

## Ignore 'Pop' Psychology But Use Social Science Data

By Patrick Mattimore

**T**o many lawyers and laypersons the term psychological science probably implies a variant of science, much like Christian Science, or even a refutation of science, as in pseudoscience. It is neither. Scientific psychology is systematized knowledge about human behavior gathered from experimentation, observation and study.

Unfortunately, a great deal of what passes for psychology is bunk. Because the scientific field has been watered down with "pop" psychology, courts are understandably reticent to allow psychological experts to testify. Even more damaging has been the tendency to allow all the psychological theories and bath water into a trial to be strained for truths by jurors.

The essential tasks of law and psychology differ, or at least they should.

Lawyers seek to persuade; psychologists pursue scientific truth. The objects of lawyers' advances are jurors; research psychologists must convince their colleagues. Too often, psychologists prostitute themselves to the legal system and forget their essential roles. Too frequently, judges abdicate their roles by allowing unqualified "psychological" opinions. The answer is for judges to do a better job of pre-qualifying psychological experts by first educating themselves about psychological science.

I recently interviewed two of those experts, Diane Halpern, the president of the American Psychological Association, and Elizabeth Loftus, the president of the Western Psychological Association.

Halpern and Loftus offered some suggestions as to how courts could make better use of psychological science and thereby better inform themselves and jurors.

Halpern is an expert in the field of critical thinking. Her research has dealt with ways in which people typically make poor judgments.

She identified several ways in which to bring critical thinking to the task of arriving at an appropriately thoughtful position about nearly any issue.

By identifying several "thought traps" that ensnare our abilities to approach problems critically, we can develop tools for weeding through complex problems, such as witness testimony at trial.

A first thought trap is our tendency to overweight views that are consistent with our previously held positions. So, for example, if we were to hear a prosecution witness in a criminal trial whom we found to be believable and accurate, we would overvalue subsequent testimony by another witness that was consistent with that testimony. Unconsciously or not, that is one reason why prosecutors often lead with their strongest witness. By recognizing that trap, we are better positioned to analyze the respective witness arguments independently.

A corollary to our first tendency is that people look for information that is consistent with previously held beliefs. This is called confirmation bias. If someone believes that a witness is lying, even about an immaterial fact, that person will ignore information about a number of consistent statements by that witness and will instead focus on inconsistencies, perhaps even manufacturing some. The antidote to this trap is for the judge to supplement the standard California Jury Instructions advisory about witness credibility with a brief reference to the confirmation bias phenomenon.

While quite persuasive, reasoning by analogy often causes us to simplify and misinterpret complex situations. Professional witnesses, for instance, are very good at painting pictures for jurors. Often those pictures are not directly applicable to the facts at hand and misrepresent

the overall picture. Judges will likely recognize an analogous example with the expert witness hypothetical, which must be carefully scrutinized to make sure it contains provable parts.

Critical thinkers must beware of how the manipulation of language can affect one's opinions. Criminal lawyers typically either personalize the defendant (my client, Mr. So-and-so) or depersonalize the victim (no name).

Judges should take care to maintain neutral language throughout a trial.

Finally, we must be

traffic accident would estimate the speed of the cars involved 10 m.p.h. faster when she substituted the word "smashed" for the word "hit" in her question: "How fast were the cars going when they hit one another?"

More recently she and her research students have demonstrated that it is possible to implant false memories in some people by proposing certain implausible, and in some cases even impossible, scenarios that might have befallen those people many years before. In one such case, approximately 15 percent of her subjects who had been to Disneyland as children reported remembering being licked uncomfortably in the ear by a "Bad Pluto" after Loftus showed those people a phony news story about that wayward Disney character.

Nearly one in six people remembered meeting and shaking hands with Bugs Bunny at Disneyland after being primed with a false story. Since Bugs is a Warner Bros. character, he would never have appeared at Disneyland.

Like Halpern, Loftus is concerned that the public separate popular psychological myths from psychological science. One challenge according to Loftus, is that we prefer heartfelt emotional beliefs to cold-hearted scientific rebuttal. Despite scientific evidence to the contrary, jurors often believe mistaken eyewitnesses who make confident identifications and "abuse victims" who have mysteriously recovered repressed memories of abuse.

In addition to consulting on many popular cases such as the first Michael Jackson case and the Rodney King trial, Loftus has worked with law enforcement agencies such as the FBI and the Secret Service to provide them with guidelines for improving witness memories. She cautions that witnesses should write down recollections as nearly contemporaneously as possible with the events about which they are reporting and that investigators should avoid the use of leading or suggestive questions.

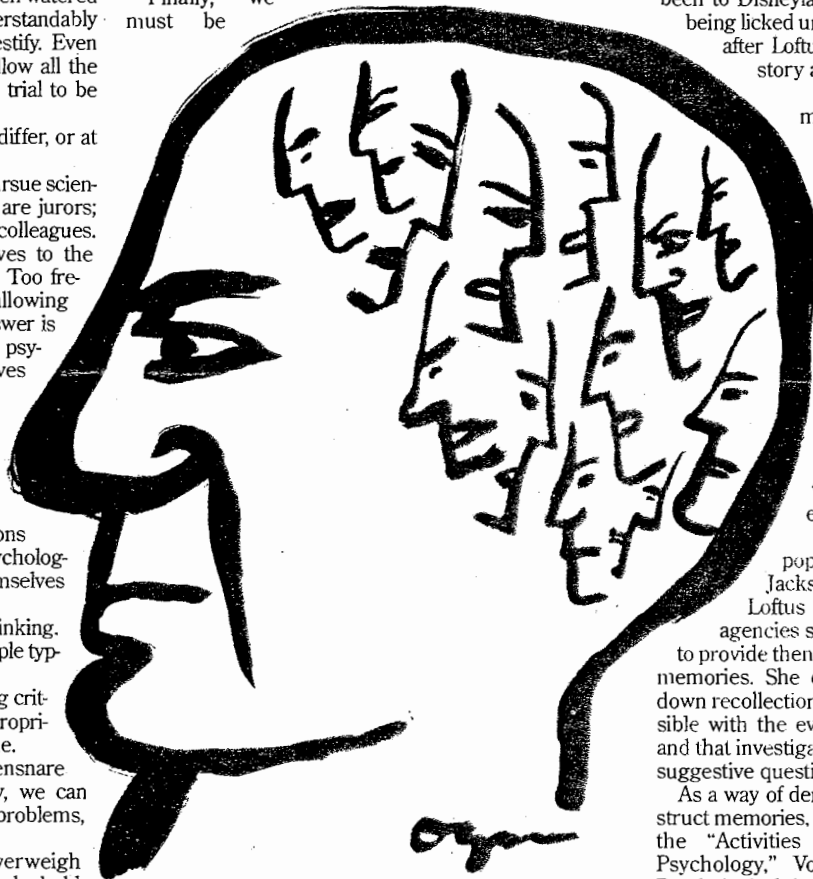
As a way of demonstrating how we mistakenly reconstruct memories, try the following activity, which is from the "Activities Handbook for the Teaching of Psychology," Vol. 2, published by the American Psychological Association. Read aloud the following 12 words slowly:

rest, tired, awake, dream, snore, bed, eat, slumber, sound, comfort, wake, night

Do not look back at the words. Now leave the room where you are reading this, get a piece of paper and write down as many of the words as you can recall.

Take a look at your paper. Have you "recalled" any words not on the list? When I used to do this activity with my psychology students, approximately 50 percent recalled the word "sleep," though it was not on the list. As the research of Loftus and others has shown, we often fill in gaps in our memories with what we think must have occurred. Such memory reconstructions pose obvious hazards in witness testimonials.

Through the understanding of psychological science and the work of researchers like Halpern and Loftus, courts can become better adept at utilizing good social science data and ignoring "pop" psychology.



alert not to confuse correlational information with causation. Because two or more events are related or associated with one another, does not mean that either is causing the other one to happen.

Were a witness to testify that X had missed 25 percent more time at work since Y joined the firm, we cannot assume without more information that Y has done anything to cause X to miss work.

Loftus' research has focused on the fallibility of human memory, and she has become the leading expert in criminal and civil cases in which either eyewitness testimony or repressed memories are issues. She was recently elected to the National Academy of Sciences and was named one of the top 100 psychologists of the 20th century and the top-ranked woman by the Review of General Psychology. In more than 30 years of research experiments, she has documented the ways in which individuals' memories are subject to manipulation and decay.

Her research suggests that because human memory is malleable that there is no way to differentiate between true and false memories.

Loftus' research is often clever and profound. In the 1970s, she demonstrated that witnesses to a simulated

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