

On Reconsideration

FACTS, MEMORY, TESTIMONY: PERSON, WOMAN, MAN, CAMERA, TV

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Events are input. Testimony is output. In between is memory.

When we hear testimony, we're not hearing a precise depiction of the event. At best, we're hearing only the memory of it. But what can happen to memory between the event and the testimony is troublesome. Memory has a central role in resolving legal disputes, yet it can be so invisibly unreliable.

It would be wonderful if memories could store facts in pristine condition, so that when a witness responds to "Tell us what happened," a fact finder would hear exactly what happened. Testimony confidently delivered, especially when rich with details, impresses fact finders that the witness's words accurately reflect the event. Listeners' brains work that way. Memory, though, does not.

Although some courts in criminal cases have had some epiphanies about how to deal with faulty memories, on the civil side courts still seem in the dark ages. Judges still instruct juries to give whatever

weight they may feel a witness's memory-based testimony deserves, using a kind of gut-reaction standard.

In other spheres, we're urged to set aside our gut reactions and follow the science. When we don't do that, people get exposed to toxins, millions of acres burn, or hundreds of thousands die from COVID.

Ignoring science leads to bad outcomes. That's one reason judges serve as gatekeepers over expert testimony: to keep juries from considering quack opinions. Why then do we give civil juries almost unfettered freedom over how much to credit testimony based on how they feel about it, without telling them what science has to say?

Well, what does science have to say? Science teaches that memory is a three-step process. One, encoding—we make a mental imprint of our observations: what was seen, what was said, what was heard, what happened next. Two, storage—those imprints sit in our mental file cabinets, backrooms, or warehouses. Three,

recall—we bring the information out of storage and disclose it or act on it.

None of those steps is secure. In each, things can alter the state of the remembered facts.

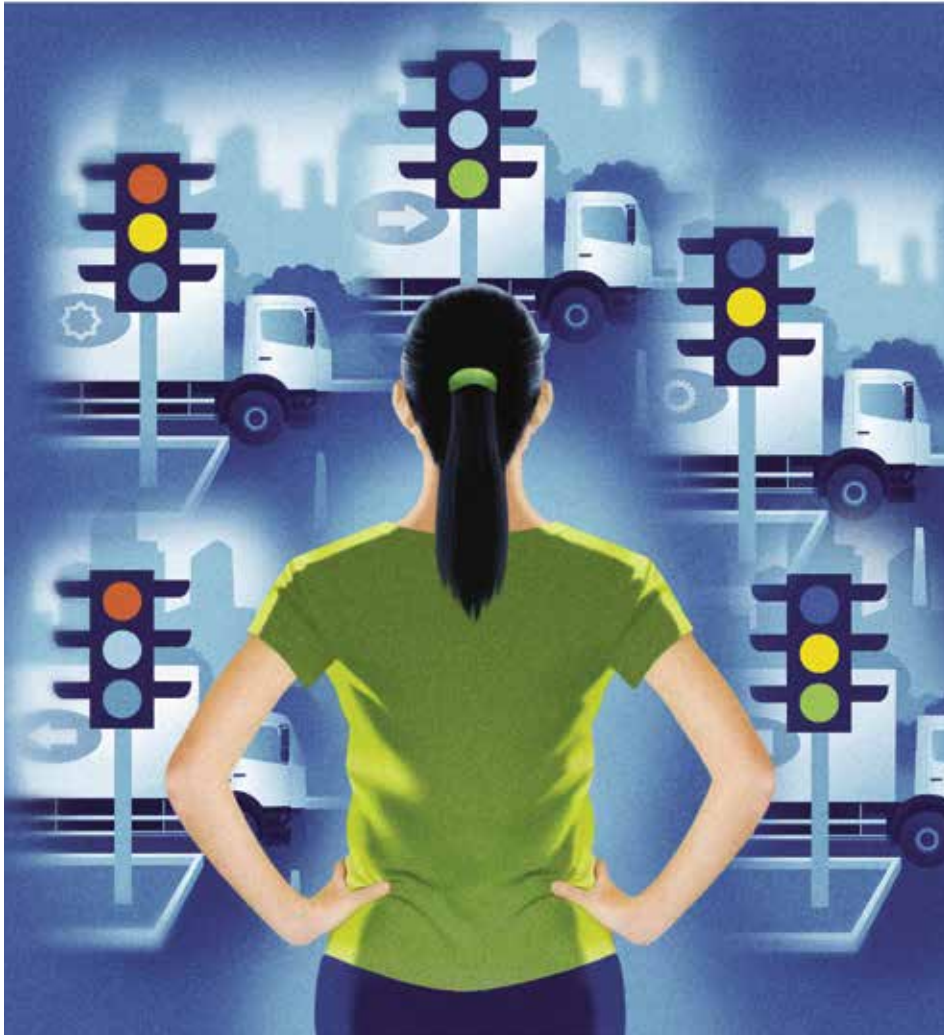
Encoding

Let's look at encoding. Brains don't encode the entire observed experience. They encode only the parts that seem significant or distinctive at the time or the ones easiest to remember or those that we're conditioned to observe. Encoding isn't like videotaping. We don't capture everything. Thoughts, stress, and other internal and external distractions compete for our attention and disrupt how much of an experience we encode.

Some people are better encoders than others. Take facial recognition, for instance. About 2 percent of the population has a condition called prosopagnosia. They have trouble recognizing faces—of someone they've just met, of friends they've long known, sometimes of their family, at times even their own. At the other end of the spectrum, about 2 percent exhibit powerful facial recognition skills. They are super-recognizers, never forgetting a face, even years later.

But variability in encoding isn't limited to facial recognition. How well we encode data varies, generally by how our brains are wired. If we could plot the population on a bell curve by how well people encode what they see, hear, or do, some would be at the high end, some at the low end, and most would be somewhere in between. But in a courtroom, most witnesses except the very worst give the illusion that they are just as capable as any other witness of encoding whatever relevant information needed to be encoded. They come across as being in the top quintile of encoders. That, of course, is impossible. Eighty percent of all witnesses can't be in the top 20 percent at encoding.

Nor can fact finders know where along the distribution curve any witness sits,



where the median is, or how uneven the distribution curve might be. If they even know that testimonial accuracy is affected by precision in encoding, they probably aren't thinking about that, much less appreciating just how much that biological process can vary from witness to witness.

Typically, encoding is underinclusive, but it can also be overinclusive. While we are encoding information, we are also re-encoding it, putting it into context. We associate it with other data that help us to make more sense of it, and then our reformed understandings become part of the encoded information.

Essentially, to fit our assumptions or expectations, we can encode details that didn't happen. If we pass a group of friends, for example, we may mistakenly encode that another friend was also there who

ordinarily hangs out with that same group.

Even accurate encoding, as far as it goes, doesn't necessarily mean good memory. President Trump bragged about his memory. He took what he said was a memory test; apparently, it was a dementia test. He was given a five-word list—person, woman, man, camera, TV. In his telling, after being asked some intervening questions, he repeated the list accurately. He said he had “aced” the test. “I have like a good memory. Because I'm cognitively there.”

Well, not exactly. That was just an example of one type of encoding: semantic encoding. *Object* words, like those Trump says he was given, are easier to encode because the brain associates them with images. If Trump had been given five *concept* words—like justice, thought, candor, norm, stress—he may have found it much harder

to recall correctly. Anyway, word tests like these look only at short-term memory.

Testimony, on the other hand, taps into long-term memory. It feeds off observational or transactional encoding. High-quality encoding for long-term memory requires taking in more information and paying more attention. Otherwise, it's apt to be fragmented, capturing only the gist of the experience or some of its highlights, but lacking the full context and many significant details that weren't appreciated at the time.

Storage

After encoding, the data sit in our mental storage—step two—where many things can happen to the stored data. Time alone can cause memory to decay. That explains one memory phenomenon: forgetting.

But time isn't the only culprit. Other factors can intervene to alter the remembered experience, to change the remembered facts, or to add details that never happened.

Here are some examples:

When retelling a story, a person might innocently include some incorrect embellishments, which then get woven into the memory. Or the memory of another proximate event can lead to conflating facts from one with the memory of the other. Or a subconscious bias, such as a desire to appear more caring, more important, or more involved, can influence how we remember our own role in the story. The wish becomes father to the memory.

Or someone else's account, accurate or not, may cause us to conform our own memory to what the other person says. Or someone can gaslight us into doubting the accuracy of our memory, leading us to revise what we remember. Or often-encouraged patterns of behavior can become part of a remembered experience, even if the specific behavior had not occurred.

Testimony and Recall

When it's time to testify, we come to step three—recall. We take our remembered

Illustration by Stuart Briers

information out of storage and describe or use it. Studies show that, even at that stage, memory can be malleable. In one famous study by the distinguished memory psychologists Elizabeth Loftus and John Palmer, subjects saw a film of an auto accident. Afterwards, some were asked: “About how fast were the cars going when they *hit* each other?” Others were asked the same question using more active verbs—“when they *collided*” or “when they *smashed* each other.” Those who were asked the *hit* question reported lower speeds than those who were asked the *smashed* question.

The great 20th-century Connecticut trial lawyer Theodore Koskoff would teach lawyers that if he wanted a witness to answer with a high number, he would ask, “How far away were you from the accident?” If he wanted a lower number, he would ask, “How close were you to the accident?” The Nobel Prize-winning behavioral economist Daniel Kahneman calls this a framing effect, where cognitive processes are influenced by how questions or problems are presented.

The point is this: No matter how unspoiled one’s memory might be as it sits in storage, that memory can be influenced by external stimuli, such as the phrasing of a question, even as late as the point of recall and reporting.

In 2011, the New Jersey Supreme Court issued a landmark ruling in *State v. Henderson*, 208 N.J. 208, addressing the reliability of eyewitness testimony in a criminal case. The opinion analyzed scientific sources on memory and concluded that many cognitive and external variables can influence a victim’s memory, can lead to identifying an innocent person as the offender, and can produce a wrongful conviction.

A year later, the same court issued an enhanced jury instruction that must be given when eyewitness identification is at issue. The instruction, later adopted in one form or another in some other states, cautions that “[h]uman memory is not foolproof” and “is far more complex” than a video recording; that “a witness’s categorical

identification of a perpetrator . . . , even if made in good faith, may be mistaken”; and that “a witness’s level of confidence, standing alone, may not be an indication of the reliability of the identification.”

The instruction then discusses many factors that can produce a defective memory. They largely involve things that affect the ability to encode, like stress at the moment of the event, the time the witness had to observe, the physical distance between the witness and the events, lighting, and the presence of a weapon that could have distracted the witness’s attention.

The enhanced instruction runs about 15 minutes, covers technicalities about line-ups and photo arrays, and warns about outside influences that can alter a witness’s memory and make it seem more reliable than it is.

Research shows that jurors get the essence of that instruction—to watch out for eyewitness identification. Maybe that’s good enough for those cases. Studies show that when the enhanced instruction is used, conviction rates go down. Apparently, the instruction produces more reasonable doubt.

But what about jurors in civil cases? What are they told about memory?

About the most they hear is something like this Florida instruction, which runs about 35 seconds:

In evaluating the believability of any witness, you may properly consider the demeanor of the witness while testifying; the frankness or lack of frankness of the witness; the intelligence of the witness; any interest the witness may have in the outcome of the case; the means and opportunity the witness had to know the facts about which the witness testified; the ability of the witness to remember the matters about which the witness testified; and the reasonableness of the testimony of the witness, considered in the light of all the evidence in the case and in the light of your own experience and common sense.

That sounds on point. But of all those factors, only two are scientifically relevant: an interest the witness may have in the outcome of the case (because bias can affect memory) and the means and opportunity the witness had to know the facts about which the witness testified (because that affects encoding).

By contrast, the “ability of the witness to remember the matters about which the witness testified” tells us nothing about the witness’s actual ability to remember. And the other factors aren’t indicators of a reliable memory.

In some states, jurors get just a single sentence, like this one from Illinois, which takes about 18 seconds: “In evaluating the credibility of a witness, you may consider that witness’s ability and opportunity to observe, memory, manner, interest, bias, qualifications, experience, and any previous inconsistent statement or act by the witness concerning an issue important to the case.”

That sentence mentions some factors that could be relevant, like ability and opportunity to observe, interest, and bias. But it still fails to educate a jury about the unreliability of memory generally and about the many factors that could cause memory to deteriorate or mutate.

A recently retired forward-thinking federal judge, Mark W. Bennett from the Northern District of Iowa, proposed a Model Plain English Witness Credibility Jury Instruction, designed to educate jurors generally about the foibles of memory and to give guidance in line with current scientific thinking.

His model instruction cautions that “a witness’s memory, even if testified to in good faith and with a high degree of confidence, may be inaccurate, unreliable, and falsely remembered; thus, human memory can be distorted, contaminated, or changed, and events and conversations can even be falsely imagined.” His complete instruction runs over two minutes.

While a step in the right direction, updated instructions that seek to steer jurors away from their gut reactions and hew

more closely to what science tells us about memory go only so far. Just as a witness's brain may not encode, store, and recall events accurately, a juror's brain will have similar issues in accurately encoding, storing, and recalling comprehensive jury instructions on memory fallibility. Sending a written version of those instructions into the jury room might help, but in the end, jurors still only get the basic message that they shouldn't believe something simply because a witness said it.

So apart from warnings and perhaps some expert testimony on how memory works, what more do jurors need before deciding a case that rests on dueling memories? And what can lawyers give them to fill that need?

Should witnesses be clinically assessed to see if they are "cognitively there"? Should witnesses be coached on how to testify with confidence so that jurors will interpret the witness's demeanor as a proxy for a reliable memory?

Corroboration

What's needed is external support, the litigation equivalent of a flying buttress. Enter corroboration.

Regrettably, corroboration gets an unmerited bum rap. It's often the least popular item in a litigator's toolbox, a backbencher. Judges who favor speed of resolution over quality of outcome seem to have little patience for it. Even Federal Rule of Evidence 403 gives it second class status: "The court may exclude relevant evidence if its probative value is substantially outweighed by a danger of: . . . wasting time, or needlessly presenting cumulative evidence." The rule essentially licenses judges to keep it out, but cumulative evidence is precisely what fact finders should value in an environment that depends on memory.

Consider this: Arthur testifies that, in a conversation after work, Bob made a promise. Bob acknowledges the conversation, but testifies that no such promise

was made. No documents evidence the alleged promise. There's no evidence of any prior consistent or inconsistent statement.

What we now know about memory tells us that, if that's the only testimony, fact finders have no way to credit Arthur over Bob or Bob over Arthur.

The flaws of human memory challenge us as lawyers to reconsider how we should work with our clients and witnesses.

Suppose that Arthur offers two witnesses who testify that they heard the promise. If Bob has no witnesses to testify otherwise, what likely will happen?

Absent some talk among Arthur and his corroborators that could taint their respective memories, the odds that those three have false memories of the same promise are likely much smaller than the odds that Arthur's memory of the promise is false. The three witnesses triangulate on the remembered fact.

Just because evidence is cumulative doesn't, in the words of Rule 403, make it "needlessly" cumulative. Here, the cumulative evidence is the most powerful and critical proof in the case.

The flaws of human memory call for reassessing how courts treat cumulative evidence. But they also challenge us as lawyers to reconsider how we should work with our clients and witnesses.

At the earliest moment when litigation is anticipated, we should go into overdrive to download the memories of the client and the key witnesses. We should compare the stories for general consistency,

mindful that minor variations are normal and exact story-matching is rare.

We should have our investigators get statements from the witnesses while their memories are fresh, and we should have the witnesses correct and sign those statements. We should make the client search for corroborating documents or other evidence consistent with the remembered facts. If none are found, we should find out why.

If the documents aren't corroborative, we need to figure out whether the witness's encoding was accurate and complete or whether something contaminated the memory when it was in storage.

In short, we need to evaluate the witness's memory with an eye on the science and use whatever memory refreshment mechanisms are technically and juridically appropriate, not to improve the story but to ensure that the witness's memory matches the truth.

"Facts are stubborn things," said John Adams in his closing argument at the Boston Massacre trial. "And whatever may be our wishes, our inclinations, or the dictates of our passions, they cannot alter the state of facts and evidence."

Powerful words. They helped acquit Adams's unpopular clients.

Adams, of course, was talking about the wishes, inclinations, and passions of the jurors. But he overlooked that wishes, inclinations, and passions can, and often do, alter facts and evidence as they sit in a witness's memory.

When judges and lawyers understand the science of memory better and duly account for its imperfections, then perhaps facts will truly be stubborn things, and justice will be the better for it. ■