False Eyewitness: "Who are you going to believe? Me or your lying eyes?"

By Douglas Starr

Late last year, psychologist Gary Wells was watching an oral argument before the United States Supreme Court. He wasn't enjoying it. Wells, who has the countenance of a boxer and the mind of a Talmudic scholar, had come with a group of scientists affiliated with the American Psychological Association, along with lawyers from the Innocence Project, for the appeal of a convicted New Hampshire burglar. The case involved a middle-of-the-night car break-in. Police had apprehended Barion Perry in a parking lot carrying a couple of car radio speakers. One officer stayed with him while another went upstairs to question a woman who had reported a "tall black man" peering into cars. Although she had identified Perry only from her distant vantage on a third-floor balcony, her testimony was used successfully to convict him.

To Wells and his fellow scientists and lawyers, the case illustrated the weakness of many eyewitness convictions. The woman saw the suspect only briefly and in the custody of police; naturally she would assume he was a criminal. The psychologists agreed with Perry's attorney that the witness's memory was so unreliable that the judge should have held a pretrial hearing to determine whether it should be admissible at all. Now they wanted to go much further: They hoped that the Supreme Court justices would use the case to reexamine the whole legal question of eyewitness memory—a question the court hadn't considered since 1977.

Wells, who is a distinguished professor of psychology at Iowa State University, is also an internationally ranked pool player and has developed the habit of looking at lots of situations from every possible angle. Before the hearing he did some research on patterns of Supreme Court discussions. He had learned that the sooner the justices interrupted an attorney, the more likely they were to rule against him. When Perry's lawyer had spoken

for barely 30 seconds before the justices began peppering him with questions, Wells knew it wasn't going well.

Then the justices' questions kept flying: What makes eyewitness testimony any less reliable than other forms of evidence? If a witness makes a mistake, can't the lawyers reveal it during cross-examination? The courts already have rules for excluding witnesses who were coached or coerced by the police. Why is eyewitness testimony so unreliable that even without police misconduct it requires special jury instructions or a pretrial hearing? In January the Supreme Court ruled against Perry, 8 to 1.

It was a difficult case for Wells, and it won't be the last. As one of the leading scientists in the esoteric field of eyewitness psychology, he has spent decades trying to overturn conventional wisdom and centuries of legal precedent.

Wells has a big job. eyewitness testimony has been a mainstay of justice since biblical times. Even today it holds almost magical power over judges and juries. As Supreme Court Justice William J. Brennan wrote in 1981, "There is almost nothing more convincing than a live human being who takes the stand, points a finger at the defendant, and says, 'That's the one!' "

But according to hundreds of studies over the past 30 years, there is almost nothing less reliable than what an eyewitness thinks he saw. Memory is not videotape. We may believe that we remember things precisely, but most of our memories are a combination of what we think we observed and information we have been exposed to since then. The situation becomes worse at crime scenes, where variables such as stress and the presence of a weapon interfere with accuracy. If you regard memory as trace evidence—which most of the field's psychologists do—it is the most delicate and easily contaminated kind. Yet police take less care in collecting and preserving memory than they do with, say, blood smears or partial fingerprints. And most courts pay scant attention to how memory-evidence was collected and retrieved.

Of the 297 cases that have been overturned by DNA evidence in the United States, more than 70 percent were based on eyewitness testimony. Those witnesses were not liars or jailhouse snitches but ordinary people utterly convinced that their memories were accurate. And this may be the tip of the iceberg. Tens of thousands of people are indicted every year because a witness has picked them out of a lineup. The implication: Across the legal system, a frightening number of people are being mistakenly arrested.

Wells's finding built on earlier studies that demonstrated how startlingly unreliable memory can be. In the early years of the 20th century, the renowned Harvard psychologist Hugo Münsterberg randomly staged crimes in his lecture hall and then asked students to remember the details. The responses were so varied and inaccurate that he realized that direct witnesses can have drastically different versions of the same event. That insight was reaffirmed by several psychologists who came of age during the 1960s and 1970s, most notably Robert Buckhout, a professor of psychology at Brooklyn College in New York. At one point, Buckhout persuaded a local television station to broadcast a simulated mugging and then ask viewers to pick the suspect from a lineup. Of the 2,145 viewers who called in, only 14.1 percent picked the correct man. Buckhout highlighted the experiment in an article he playfully titled "Nearly 2,000 Witnesses Can Be Wrong."

More recently Elizabeth Loftus at the University of California, Irvine, demonstrated that memory is not only fallible, it is changeable. She showed that changes in the way people are questioned—even when the change amounts to a single word—can alter what they think they've seen. In a now-classic series of experiments, Loftus showed volunteers a video of a car crash and asked them to estimate the impact speed. The answers depended on whether she said one car "hit" or "smashed" the other. As her experiments grew in complexity, she found she could induce people to "remember" entire episodes from childhood (such as being lost in a shopping mall and rescued by a kindly old man in a flannel shirt) simply by dropping subtle verbal cues. Eventually she became embroiled in the notorious recovered memory controversy of the 1990s, in which adults thought they had discovered repressed memories of sexual abuse during childhood. Loftus testified that therapists sometimes created those memories by unwittingly dropping cues.

Studying those findings, Wells felt frustrated. Although eyewitnesses could be challenged at trial, no one was able to stop the errors up front. So he proposed a new way of structuring eyewitness research according to two practical categories of memory-based evidence. The first category included things beyond a detective's control, including conditions at the crime scene, such as darkness, distance, or stress. Wells called these "estimator variables," because their effects could be estimated only after the fact. A second category, labeled "system variables," involved things a detective could control—for instance asking leading questions or deciding what kind of photos, lineups, or information witnesses saw.

Questions:

What does this article tell us about how our memories work?

According to this article, why is eye-witness testimony unreliable as court evidence?