Who Are You Going to Believe?

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Although most of the time people tell the truth, people do lie. On a bad day, those working in the justice system get lied to all day long. Some days the lies are harmless, even unnecessary, and they amuse and entertain. Some of the lies are a product of self-deception: “I can quit doing drugs any time I want.” Some statements are not lies but honest mistakes: “I’m sure that is the guy who robbed me.” But on other days the lies are despicable and dangerous, and they must be exposed.

The question is: Can we tell the difference between the truth and the lie? Many of us would like to believe we can rely on our professional and personal instincts to guide us, or perhaps even on some professional training we have received. Often we rely on a process we cannot precisely describe, but one in which we have confidence nonetheless. We just know. Or do we?

There have been over 300 post-conviction DNA exonerations in the United States. These cases are dramatic proof that the ability of judges to determine the truth remains suspect. Eighteen people had been sentenced to death before DNA proved their innocence and led to their release. The average sentence served by DNA exonerees before their release is about 13 years. Exonerations have been won in 35 states and Washington, D.C. And in every case in which DNA led to exoneration, the courts were wrong in determining who was lying. The cost of that mistake could have killed someone and is a stark reminder of just how weak we are in determining who is lying.

Although it would be nice to have DNA to answer whether someone stopped at a stop sign or did a California roll through it, traffic cases will never be susceptible to DNA analysis. The admonition “you always believe the police officer” may work for a few judges or, more likely, may get a laugh among judges at a cocktail party, but the fact remains that every day courts make determinations about credibility and rarely is there serious discussion about how that happens or how to improve the odds of getting it right.

A MACHINE CAPABLE OF LIE DETECTION?

In the 1950s, one of the most popular new developments in applying science to matters of justice was the polygraph, known by many as the “lie detector.” The device was thought to determine conclusively if a person was lying by measuring several physiological indicators such as pulse, blood pressure, galvanic skin response, and respiration. By having the subject answer baseline questions and comparing measurements on these indicators to measurements taken during responses to questions related to a crime, investigators believed they were able to accurately determine whether a person (e.g., a suspect or prospective employee) was telling the truth or not.

Television talk-show host Dick Cavett once had F. Lee Bailey on his show to demonstrate how the polygraph worked. Bailey was a strong proponent of the polygraph. Cavett asked Bailey, “If lie detectors work, how come they’re not allowed in court cases?” Bailey responded, “They do work . . . . I use them all the time.” Cavett challenged Bailey to prove it. A few weeks later, Bailey brought a state-of-the-art polygraph to the show, complete with a qualified operator of the machine. Cavett was questioned, and at the end of the questioning, the polygraph examiner scanned the results. The examiner was to his field what Henry Kissinger is to the field of foreign affairs: an expert with a very pronounced German accent. According to Cavett, the examiner began to noticeably sweat. The examiner said to Bailey, “It didn’t work.” There, on national television, the lie detector could not provide a definitive answer as to whether a person had lied.

In United States v. Scheffer, the United States Supreme Court ruled that juries could be excessively swayed by the testimony of polygraph experts. The opinion states:

Unlike other expert witnesses who testify about factual matters outside the jurors’ knowledge, such as the analysis of fingerprints, ballistics, or DNA found at a crime scene, a polygraph expert can supply the jury only with another opinion, in addition to its own, about whether the witness was telling the truth. Jurisdictions, in promulgating rules of evidence, may legitimately be concerned about the risk that juries will give excessive weight to the opinions of a polygrapher, clothed as they are in scientific expertise and at times offering, as in respondent’s case, a conclusion about the ultimate issue in the trial. Such jurisdictions may legitimately determine that the aura of infallibility attending polygraph evidence can lead jurors to abandon their duty to assess credibility and guilt.

In 2003, the National Academy of Sciences concluded that the evidence to support the reliability of the polygraph was “unreliable, unscientific and biased.” But despite being dis-
credited, the polygraph remains in widespread use by law enforcement and prosecutors. Polarization of views on this issue is reflected in the fact that 31 states bar the admission of polygraph evidence per se. Eighteen states admit polygraph results at trial if the parties stipulate to its use before the administration of the test. Only New Mexico allows for the routine admission of polygraph evidence. The admissibility of polygraph results in Federal Court varies by circuit.

Because just about every private company uses a computer, the mail, or a telephone system to send messages to someone in another state, the federal Employee Polygraph Protection Act of 1988 has a broad application. This Act prohibits nearly all use of lie detectors in connection with employment. It is illegal for all businesses covered by the Act to require or even suggest that any employee or job applicant submit to a lie-detector test. If a business dismisses, disciplines, discriminates against, or threatens to take action against any employee or job applicant who refuses to take a lie-detector test, there are sanctions and civil liability for the business.

The latest version of the lie-detector machine is the fMRI, or functional magnetic resonance imaging, developed in the 1990s. The fMRI is similar to the original polygraph machine: the telling of a lie creates a measurable physiological response, in this case increased blood oxygenation and blood flow to the prefrontal and parietal regions of the brain. Images can be created that show this brain activity. This work was highlighted at a recent judicial seminar hosted by the American Association for the Advancement of Science and summarized in the National Judicial College publication Case in Point. Edward Lempinen described the claims of the vendor selling this “science” at the seminar and recounted the critique of a university neuroscientist who noted among other concerns that the definition of when the brain is “activated” is arbitrary. The vendor candidly admitted that “[w]here there will be mistakes. We will misclassify people.” But he went on to say that this was not a big problem, since “[w]e judicial system puts people away based on ambiguous evidence all the time.”

The next generation of lie-detector machine is being developed by Customs and Border Protection, with additional funding from the military. This machine combines a microphone to record the person’s voice, a near-infrared camera to record pupil dilation and glance location, and a high-definition video camera to record body movements; in addition to recording responses, the kiosk also functions as the interrogator asking the questions. This machine is being field tested at the United States-Mexico border, although budget reductions have slowed its development.

There is no particular formula for evaluating the truthfulness and accuracy of another person’s statements or testimony. You bring to this process all of your varied experiences. In life, you frequently decide the truthfulness and accuracy of statements made to you by other people. The same factors used to make those decisions, should be used when evaluating the testimony.

its deployment. In an attempt to recognize and overcome the fact that, once again, the machine is simply registering physiological responses that are supposed to prove lying, the inventors have received funding to study how people might defeat the ability of the machine to read them.

In the 1700s, a German doctor believed that the shape and contours of the human skull could predict a person's character and therefore criminality. For many years, some believed this new “science” of phrenology would revolutionize criminal law, but today the idea is totally discredited. Similarly, the best scientific evidence today is clear: the polygraph should be tossed to the junkyard of pseudoscience like phrenology. No one can predict whether some new machine may be invented. But today all of the machines are based on a faulty premise that, in each and every case, telling a lie will provoke a physiological response in all people. That link is simply not true. Some people can lie without any physiological response; indeed Soviet spies were trained to lie without any physiological response, and it worked. The problem is not the polygraph machine or the MRI or the interrogator kiosk, it is the premise upon which they are based.

While it is understandable that judges and others want some forensic machine to help, there is simply no machine that can determine if a witness is lying, or conversely, if a person is telling the truth. All these technologies generate unacceptably high rates of false positives—that is, results that suggest truthful people are lying when they are not.

**CAN BEHAVIORAL SCIENCE TEACH JUDGES TO DETECT LIES?**

The drive to develop a science of lie detection extends to the social sciences as well. The earliest versions of the behavioral-science approach argued that certain eye behaviors, such as gaze aversion and shifting eyes left or right, could successfully determine deception. A review of evaluations of this claim found that “[23] out of 24 peer-reviewed studies published in scientific journals reporting experiments on eye behavior as an indicator of lying have rejected this hypothesis. No scientific evidence exists to suggest that eye behavior or gaze aversion can gauge truthfulness reliably.” And yet there remain the popular myths that timing and duration of speech are off when someone is lying. Some claim people touch their nose more when lying and a great deal less when telling the truth. Others claim a liar breathes faster, displaying short breaths followed by one deep breath. And there is the popular myth that the mouth may appear dry (causing much throat clearing). The problem with these myths is they just are not true. So placing a water pitcher in front of a witness and waiting for signs of dry mouth will not advance the quest to find the truth. But it is a nice thing to do for the witness.

A more recent version of the behavioral-science approach is based on the recognition of microexpressions—brief involuntary facial expressions generated by emotions. This training is packaged and sold online as “products” with names like “Micro Expression Training Tool” and “Subtle Expression Training Tool,” with the tag line “Accept No Substitutes.” One website boasts that their “deception expert... teaches scientifically proven methods of lie detecting... These ‘state of the art’ methods are what federal agents, law enforcement and other professionals are taught when they seek the highest accuracy rates.”

Although not a single study supports the idea that those taking “training” to detect behavioral cues said to accompany a lie are better at determining whether a person is lying, courses continue to be taught to law enforcement, prosecutors, and judges, enticing them to “[s]ee why Government agencies, Fortune 500 companies, educational and medical professionals are using Dr. Ekman’s training to enhance their ability to better ‘read’ people and detect truth and lies.” Here, the claim to scientific truth is enhanced by the claim that not only is this training “scientifically proven and field tested,” it is “now the basis of a new television show on FOX/SKY tv—Lie to Me—to which Dr. Paul Ekman is the Scientific Consultant.”

The same psychologists who publish academic papers in professional journals admitting that “[i]n every study reported, people have not been very accurate in judging when someone is lying” and “[i]t is unlikely that judging deception from demeanor will ever be sufficiently accurate to be admissible in the courtroom” also serve as faculty to state and local judges for the courses designed to convince them of the opposite—namely, that they can be taught to accurately detect lies. There is nothing wrong with exploring what we know and don’t know about something as central to justice as the ability to determine what is a lie, but the danger such courses potentially create is that they convince the students they have achieved expertise. This “expert effect” results in its opposite: “you become less, not more, effective than the average person, likely because of overconfidence or overblown belief in yourself.”

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17. *Id.*
20. *Id.* at 264 (reporting that a group of 84 federal judges took part in one such course).
A judge who believes he or she is a lie-detection expert is making decisions based on false criteria... Studies have shown those who have taken such courses are more likely to believe they know when someone is lying than others and to cease to adhere to the duty to examine all the evidence at hand. A judge who believes he or she is a lie-detection expert is making decisions based on false criteria invisible to other actors. Such a judge does not make explicit that he or she has made a ruling based on interpreting the sideward glance or posture of a defendant in response to a question. Too often the jargon of a written order is “based on the demeanor of the witness.” By relying on this “training” the judge succumbs to the danger foreseen by the Supreme Court in United States v. Scheffer, namely abandoning the duty to evaluate all the facts, testimony, and evidence before him or her. Armed with this training, judges, like law enforcement, can succumb to confirmation bias, in which they see and hear what they want to hear based on the rules of behavior defined in the training while ignoring facts and behaviors that exist outside of that framework.

LESSONS LEARNED FROM FALSE CONFESSIONS

Perhaps no lie seems as counterintuitive as the false confession. In about 25% of DNA-exoneration cases, innocent defendants made incriminating statements, made complete confessions, or even pled guilty. If you can’t rely on a confession being the truth, what can you believe? Most confessions are genuine, and people plead guilty because they are guilty. But these cases show that confessions can occasionally be a lie.

How is it that someone confesses to something he or she did not do? A study by Saul Kassin and Jennifer Perillo of John Jay College of Criminal Justice tested how bluffing affects “confessions” gained from innocent parties. The subjects of the study were instructed to complete a task on a computer and then were falsely accused of crashing the computer or collaborating with a colleague to improve their performance. Bluff evidence, false evidence, and unreliable witnesses were used to test their effect. In the first test, 60% of the subjects “confessed” to pressing a computer key they had been instructed to avoid when, in fact, they had not. Research has identified two sets of risk factors for false confessions: (1) dispositional vulnerabilities inherent in the suspect, such as youth, intellectual impairments, mental illness, and personality traits that foster compliance and suggestibility; and (2) situational pressures inherent in the conditions of custody and interrogation, such as excessive time, the presentation of false incriminating evidence, and the use of minimization themes that imply leniency.

Studies by Dr. Robert Horsemberg of Maastricht University have similar results to the Kassin and Perillo research. Dr. Horsemberg and his fellow researchers told 83 people that they were taking part in a taste test for a supermarket chain. The top taster would win a prize such as an iPad or a set of DVDs. The volunteers were asked to try ten cans of fizzy drink and guess which was which. The labels were obscured by socks pulled up to the rim of each can, so to cheat a volunteer had only to lower the sock. The test was filmed by a hidden camera, which caught ten participants who actually did cheat. Bafflingly, though, another eight falsely confessed when accused by the experimenter.

In Colorado v. Connelly, Justice Brennan’s dissent detailed the powerful impact a confession has on the outcome of a case. Justice Brennan wrote:

“Our distrust for reliance on confessions is due, in part, to their decisive impact upon the adversarial process. Triers of fact accord confessions such heavy weight in their determinations that “the introduction of a confession makes the other aspects of a trial in court superfluous, and the real trial, for all practical purposes, occurs when the confession is obtained.” No other class of evidence is so profoundly prejudicial. “Thus the decision to confess before trial amounts in effect to a waiver of the right to require the state to meet its heavy burden of proof.”

False confessions demonstrate the limitations on our ability to determine what is a lie even when it is so obvious that the “lie” is against one’s self-interest. There are reforms that have or can significantly reduce the likelihood that the “confession” is in fact a lie. Some states in recent years have tried, either through legislation or court decisions, to ensure the confession is not a lie. Videotaping confessions and changing interrogation methods are the most common reforms and have the potential to aid in differentiating lies from the truth. University of Virginia law professor Brandon Garrett, author of the 2011 book Convicting the Innocent, reviewed 250 cases of people who were exonerated by DNA evidence. Garrett found that suspects confessed in detail to crimes they didn’t commit in 40 of those cases. None of the interrogations in those cases was recorded in its entirety. As Garrett noted, when the entire interrogation is recorded, discovering whether interrogators have provided suspects with key details of the crime is a lot easier.

LESSONS LEARNED FROM EYEWITNESS IDENTIFICATION

Eyewitness identification that is inaccurate is most likely not a lie but the product of self-deception or just an honest mistake. This is what we know about the phenomenon of eye-
witness identification: mistakes can happen. As with false confessions, we know that reforms in police procedures can reduce the possibility of a mistake. We know at a minimum that jury instructions regarding eyewitness testimony can be improved.

Law enforcement, lawyers, judges, and psychologists have worked together to make eyewitness testimony more reliable and accurate. Although the United States Supreme Court declined to order new procedures in Perry v. New Hampshire, and held that the Due Process Clause does not require a preliminary judicial inquiry into the reliability of an eyewitness identification when the identification was not procured under unnecessarily suggestive circumstances, New Jersey and Oregon have introduced significant reforms on their own. In the words of the New Jersey Supreme Court, there is a “troubling lack of reliability in eyewitness identifications.” Could the same be said of some of our judgments regarding when a defendant or a witness is lying? And if that is so, should courts at a minimum rethink what jury instructions should say? Telling people to use the same factors you use in life sounds pretty simple; it is just that many of the factors we use are wrong—or at least challenging.

WHAT WE CAN LEARN FROM MINDFULNESS

There is a compelling body of social and cognitive research on how people make decisions and how the brain processes information. The caveat here is that there is still much that scientists do not know, but what is known and widely accepted may improve a judge's ability to figure out whom to believe.

Anchoring is the well-documented phenomenon that describes the process through which an individual's estimates or comparison judgments are influenced by an initial value; information provided early in a process shapes subsequent judgments. This can occur with judges just like anyone else. The problem if a judge anchors on a fact, or even worse, an irrelevant fact, is that anchoring can blind the judge to other evidence or an alternative view of what happened. Judgment about lying can be premature and then distorted by confirmation bias where the decision maker overly focuses on facts supporting the premature decision and ignores facts that are inconsistent with that view. One study found that criminal-law judges exposed to a high anchor responded to incriminating evidence faster than exculpatory evidence (measured by response latencies on a timed categorization test), suggesting that the anchor primed the judges to look for anchor-consistent information. The same was not true for exculpatory information. The researchers found this consistent with prior research indicating that negative information tends to be more salient for individuals in general, and they hypothesized that judges focus on the incriminating information because they are charged with determining whether the defendant is guilty beyond a reasonable doubt. In addition, the criminal-law judges were more certain about their decisions than those who were not experts in criminal law, suggesting that “experts may mistakenly see themselves as less susceptible to biasing influences on their sentencing decisions.”

It is plausible that the expertise criminal-law judges had was a product of egocentricity—overconfidence in one's abilities. Egocentricity may be the single most important lesson from mindfulness research. Simply put, overconfidence in one's ability may be counterproductive to good decision making. While the culture of judicial decision making is weighted toward rarely expressing self-doubt, good judicial decision making—in this case, trying to determine the truth—needs to be heavily weighted toward acknowledging that this is a difficult task.

Implicit biases can also affect one’s judgment. Implicit biases are based on attitudes or stereotypes that operate below the radar. As a result, individuals are not aware that implicit biases may be affecting their behaviors and decisions. Indeed, research shows that even individuals who consciously strive to be fair and objective can nonetheless be influenced by implicit biases. The good news is that the researchers found that “when judges are aware of a need to monitor their own responses for the influence of implicit racial biases, and are motivated to suppress that bias, they appear able to do so.”

WHAT IS A JUDGE TO DO?

Forensic science has produced valuable new advances than have contributed to making the system of justice better. Those advances, however, also have revealed that sometimes faulty forensic-science analyses may have contributed to egregious errors. There are expensive polygraph machines and lie-detector apps for an iPhone—even iBodyLanguage. These apps are cheap and entertaining. However, there is no machine that can accurately detect if the defendant is telling the truth when he or she either confesses to a horrific crime or claims to have stopped at a stop sign. But the quest for the truth cannot be

29. Henderson, 27 A.3d at 877.
32. Id. at 194.
33. See the resources provided by Harvard's Project Implicit at https://implicit.harvard.edu/implicit.
deterred by a lack of a machine (or an app for your iPhone).

The notion that whether a person is lying or telling the truth can be detected by a trained expert remains a popular one, but it is simply not supported by behavioral science. That science teaches us that behaviors claimed to prove lying are often merely expressions of stress or anxiety. An honest person, asked a question in a stressful setting, may fidget, avoid eye contact, cross his or her arms, or contradict himself or herself, none of which constitute definitive proof of lying. Conversely, a variety of instances have been documented in which spies trained themselves to provide false statements during a polygraph, and as a result they “beat” the machine and the lie is seen as truth. Habitual liars may register no behaviors that suggest deception, since dishonesty is a way of life for them.

Talking about lying might be nothing but fodder for interesting conversation were it not for the profound consequences of getting this wrong. As clarified in Daniel Kahneman’s award-winning book Thinking, Fast and Slow, focus requires energy to sustain slower, deliberative, and rational decision making. Judges cannot simply throw up their hands and say, “determining who is lying cannot be done.” But they can—indeed must—improve the process of making the decision about what is a lie.

Three things can make a judge a better judicial lie detector.

1. Judges should acknowledge that the human mind can play tricks on them in determining who is lying. Egocentrism may be a term of art in psychology that is more easily understood in the context of courts as “black robe disease.” If a judge assumes that he or she has unique powers to determine who is telling the truth either because of “training” or some inherited talent, there is an increased likelihood of making a mistake.

2. Judges need to use their brains in following the testimony and evaluating inconsistencies, rather than relying on visual cues, to try to figure out what is “more probably true than not true” at trial. Even in this endeavor, though, judicial humility is really what is called for. Everyone who tells a story several times may have some inconsistencies in the retelling of the story, and yet these are not lies. Rather than jumping on one inconsistency in a witness’s testimony, judges should think. In the final analysis, that inconsistency may prove so compelling that a judge should simply not believe the testimony. But, just as juries are instructed to do, judges need to do their best to keep an open mind until they’ve heard—and carefully considered—everything before them. Judges need to ask: Am I anchoring? Did I make a premature judgment and ignore conflicting evidence? Was my decision the product of confirmation bias? Is there a chance my decision about who to believe is a product of implicit bias?

3. In the final analysis, the burden of proof may well be the most important safeguard for judges. The standard in criminal cases is a high one (“beyond a reasonable doubt”), but the standard in civil cases (“more likely”) is no less compelling in its demand. While many cases are clear cut, there are many others where the facts are often murky. As trite as it may seem, relying on the burden of proof is the most overarching and important step toward improving the ability to recognize or admit you cannot detect a lie. And that is the honest truth.

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37. For a judge’s perspective on this issue, see Steve Leben, Thoughts on Some Potential Appellate and Trial Court Applications of Therapeutic Jurisprudence, 24 SEATTLE U. L. REV. 467, 470 (2000).