 2000). Another study showed that abused women with PTSD had a higher frequency of false-recognition memory than did abused women without PTSD, nonabused women without PTSD, or nonabused men without PTSD (Bremner, Shobe, & Kihlstrom, 2000). Thus, if testifying today on the same issue, I would modify the caveat that I was careful to include ("there has been no explicit study . . . but based on other considerations . . .").

I would have enjoyed Russell’s (2000) essay if she had not misrepresented me. Much of the rest of her piece is an astounding recognition that the battle fought by many of us over the past decade has not been in vain. This heroine of the child abuse community, who once revealed that 16% of randomly interviewed women in her study reported being sexually abused by a relative before age 18 and brought attention to the very real problem of incest, was now acknowledging that both sides of the “Great Incest War” have some validity. She couldn’t have been clearer when she wrote, “retrieved memories cannot be assumed to be authentic” (p. 5). But her otherwise thoughtful essay was diluted by misunderstanding comments from an expert witness about a case that was not about incest.

**Costs, Benefits, Advice**

The costs of being a soldier in the repressed-memory war have been great: nasty letters, calls, and e-mails, defamatory utterances that sometimes cannot be ignored, complaints to address, and even one instance of being swatted with a newspaper by a woman on an airplane when she learned my identity. Sometimes I wish my skin were thicker. I stumbled into this controversy rather than deliberately choosing it, and I am often asked whether I would do anything differently if I’d known about this side of it. My first response is, probably not. So if the costs have been great, I say to myself, there must be some rather large benefits. What are those benefits? New research paradigms were developed, new findings in the area of memory were discovered, all of which greatly enhanced our understanding of memory and its enormous malleability. Not only were many behavioral studies conducted that were inspired by the controversy over false memories, but also interest was increased in the neural events that underlie remembering things that never happened (e.g., Gonsalves & Paller, 2000). I got the big benefit of joy that comes when one can join in the contribution to scientific advancement.
Many innocent people were freed from prison, and fewer new questionable cases were being brought to trial. Women who had been badly damaged by their false beliefs brought successful lawsuits for compensation, such as occurred in the case of Joan Hess of Wisconsin, who received a jury award of $850,000 from her former psychiatrist who helped her create memories of molestation by her father and gave her multiple personalities in the process (AP Wire, 1999). Prestigious organizations stepped forward as well; the American Psychiatric Association (2000), for example, published a revised Fact Sheet titled “Therapies Focused on Memories of Childhood Physical and Sexual Abuse” in which they warned about the problem of false memories. To educate members to the fact that “memories can also be altered as a result of suggestions particularly by a trusted person or authority figure” was a huge step in the right direction.

The world began to see the repressed-memory folklore for what it was worth. The media began using the term myth, as occurred in an obituary for Peggy McMartin Buckey (Talbot, 2001). Buckey was a middle-aged woman who worked in a day care center run by her family. She was indicted, along with her son Ray and others, and served 2 years in prison before she was freed. The New York Times obituary suggested that she was one of the many victims of the satanic abuse scare that gripped the United States, describing it as “the myth that Devil-worshippers had set up shop in our day-care centers, where their clever adepts were raping and sodomizing children, practicing ritual sacrifice, shedding their clothes, drinking blood and eating feces, all unnoticed by parents, neighbors and the authorities” (p. 51). The change in public attitude also became evident in “cartoons” and commentary such as one New York Times Magazine item subtitled “Things that are puzzling.” Number 5 was on point: “Can those ‘recovered memory’ psychiatrists get you to remember high school French, or is it just sexual abuse?” (Viladas, 1999, p. 55). Even Ann Landers now understood. She published a letter from a Canadian man named “Floyd,” who wrote, “Norma’s odd behavior and hostile accusations sound a lot like those false recovered memories that were so popular a few years ago. This now-discredited type of therapy was based on the flaky theory that all adult problems are the result of some childhood trauma, the memories of which have been repressed. . . .” Landers (2000) pulled no punches when she responded, “I go along with every word you have written. Thanks for another opportunity to unmask those charlatans who destroy families” (p. C9).

Aside from a benefit to society, I also derived some personal benefits, primarily stemming from an enhanced sense of purpose in life, corny as that might sound. A few years ago, when the attacks had mounted, I created a “When Blue” file on my computer where I could store elec-
tronic communications. Then, and now, I access the file periodically when the skin needs thickening. One of my recent favorites is from the sister of a falsely accused man who is now in prison in Texas. She wrote to me in November 2000:

I just wanted to take the time to tell you how much I appreciate all you are doing to help . . . I am grateful and appreciative for your wisdom and education and research in your field of expertise. But most of all your kindness in sharing with us and others who need you so desperately as we do. My Mother and I often discussed your kindness and wondered how you had the time to help. I just wanted you to know how much our Mother appreciated all you are doing for her son. She died claiming his innocents (sic) and his name was her last word. I hope no other Mother has to suffer as she did. May God bless you and keep you safe.

When the enemies are acting particularly nasty, a “When Blue” file is handy, indeed.

I never planned to immerse myself in this or any controversy. Especially when it came to the repressed-memory controversy, I made no deliberate decision to embark on such a controversial path. When I found myself in it, I tried to take steps to be something of a peacemaker. I wrote what I felt were highly balanced pieces (e.g., my first large essay on the topic in the American Psychologist; Loftus, 1993). But peaceful it was not to be. The attacks began right away and continued for years. Surely this hasn’t been easy, and it certainly is not the path for everyone.

On his deathbed, Cecil Rhodes, who a century ago built railroads, created empires, and became a leading ruler of his day, was said to have muttered, “So little done, so much to do” (cited in Tierney, 2000, p. 18). Whatever he meant, the little quotation raises the question of what it is a person wants to be sure to do before he or she dies. The story of Rhodes begins a lovely essay in Forbes magazine entitled “Ten Things to Do Before You Die.” One of them caught my eye: “Make an enemy for life.” Part of the entry reads, “Stand up to a bully, speak out against fraud. . . . Care enough about something to make someone mad. An enemy helps you define yourself.” Then there is a quote from Schopenhauer: “We can come to look upon the deaths of our enemies with as much regret as we feel for those of our friends, namely when we miss their existence as witnesses to our success” (cited in Tierney, 2000, p. 84).

Okay, so maybe I’m not there yet. I’ll miss my friends far, far more than my enemies. But I have come to appreciate that it might be a real gift to care about something so much that you are willing to make someone very mad.
References


Furundzija case: Hearing before the International Tribunal for the Former Yugoslavia (Case No. IT-95-17/1; 1998) (testimony of Elizabeth Loftus).


When William McGuire, the “father of the social cognition revolution,” is asked why he tends to study neglected topics, he often argues that more researchers should study topics because of, not in spite of, their being neglected. He studies underrepresented topics not to play the rebel but to avoid the overcongregation of researchers at current fads. Among underrepresented topics rescued from neglect by McGuire are immunization-against-persuasion research and a theory of the content, structure, and functioning of thought systems, describing work of his that eventually helped end the long domination of experimental psychology by stimulus–response behaviorism.