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UNTIL WE FIX THE LABS AND FUND CRIMINAL DEFENDANTS: FIGHTING BAD SCIENCE WITH STORYTELLING

Brian J. Foley*

I. INTRODUCTION

Criminal defendants have not benefited from the more liberal admissibility standards for scientific testimony that *Daubert v. Merrell Dow Pharmaceuticals, Inc.*¹ seemed to promise. Criminal defendants have their own proffers of scientific evidence rejected “almost always,” and they rarely even raise, much less win, *Daubert* or state court *Daubert*-like motions against the prosecution’s scientific evidence.² Some of the science used against criminal defendants is “junk science.”³ Peter Neufeld has proposed attacking this sketchy science “upstream” of the courthouse with the following reforms: Independent audits of crime labs that have been found to have made mistakes or committed fraud; a national system of accreditation for crime labs, and keeping the labs independent from law enforcement; and a national institute to set standards for technologies and methodologies used for testing and interpreting data.⁴

We should also consider *indirect* attacks on bad science, especially when it threatens to convict innocent defendants. The reforms suggested in this essay are based, however, on a hypothesis that the government’s scientific evidence in a case may not be as decisive in convicting defendants as we fear. This hypothesis is premised on the recognition that juries decide cases based on The Story Model as described by Nancy Pennington and Reid Hastie, which has become a popular descriptive heuristic.⁵ It is also grounded in recent work by Kevin Jon Heller, explaining experiments concluding

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1. 509 U.S. 579 (1993).

2. Peter J. Neufeld, *The (Near) Irrelevance of Daubert to Criminal Justice and Some Suggestions for Reform*, 95 Am. J. Pub. Health 107, 109 (2005). About a dozen states still follow the more conservative standard set forth in *Frye v. U.S.*, 293 F. 1013 (D.C. Cir. 1923). *Id.* Plaintiffs in civil suits have also suffered. It is hard not to believe that this use of discretion by judges reflects their political bias, but that is beyond the scope of this essay.

3. Neufeld, *supra* n. 2, at 109.

4. *Id.* at 111–13.

5. See Nancy Pennington & Reid Hastie, *A Cognitive Theory of Juror Decision Making: The Story Model*, 13 Cardozo L. Rev. 519, 520 (1991).

that jurors value direct evidence over circumstantial evidence in criminal cases, even where the circumstantial evidence is more probative (as judged by probabilistic standards).⁶ I assume the truth of these premises *arguendo*. In this essay, I suggest reforming evidence rules to make it easier for criminal defendants to tell a compelling story of innocence to juries as a way of helping these defendants combat junk science, lab mistakes, and lab fraud.

II. THE STORY MODEL AND SCIENTIFIC EVIDENCE

A. *The Story Model of Juror Decision-Making*

In the past several years there has been increasing support for the idea that juries decide cases based on the “Story Model” as opposed to logical, probabilistic models of decision-making.⁷ Juries organize evidence into story form.⁸ They construct a story during trial, using trial evidence, their own knowledge of similar events, and “generic expectations about what makes a complete story (e.g., knowledge that human actions are usually motivated by goals).”⁹ The story also might be one suggested by the lawyers (at least the savvy ones) in opening arguments. During the trial, jurors fit the evidence into the available story frames. They may create competing stories during trial, as well as, after the judge instructs them about verdicts.¹⁰ During deliberations, jurors choose among competing stories of what happened.¹¹ The winner of this “story battle”¹² is the story that makes the most sense to the jurors.¹³

What makes a story make sense? Pennington and Hastie argue that jurors choose the story they have the most confidence in, as judged by their assessment of the story’s coherence, coverage of the evidence, and uniqueness.¹⁴ Coherence addresses “consistency, plausibility, and completeness.”¹⁵ Coverage addresses how much of the evidence is included in the story.¹⁶ Some evidence might be disregarded if it does not fit. A causal relationship is also important to coverage.¹⁷ Uniqueness means that if there is more than one story that is acceptable, the jury will lack certainty in any one of them,¹⁸ which in a criminal case could result in reasonable doubt. The jury’s effort is

6. See Kevin Jon Heller, *The Cognitive Psychology of Circumstantial Evidence*, 105 Mich. L. Rev. 241, 241 (2006).

7. John H. Blume et al., *Every Juror Wants a Story: Narrative Relevance, Third Party Guilt and the Right to Present a Defense*, 44 Am. Crim. L. Rev. 1069, 1087 (2006).

8. *Id.* at 1087–88. That people order information into story form is not really a new discovery; it has been widely acknowledged. There is support for the idea that there is some biological explanation for this form of thinking. Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* 66–68 (Random House 2007).

9. Pennington & Hastie, *supra* n. 5, at 522.

10. *Id.* at 531–33.

11. *Id.* at 530–33.

12. Blume et al., *supra* n. 7, at 1089.

13. See Pennington & Hastie, *supra* n. 5, at 527–28.

14. *Id.*

15. *Id.* at 528.

16. *Id.*

17. Heller, *supra* n. 6, at 296 (noting a relation between coverage and causation).

holistic, not an exercise in probabilities, as a Bayesian or other probability-based models suggest.¹⁹

Kevin Jon Heller recently wrote that the more acceptable story for jurors is the one that they can most easily imagine—the story with higher “imaginability.”²⁰ An explanatory story that is improbable, but highly imaginable, is more likely to be chosen by juries than a story that is more probable but less easily imagined. Heller stated, “there is no necessary relationship between the subjective probability of [a story] and its ease of imagination.”²¹ This is rooted in a psychology concept called “the simulation heuristic,” as Heller explains: “The basic assumption of the simulation heuristic—that the simple act of imagining a scenario makes it seem more probable—has been validated by research in a variety of disciplines.”²²

Whether one story is more easily imagined than another has much to do with the sort of evidence used, and how the story is told. Heller sought to explain why experiments have shown that juries are more likely to convict a criminal defendant if the case against him was based on direct evidence rather than on circumstantial evidence—even where the circumstantial evidence was more probative of guilt as a matter of probabilities.²³ (Heller argues that the danger of false acquittals is high when the prosecution’s case is based on circumstantial evidence: Even where jurors have a subjective understanding that the probability is high enough to convict, they might still acquit if the evidence is circumstantial.²⁴) This difference is largely rooted in four main differences between direct and circumstantial evidence. The first is that direct evidence—eyewitness testimony and confessions—is “representational,” whereas circumstantial evidence is “abstract.”²⁵ Direct evidence paints a picture of the crime for the jury. Second, direct evidence is presented in narrative form, whereas circumstantial evidence is rhetorical.²⁶ Circumstantial evidence does not tell a story—jurors must draw inferences from it. Third, direct evidence is “univocal,” because no alternative scenario is woven, whereas circumstantial evidence is “polyvocal,” because it can support several inferences, inculpatory and exculpatory.²⁷ For example, the defendant’s blood that is found on the scissors that were the murder weapon may have ended up there during the

19. Blume et al., *supra* n. 7, at 1087 n. 115 (“Narrative theory rejects the previous line of thinking in which juror reasoning was generally thought to follow some sort of mathematical model, such as Bayesian theory, traditional probability theory, or other algebraic models.”).

20. Heller, *supra* n. 6, at 262.

21. *Id.* at 302.

22. *Id.* at 260. Heller explains:

For example, one day before the 1976 presidential election, subjects were asked to imagine, based on detailed scenarios, either Jimmy Carter or Gerald Ford winning the election. The subjects who were instructed to imagine a Carter victory were far more likely to predict that Carter would win than subjects who were instructed to imagine a Ford victory, and vice-versa.

Id. (citing John S. Carroll, *The Effect of Imagining an Event on Expectations for the Event: An Interpretation in Terms of the Availability Heuristic*, 14 J. Experimental Soc. Psychol. 88, 90–92 (1978)).

23. *Id.* at 245, 252.

24. Heller, *supra* n. 6, at 245, 299.

25. *Id.* at 264.

26. *Id.* at 265.

murder, but it also may have ended up there sometime before or after the murder.²⁸ A fingerprint at a crime scene may have been left before, during, or after the murder. Fourth, direct evidence is unconditional, whereas circumstantial evidence is probabilistic.²⁹ The witness, often an expert witness, delivers the information with qualifiers such as “probably,” and “most likely,” without the certainty that characterizes witnesses bearing direct evidence.³⁰ Ultimately, according to Heller, it is easier for the jury to imagine what happened if the evidence is direct rather than circumstantial. The direct evidence is “vivid,” not “pallid,”³¹ and human beings are hard-wired to listen to storytellers and to imagine the story that is told and become immersed in it.³²

A caveat: Heller acknowledges that he addresses instances where the prosecution’s case is either all direct or all circumstantial, and that he has not studied mixed cases, which are common.³³ For my purposes, I will take from Heller the proposition that as a categorical matter, juries are more likely to credit direct evidence than they are to credit circumstantial evidence.

B. *Forensic Scientific Evidence*

Forensic scientific evidence is always circumstantial evidence. A DNA test result or bite mark analysis does not get up on the stand and recount how the murder or rape occurred. (One is reminded of the nineteenth century belief that the eyes of a murder victim might retain, like a photograph, the last image the victim saw.) Instead, the jury must draw an inference from the evidence and the expert witness’ testimony about it.³⁴ In general, lawyers understand the probative value of the evidence as helping the jurors identify the perpetrator of the crime, as *a matter of probability*. So a DNA result that says the blood found at the scene essentially has to have come from the defendant makes it more likely that the defendant was at the crime scene and committed the crime—and such evidence might lead the jury to convict. But a jury might reject the evidence and the incriminating inference(s) flowing from it, even if those inferences make the probability of defendant’s guilt high, if the overall story of defendant’s guilt is not easily imaginable and does not make sense, especially if the defendant offers an easily imaginable story of innocence. The implication is that lawyers need to think more like jurors than like good Bayesians; and in addition to direct attacks on the prosecution’s scientific evidence inside and outside of the courtroom, defense lawyers should also, when possible, indirectly attack the evidence with a *story of innocence* that may cause the jury to disregard the scientific evidence.

28. *See id.* at 265.

29. Heller, *supra* n. 6, at 268.

30. *Id.* at 276. Jurors’ certainty regarding direct evidence can be undercut by cross-examination, however. Neil Vidmar et al., *Was He Guilty As Charged? An Alternative Narrative Based on the Circumstantial Evidence from 12 Angry Men*, 82 Chi.-Kent L. Rev. 691, 703 n. 26 (2007).

31. Heller, *supra* n. 6, at 269.

32. *Id.* at 287 (discussing “narrative transportation”).

33. *See id.* at 300–02.

34. I should also add that the jury should probably understand the evidence in the first place if it is to draw the correct inference (though it is certainly possible for a jury to arrive at the correct inference by accident—a

C. *What Makes a Good Story?*

Although the term “story” is used frequently in legal scholarship, there is little explanation of what a story is.³⁵ Before moving on, I will define “story” by drawing on storytelling instruction for aspiring dramatists, some of which are included in my earlier work on legal storytelling.³⁶

A story is not simply a narrative of events in chronological order. Instead, a story unifies characters and events. Its most basic elements are character, conflict, and resolution.³⁷ The character encounters obstacles and conflicts in trying to achieve a goal.³⁸ He is acted upon by events and reacts to them, and/or acts to bring about events.³⁹ He either achieves the goal or he does not (resolution). A deeper need may be met, or a lesson may be learned. The account of this struggle is the story.⁴⁰

Take for instance the story of a first-degree murder. A mere recitation of the fact that defendant shot the victim is an account, a narrative, but it is not a *story*. To understand the difference, we need to think like storytellers. We know that a play about a murder that merely depicts an actor walking onto the stage, drawing a gun, shooting another actor, exiting, and the curtains closing, would probably have a short run, somewhere off-off-off-off Broadway (though it might win favor in a French “experimental” theatre or a fringe festival). Lagos Egri, in his well-known primer, *The Art of Dramatic Writing*, imparts the following advice to a hypothetical playwright trying to write a play about someone who commits “the perfect crime”—after the writer’s friends find the script boring:

Crime is not an end in itself. Even those who commit crime through madness have a reason. Why are they mad? What motivated their sadism, their lust, their hate? The reason behind the events are what interest us. The daily papers are full of reports of murder, arson, rape. After a while we are honestly nauseated with them. Why should we go to the theater to see them, if not to find out *why* they were done?

A young girl murders her mother. Horrible. But why? What were the steps that led to the murder? The more the dramatist reveals, the better the play. The more you can reveal about the environment, the physiology and the psychology of the murderer, and his or her personal premise, the more successful you will be.

If the reader accepts our reasoning, he will drop the idea of writing a play about *how* someone committed a perfect crime, and turn to *why* someone did.⁴¹

For a good murder story, the audience needs to know something about the

35. Brian J. Foley & Ruth Anne Robbins, *Fiction 101: A Primer for Lawyers on How to Use Fiction Writing Techniques to Write Persuasive Facts Sections*, 32 Rutgers L.J. 459, 459–62 (2001).

36. *See id.*

37. *Id.* at 467. There are other elements, such as organization, point-of-view, and setting, but for a legal storyteller, character, conflict, and resolution are the bedrock elements. *Id.* at 466–68.

38. *Id.* at 469–70.

39. *See* Foley & Robbins, *supra* n. 35, at 468.

40. *Id.* at 470.

41. Lajos Egri, *The Art of Dramatic Writing: Its Basis in the Creative Interpretation of Human Motives* 18

(alleged) murderer, something about the victim, and the conflict between them. Does the killing “fit” the characters and conflict as the resolution? Is the killer’s character drawn such that it makes sense that he would try to achieve his goal by killing? Was the killer justified? Did the victim deserve it? Has the world been improved through the killing, or does the audience desire “justice” against the killer? Does the dramatist deliver on these counts, or is the audience left thinking the play did not make sense, was implausible, or that there was no catharsis?

The courtroom is not so different from a theatre.⁴² In a trial for first degree murder, the account of the killing might simply be “defendant shot victim.” But the *story* is richer. There are essential characters: The murderer (defendant) and the victim. There are essential events. The essential events start before the actual crime. There must be some event or condition that created a need (actual or perceived) for the defendant to kill the victim. It might be a lack of money, or a wrong or injustice (actual or perceived) that the defendant sought to avenge. The defendant must have decided to meet the need by killing the victim. The defendant must have planned the murder. The defendant must kill the victim. There might be an event where the defendant tried to escape or cover up the killing. The defendant must be caught and prosecuted. There are of course other events, other stories that spin off the central action, such as the story of the detectives who solve the crime—these make up mystery novels—and/or the lawyers who prosecute it—the full government story makes up television’s *Law & Order*.

Under the Story Model, to convict, a jury has to find the prosecution’s story of the murder more believable, more imaginable, than any story the defendant offers about how he did not murder the victim. The defendant might present a different story of what actually happened (accident or mistake or self-defense) or an alibi, or an account of how a third party, known or unknown was the killer. It is possible that the defendant might present no story and merely argue that the prosecution’s story is implausible, that it makes no sense (Heller warns that the defendant’s relying on this reasonable doubt strategy is dangerous⁴³). An implausible, improbable, but vivid, easy-to-imagine story will win out over a harder-to-imagine story. If there is no story offered by defendant, the jury will construct its own, if it is not too hard to do. Heller warns, however, that if the jurors have heard lots of direct evidence from the prosecution, they might have such a strong story in their imaginations that they will not be “primed” to engage in the difficult work of constructing an alternative story on their own.⁴⁴

Where in this story does scientific evidence fit? Look hard. Take, for example, the results of a DNA test of blood found at the crime scene. This evidence is not a character or victim. It is not the plot—not part of the murderer’s need, or decision, or action. It is not part of the conflict or the resolution. The evidence helps identify the murderer, by making it more probable that the defendant committed the crime. That is as far as it goes, though. But it is polyvocal: The defendant’s blood might have gotten there

42. It is somewhat different from a novel, however, where an author can develop a character by taking readers inside his or her mind.

43. Heller, *supra* n. 6, at 292 (“[T]heir use comes with a price: depriving the jury of its most likely source for affirmative evidence of innocence.”).

sometime before or after the crime. It might have been planted. There might have been a mistake or a fraud at the lab. The evidence itself does not assert with 100 percent certainty that this defendant killed this victim in a particular way for a particular reason. It is far less vivid than an eyewitness' testimony about the crime itself. At most, even if the science were seen as a character (which it might be, given that the evidence is presented by an expert witness), it is at most a bit player, an assistant to the people who are responsible for catching and prosecuting the murderer. Legal stories are not postmodern or experimental fiction: The story in the courtroom will not be told through the point of view of the DNA, or the DNA test result, or of the DNA tester. If it were, it would probably not be convincing, except perhaps to a jury of comp lit professors. At best, the forensic scientific evidence is a sort of Greek Chorus, saying, "This defendant did it!" Indeed, it would be more accurate to say that the expert is vying to be the Greek Chorus. The rest of the story must make sense, the rest of the inferences must stack up; if not, the jury will look at other possibilities that flow from the DNA evidence's polyvocal nature. The other possibilities might be presented by the defendant's story or from defense counsel in argument; or, some jurors might think them up themselves.

Lawyers reading this might find it unlikely that a jury would disregard DNA evidence. After all, DNA is a silver bullet! It can exonerate falsely convicted defendants, as we have seen in Innocence Project cases. But these lawyers would be forgetting that the jury might be made up of affective thinkers rather than cognitive thinkers.⁴⁵ Lawyers are usually cognitive thinkers. It is likely that the Bayesian and other probabilistic models of decision-making describe most lawyers, law professors, and judges, but not most jurors. We must keep in mind that we are trained to think logically and probabilistically, and that part of our professional culture and norms is to think in this way. We have self-selected. But jurors come from all walks of life and may not have bought into these norms.⁴⁶ In general, a lawyer will be more impressed with scientific evidence and probability determinations than a jury will be. This means that we may be convicting our own defendant-clients when we plead out a case because forensic scientific evidence will be used against them.

III. FIGHTING SCIENCE WITH . . . STORIES

If I am correct, there are several implications worth addressing. The first is that we can fight science with *stories*. In cases of actual innocence, the chances should be higher: There *has* to be a story of how the crime or event happened that does *not* incriminate the defendant; the prosecutor's story has to be wrong. Of course, a jury might accept it as true, especially if it is a good story, and especially if it is told at least in large part by direct evidence. (This is a danger that inheres in the Story Model. It does not necessarily arrive at the truth.⁴⁷) In any event, since scientific evidence does not and

45. See Richard C. Waites & David A. Giles, *Are Jurors Equipped to Determine the Outcome of Complex Cases?* 29 Am. J. Trial. Advoc. 19, 36–39 (2005) (discussing these thinking styles among jurors).

46. After my first semester of law school a friend took me aside and began studying my head, as if he were a phrenologist. Finally, I asked him what he was doing (of course he was waiting for me to ask). "Just seeing if the scars have healed from your 'law-botomy,'" he said.

47. See Tebb, *supra* n. 8, at 66–68 (discussing "The Narrative Fallacy").

cannot tell this story—it can only confirm particular elements, albeit only in a polyvocal way—then the key to winning a case of actual innocence is not only, or even necessarily, in defeating *the science*; it is in defeating *the prosecution's story*. It is an indirect attack on the science.

Scientific evidence alone is unlikely to convict the defendant if the prosecution's story does not make sense. If the prosecution's story makes sense, however, the defendant might be convicted, even if the science is discredited or seriously questioned. *Forensic scientific evidence is not necessarily decisive*. Let us look at a hypothetical Heller uses:

Consider, for example, a murder trial in which Jack is accused of giving his bipolar wife, Jill, a lethal dose of Lithium. The prosecution's case is based on four items of circumstantial evidence: Jack's skin was found under Jill's fingernails; Jack had fresh scratch-marks on his cheek; Jack waited 20 minutes to call 911 and sounded calm on the phone; and the couple had recently purchased \$1 million of additional life insurance for Jill naming Jack as the beneficiary. The evidence is probably sufficient for jurors to imagine a structurally coherent FIS ["factually inculpatory scenario," i.e., prosecution's story] in which Jack forced Jill to swallow the Lithium, despite being scratched by her as she tried to resist.⁴⁸

The prosecution's story covers the evidence. Here is the defendant's story ("factually exculpatory scenario") that Heller offers, which likewise covers the evidence:

Although the inculpatory inferences the prosecution asks jurors to draw certainly make sense, exculpatory inferences are possible as well: Jill wanted the life-insurance policy because she was suicidal; she was twitching violently from the Lithium overdose when Jack tried to help her [and thus scratched Jack]; and Jack was still in shock when he called 911.⁴⁹

It is still possible that a jury might side with the prosecution. If they do, I think it is because the jury would go *beyond the facts*. The jury might find the witnesses for the prosecution more believable, more likeable, for reasons that do not have to do with the facts presented. The jury might find the defendant not to be believable, or unlikable. The jury might be overcome by a dominant cultural story ("narrative"), such as that of husbands who kill their wives for insurance (the jury might wonder if a mistress lurks in the background). Or they might latch onto a cultural narrative about wives who commit suicide, about depression. In any event, the defendant and his lawyer are going to have to tell the best stories of their lives. Time to hire Gerry Spence?

Going back to our definition of story, we see that there is a missing element in both the prosecution and defense stories: *Character*. Character is key. (Here the reader is warned to temporarily suspend knowledge of evidence rules.) Lajos Egri argued compellingly that character is the *most* important element of any story.⁵⁰ So part of what

48. Heller, *supra* n. 6, at 279.

49. *Id.* at 295.

50. Egri, *supra* n. 41, at 93–96. Egri made the point with aplomb, showing how Shakespeare's *Hamlet* would not be the same play if we "trade the sensitive, brooding Hamlet for a pleasure-loving prince, whose one reason for living is the privileges his princehood affords him. Would he avenge his father's death? Hardly. He would turn the tragedy to comedy." *Id.* at 94. Many of the events simply would not have happened, could

will make one story more believable to a jury is the *jury's understanding* of Jack's character. Is Jack the *kind of person* who would kill his wife for insurance? Is he a good person or a villain? This is crucial. Even if Jack had a motive to kill his wife—need for money (by the way, most every spouse has a motive to kill the other spouse, if there is life insurance)—he would not act on this unless he is a villain, a scumbag, an evil person. If I may digress for a moment: Every day I have a motive to defraud people, to shoplift, even to harm some people. But I do not do it. Because *I am not that kind of a guy*. It is for these reasons that Josephine Ross has argued that, to determine guilt or innocence of defendants, “juries often look at the character of the accused to help piece together what happened . . . jury trials are all about character.”⁵¹

So how can Jack show a jury that he is not the kind of guy who would kill his wife? Outside of the courtroom, where evidence rules do not apply, a good storyteller would do so by showing the character in action, in other instances. There might be a few signature acts from Jack's life that “define” him—in the sense of forging his character and describing his character. If the jury saw some of those acts, it might draw inferences and be convinced of what sort of a person Jack is. Similarly, the marriage itself would have to be characterized. Some acts or moments from it could help. Jill, too, would have to be characterized as suicidal. There is of course the danger of reasoning from these instances, but that is how it is done in storytelling, and it is how we do it in real life. We judge people, we get to know them, based on our *interactions* with them.⁵²

Inside the courtroom, of course, this approach presents a problem: The rules of evidence make it difficult to get such information in front of the jury. For example, a defendant in a criminal trial may offer evidence only of a “pertinent” character trait.⁵³ In Heller's hypothetical, what is that trait? The trait of not killing one's wife? General peacefulness? Lack of greed, or at least lack of financial motive? Decency? Love for wife? Of not killing people in other situations where money could have been gained? It is hard to pin down.⁵⁴ The second problem is that this trait, however it is defined, can only be presented through testimony about Jack's reputation, or the witness' own opinion; specific acts may not be discussed.⁵⁵ Any storyteller knows that the specific act is much more vivid and memorable, much richer, for communicating a pertinent character trait. So, too, did the drafters of the Federal Rules of Evidence, who noted, “Of the three methods of proving character provided by the rule, evidence of specific instances of conduct is the most convincing.”⁵⁶ Given the lack of information, juries use

would have been with Hamlet as the romantic lead: Hamlet would have contemplated over his love for Juliet and tried to make peace with the Capulets, and “while these negotiations went on, Juliet, not suspecting that Hamlet loved her, would have been safely married to Paris. Then Hamlet could have brooded still more and cursed his fate.” *Id.* at 94. The action, the plot, results directly from the particular propensities of the protagonist.

51. Josephine Ross, “*He Looks Guilty*”: Reforming Good Character Evidence to Undercut the Presumption of Guilt, 65 U. Pitt. L. Rev. 227, 227, 229 (2004).

52. *Id.* at 227.

53. Fed. R. Evid. 404(a)(1).

54. Ross, *supra* n. 51, at 270.

55. Fed. R. Evid. 405.

be using whatever information it can to determine Jack's character. Going back to the teaching of Lajos Egri, we know that the jury wants to know *why* Jack might have killed Jill, and to do so they must know more about *who* Jack is.

Readers of Heller's article will see that here, regardless of the parties' inability to bring in character evidence, Jack will probably be acquitted. Jack can probably create reasonable doubt here. This is another way of saying that the jury has only polyvocal circumstantial evidence to use to convict, and the defendant's competing story is imaginable. In addition, Jack has going for him that jurors apparently have scruples and fears about convicting someone falsely.⁶⁸ That said, in an actual trial, I think that much of the jury's decision-making would rest on their speculations about whether Jack is the kind of man who could have done what he is accused of doing, and what sort of evidence there is for them to draw inferences about his character, and what sort of conclusions they draw about his character from their observations of him at trial.⁶⁹

IV. WHAT ABOUT FRAUDULENT OR ERRONEOUS SCIENTIFIC EVIDENCE?

Let us tweak Heller's hypothetical about Jack and Jill just a bit. Say there actually was none of Jack's skin under Jill's fingernails. Say there were no skin bits there at all. But the police *say* there were, and they say that DNA evidence "proves" it was Jack's skin. Or, let us assume there *was* skin but it was not Jack's, but the police say that it was, and police say that DNA testing "proves" it. According to my hypothetical, this can be either because the police are committing fraud or because there was a mistake in the lab.

Jack's story is the same as before, except that he never told anybody at any point that Jill had scratched him. *Because she did not.* Depending on which of my hypotheticals you use, she did not scratch Jack because she did not scratch anybody at all, or because she scratched someone else. In any event, now Jack's story does not offer the same "coverage" as the prosecution's story (which is the same as before). Jack's story fails to account for the "fact" that his skin was under Jill's fingernails. Under a worst-case scenario, let us assume that Jack cannot afford his own DNA testing, and cannot afford an expert to attack the work and conclusions of the prosecution's expert. So Jack is stuck with this "fact" that he knows is not true, but which he cannot disprove scientifically.

What can Jack do? He can tell a better story. He can tell his story more vividly.

68. Jack also has going for him that acquittal here would provide a jury with a happy ending, which is preferable to a sad one. Here, the prosecution needs to prove that what happened in the case was a criminal act, not an accident, and that Jack is criminal. The jury gets to write the ending that says not only that Jack is not a criminal, but that no crime even occurred. Sherry F. Colb, "*Whodunit*" Versus "*What Was Done*": *When to Admit Character Evidence in Criminal Cases*, 79 N.C. L. Rev. 939, 989–92 (2001).

69. Along these lines, let me suggest a theory for the O.J. Simpson verdict that goes beyond the alternative stories that Pennington and Hastie sketched. See Reid Hastie & Nancy Pennington, *The O.J. Simpson Stories: Behavioral Scientists' Reflections On The People of the State of California v. Orenthal James Simpson*, 67 U. Colo. L. Rev. 957 (1996). The jury may simply have been unable to picture O.J. Simpson as a heinous murderer. Unlike most defendants, O.J. Simpson had put his very likeable character in front of the jury—for almost thirty years. He was widely "known" as a phenomenally talented, Heisman Trophy-winning, college football player at the University of Southern California (local to the trial), as a star NFL player, and then as a

But he will have serious difficulties. He will try to show that he is credible, by speaking with certainty and with an honest demeanor (whatever that is—juries are notoriously bad at detecting lies⁷⁰). Jack and his attorney are going to have to search hard for other facts that might corroborate his story. Maybe he was examined medically after the murder and no scratches were found. Maybe his clothes were taken and none of his own blood was found on them. He might seek out evidence of police bias against him. Such investigation might work in some cases, and they support my thesis that a sensible story can defeat science. But for the sake of a harder challenge to my hypothetical, let us assume that this evidence is unavailable.

Ultimately, though, given the (dramatic) logic of storytelling, Jack will have to prove his own character. He will have to prove that he is *not the kind of person* who would kill his wife. The jury will have to believe him on this count if it is to discount the prosecution's forensic evidence as fraudulent or mistaken. He will also try to show that the prosecution characters (police, witnesses, criminalists) are bumbling or frauds, that is, that they have characters that could account for a mistaken or fraudulent test result, since Jack cannot prove conclusively that *this* result is flawed. The rules of evidence make these sorts of proofs hard if not impossible in general (we are talking, after all, about character-propensity evidence). So we see that it will be hard for Jack to tell a better story if he cannot test the evidence himself or get an expert to (somehow) expose the mistake and the fraud.

Jack will have to take the stand. He is the only surviving eyewitness. His direct testimony might overcome the prosecution's circumstantial evidence, though it has a serious weakness: It does not provide coverage of the DNA evidence. By taking the stand, Jack also exposes himself to impeachment under Rules 608 and 609, as well as with general evidence of bias or motive (which here would be the life insurance policy, which already will have come in during the prosecution's case-in-chief as motive evidence). If he is lucky to have been known as a "good husband," a "loving husband," or as "nonviolent," he might be able to get character witnesses to come testify for him. Again, this character testimony will be general testimony, concerning opinion and reputation; specific acts are not allowed. The testimony will be pallid in comparison to vivid testimony about specific acts. Jack will hope that there are no specific acts that the prosecution can bring up to contradict the witness's testimony. He will hope he never had a public fight with Jill, or perhaps with anybody else for that matter, at least that the prosecutor has a good faith knowledge of.⁷¹ Jack will also hope his character witnesses will not have their character for truthfulness attacked under Rules 608 and 609, because the attack will come in the form of specific acts. Again, any specific acts raised on cross-examination will be more vivid, more memorable than the pallid reputation and opinion testimony, and they may be the last word the jury hears on the subject. So the oft-mentioned rule of "recency" comes into play, too—the jury will remember these vivid acts, heard last—and raised dramatically on cross-examination—better than the foregoing general testimony about character.

70. Heller, *supra* n. 6, at 285–86.

71. See *Mitchell v. U.S.*, 335 U.S. 469 (1949).

In any event, Jack will have a tough time, not only because he cannot carry out a full frontal assault on the science, but because the rules of evidence constrain him from providing the jury meaningful information about his character, information that any storyteller in a non-legal context would present—indeed, evidence that would be *expected* by any audience. Even if the prosecution does not bring in negative evidence under Rules 608 or 609 against Jack or any of his character witnesses, the jury might still infer Jack is a bad character: The very fact that he is being prosecuted might make some jurors think the worst, so making it hard for him to overcome this impression is truly dangerous for him, an innocent defendant.⁷² It is a Kafkaesque nightmare.

V. REFORMS TO HELP DEFENDANTS TELL THEIR STORIES

Three reforms suggest themselves.

A. *Funding Expert Witnesses for Defendants with Plausible Stories of Innocence*

When a defendant who cannot afford his own expert has a plausible story of innocence, a judge should authorize funds for one. In many states, judges have discretion to grant or refuse such funding, because funds are limited. In some states, funding is categorically rejected if a defendant has private counsel, because the defendant is not indigent.⁷³ A rule could be created to the effect that when a defendant cannot afford testing or his own expert, the court should authorize funds when the defendant has a viable story of actual innocence. Defendants should be able to use inadmissible evidence to help convince the judge, such as character evidence that includes specific acts and stories showing that the defendant is “not the kind of person” who would have committed the crime. The defense attorney should explain how the defendant’s and prosecution’s stories will play out at trial; the defense attorney might also have to explain the Story Model and Heller’s work on direct and circumstantial evidence.

The reasoning behind this proposal is that if there is a plausible story of actual innocence, then there may well be some problem with the forensic science: It may be mistaken or even fraudulent. (If the defendant is innocent, then there is certainly a problem with the prosecution’s story: It is not true.) In effect, this reform would move the sort of dramatic intervention by the Innocence Project from post-conviction to pre-trial. The benefits of this move are obvious for the defendant, but there would also be benefits for the state. If a mistake is discovered, prosecutorial and police resources would be redirected. Public safety would be increased, because if the defendant is innocent, the investigation could be reignited with less effort than it could be years later, when the case is cold. The chances of catching the actual perpetrator would be

72. Ross states that the accusation causes the same sort of harm that defamation causes: “If incorrect accusations of criminal behavior destroy reputation when uttered by anyone, think how much more powerful an accusation by a government lawyer is, especially when the accusation is accompanied by a complaint or indictment.” Ross, *supra* n. 51, at 259 (citation omitted).

73. See e.g. *Moore v. State*, 841 A.2d 31 (Md. Spec. App. 2004) (no violation of indigent defendant’s rights where his request for funding of expert was denied, because “independent” lab tested DNA). See also *Finn v. State*, 558 S.E.2d 717 (Ga. 2002) (defendant’s rights not violated by denial of funds for his own expert); *People v. Leonard*, 569 N.W.2d 663 (Mich. App. 1997) (same).

increased.

Some defense attorneys would be loath to discuss their defense strategy in front of the prosecutor before trial; perhaps an *ex parte* proceeding could be permitted.⁷⁴ If no reform is created formally, defense counsel seeking funding to combat the prosecution's forensic science should make these arguments anyway in an attempt to have the judge exercise her discretion.

B. Update Federal Rules of Evidence 404 & 405

Given that juries decide cases according to the Story Model, and given that character is a critical element of any story, the rules should permit defendants great leeway to prove they are “not the kind of person” who would commit the crime they are charged with. As Josephine Ross cogently argues—for this and many more general reasons—Rules 404 and 405 (and similar state rules) should be updated to make it easier for criminal defendants to prove their own good character.⁷⁵ Ross presents many ways in which this could be accomplished: Give criminal defendants wide berth to present a great deal of information about who they are and their struggles, rather than limiting proofs to “pertinent” traits, which would humanize the defendant to a jury that might otherwise see him only as “the other”;⁷⁶ let defendants use specific acts rather than limiting their character evidence to reputation and opinion testimony;⁷⁷ limiting the prosecution's rebuttal evidence to criminal convictions of the defendant and some civil court judgments or settlements against him, such as a settlement of a sexual harassment lawsuit, but only “as long as a judge finds that it tends to disprove the testimony of good character witnesses. All other bad character rebuttal should be off limits.”⁷⁸

The reform most closely tied to storytelling is to let defendants prove their character by specific acts. As Ross colorfully argues:

Assuming that jurors do reason in terms of stories, the most persuasive evidence of good character would be vignettes from the life of the accused. Stories of the accused saving the life of a drowning man or stories of the accused helping her children with homework would carry meaning. In contrast, reputation evidence that “Ms. X has a reputation for good moral character” sounds like a form letter for an application to the Bar.⁷⁹

Specific acts are vivid and memorable. Because under the current rules the only specific acts about the defendant's character that the jury hears are *specific bad acts*, this reform would merely level the playing field. It does not give criminal defendants a new right. Understood in this way, requests by prosecutors for the power to bring in specific bad acts as part of their case-in-chief—which would be a new right, because prosecutors cannot even bring in reputation or opinion evidence of this sort in their case-in-chief—

74. Paul C. Giannelli, *Ake v. Oklahoma: The Right to Expert Assistance in a Post-Daubert, Post-DNA World*, 89 Cornell L. Rev. 1305, 1402 (2004) (supporting *ex parte* proceedings).

75. See generally Ross, *supra* n. 51.

76. *Id.* at 256. See also Foley & Robbins, *supra* n. 35, at 470 (quoting Richard K. Neumann, Jr., *Legal Reasoning & Legal Writing: Structure, Strategy, & Style* 322 (3d ed., Aspen 1998)).

77. Ross, *supra* n. 51, at 256.

78. *Id.* at 246.

should be rejected. Prosecutors can still rebut, as usual, using specific acts.⁸⁰

Given these understandings, it is worth revisiting the rationale the Federal Rules of Evidence drafters used in barring evidence of specific acts. The Advisory Committee Note states,

Of the three methods of proving character provided by the rule, evidence of specific instances of conduct is the most convincing. At the same time it possesses the greatest capacity to arouse prejudice, to confuse, to surprise, and to consume time. Consequently, the rule confines the use of evidence of this kind to cases in which character is, in the strict sense, in issue and hence deserving of a searching inquiry. When character is used, circumstantially and hence occupies a lesser status in the case, proof may only be reputation and opinion.⁸¹

This explanation is too pat. For one, that specific act evidence “possesses the greatest capacity to arouse prejudice, to confuse, to surprise, and to consume time” is no reason to bar it categorically. This capacity might obtain in some cases, but not in all—and the trial judge has ample tools at hand to limit prejudice, confusion, surprise, and time consumption if the need arises. For another, and more importantly for my thesis, if the Story Model of Juror Decision Making correctly describes a jury’s thought process, character in a criminal case *is* “deserving of a searching inquiry,” and does not, despite being circumstantial evidence, “occupy a lesser status in the case.”⁸² Character, as we have seen, takes on central importance in a criminal case.

This Article’s proposal would leave the criminal defendant the choice of whether to open up the character issue. In this sense it differs from an ingenious proposal by Sherry Colb that would permit the *prosecution* to present character evidence in its case-in-chief in certain kinds of criminal cases—that is, in a “what was done” case, but not in a “whodunit” case.⁸³ In a “what was done” case, an event occurred, and there is no dispute as to who was involved; the dispute is whether the event was a criminal act, or at least what crime occurred (e.g., murder or manslaughter).⁸⁴ On the other hand, in a “whodunit” case, a criminal act unquestionably occurred, but the defendant claims that he is not the person who did it—his defense is that the prosecution has the wrong

80. Ross argues that all of her proposals would merely level the playing field, even if they create a formal asymmetry between prosecution and defense:

In sum, asymmetry in favor of good character evidence is justified by the significant danger of unfair prejudice nascent in bad character testimony. Neither concern posed by good character evidence—jury nullification and lack of recency—are comparable harms. Harking back to the notion of the accusation itself as libel, there is no comparable need on the part of the prosecution to off-set the accusation. The need for good character evidence is not counterbalanced by any similar need for bad character evidence, while the risk of harm from bad character evidence is much greater.

Id. at 275.

81. Fed. R. Evid. 405 advisory comm. nn.

82. There is a certain irony here, of course: A common jury instruction teaches that circumstantial evidence is of equal worth as direct evidence. *See e.g.* 7th Cir. Fed. Civ. Jury Instr. 1.12 (2005) (Definition of “Direct” and “Circumstantial” Evidence).

83. Colb, *supra* n. 69, at 948–49 (describing these categories, and stating, “In short, most cases present either the ‘whodunit’ or the ‘what was done’ scenario, but not both.”). Colb came up with this helpful taxonomy. *Id.* at 943. Colb specifically does not address the methods of proving character (reputation, opinion, specific evidence), but only the “preliminary admissibility question.” *Id.* at n. 17.

84. *See id.* at 949, 950.

suspect.⁸⁵ The jury's job is to identify, not to interpret.

Character evidence would be particularly helpful for jurors deciding "what was done" cases, as we have seen: the Jack and Jill hypothetical is such a case (Was Jill's death murder or suicide (or accident)?). Colb argues that character evidence should be admissible by both sides in "what was done" cases, "[b]ecause all potential culprits are located in the courtroom in such cases, defendant and victim propensity evidence provides highly relevant data for choosing between the two competing versions of what happened."⁸⁶ If, for example, Jack is violent, or if he's a wife abuser, then the prosecution's story of murder is more likely to be true. On the other hand, if Jack is nonviolent, then his story is more likely to be true. It is also more likely to be true if Jill was suicidal. I don't agree with Colb, however, that the *prosecution* should be able to make the ultimate decision of whether the jury will consider character evidence in all "what was done" cases; the choice should remain with the defendant. There remains the danger that the prosecution's character evidence will be misleading, especially where the "what was done" prosecution arose because police jumped to the conclusion that the particular defendant, because of his past acts and character, must have committed a crime *when in actuality the event was not a crime*. For example, even if Jack were a wife abuser, he might be innocent; Jill still might have committed suicide (living with him might have been unbearable). Suspicious-by-nature police, however, might have envisioned the incriminating scenario once they learned Jack's character. Under Colb's proposal, apparently, the prosecution would be able to proceed without further evidence. I wonder, though, if the jury would seriously entertain the possibility that the police had jumped to conclusions. So despite that there is certainly probative value to the character evidence in a "what was done" case, it seems it would be substantially outweighed by the danger of unfair prejudice—perhaps especially if forensic scientific evidence is used against Jack (and especially if that evidence is mistaken or fraudulent). It's unclear, however, if a judge would apply Rule 403 to bar the evidence if Rule 404 were changed to permit it.⁸⁷

On the other hand, Colb would maintain the status quo in "whodunit" cases, because there the prosecution's use of character evidence would be more clearly misleading.⁸⁸ I agree. Here I should add that letting defendants introduce specific acts

85. *Id.* at 949.

86. Colb, *supra* n. 69, at 986.

87. See e.g. *U.S. v. Mound*, 149 F.3d 799, 800–02 (8th Cir. 1997) (Fed. R. Evid. 413, 414, and 415, which allow the prosecutor to present character evidence in sex crimes, are subject to Rule 403 balancing). Of course, a proposed rewrite of 404 to make character evidence admissible in "what was done" cases could be drafted to obviate 403 balancing (or to strengthen such balancing). See e.g. Fed. R. Evid. 609(a)(1) (requiring, for criminal defendant, a balancing test more protective than the 403 test when prior convictions are offered for admission against him); *id.* at 609(a)(2) (requiring admission of "evidence that any witness has been convicted of a crime" of dishonesty).

88. As Colb explained,

This disparity results from the absence within the courtroom of other suspects with similar traits or inclinations. Under these circumstances, for example, a violent character in a defendant charged with a violent crime is very damning, even though he is only one of countless violent people in the world who could have committed this offense. Compounding the gap between the apparent and actual relevance is the probability that the police selected the defendant in the first instance because of his prior criminal history. The apparently remarkable coincidence of his propensity and his status

would help some defendants in “whodunit” cases. A defendant (innocent or not) who has led a blameless life would be helped; the evidence would show that he is less likely to be the culprit. A defendant who has a criminal past could still choose to keep his character out of issue. Although an innocent defendant with a criminal past could not take advantage of the ability to present specific acts (because the prosecutor would rebut with specific, bad acts), he at least would not be subjected to what would amount to the *mistaken and misleading* use of this bad character evidence.⁸⁹

C. *Abolish Rule 609, and Modify Rule 608*

In addition, Rule 609 and similar state rules that allow impeachment of defendants’ and witnesses’ character for truthfulness with prior convictions should be abolished. These rules often keep defendants with prior records, even innocent defendants, from testifying at all.⁹⁰ Even if such a defendant testifies, it becomes almost impossible for him to tell a story, because he may be disregarded as an “unreliable narrator.” The judge herself might tell the jury as much. A common limiting instruction given when prior convictions are admitted under Rule 609 warns jurors that they may not use this evidence of specific acts to infer that the defendant committed the charged crime, but only to infer that he is not telling the truth. And if the jury does not heed the warning and goes ahead and makes the prohibited character-propensity inference, then the defendant faces a giant risk. The jury might construct a dramatically logical but false story based on the idea that this defendant is the type of character/person that could have committed the charged crime. When it becomes widely recognized that a defendant’s story—especially a *factually innocent* defendant’s story—is necessary for his defense, then efforts to abolish this rule might gain traction.

Rule 608 would remain, as a rule more narrowly tailored toward establishing the defendant’s character for truthfulness, given that it admits acts bearing on that issue only.

as a defendant turns out to be no coincidence at all.

Colb, *supra* n. 69, at 985.

89. In her article, Colb also sets forth a fascinating hypothesis about why “what was done” cases are difficult for prosecutors to win, which, like Heller’s work regarding circumstantial and direct evidence, is worthy of serious consideration by prosecutors and criminal defense attorneys. *See id.* at 989–992. Colb suggests that jurors, who under the Story Model create the ending of the stories proffered by competing advocates at trial, choose the happy ending whenever they can. (In this regard they resemble many Hollywood producers.) In a “whodunit” case, the jury is apt to convict, because it knows a crime was committed, and it knows that if it does not convict, then the story ends sadly: a crime for which there has been no retributive justice, and, perhaps worse, a crime whose perpetrator is still at large, ready to strike again. On the other hand, convicting is a happy ending that wraps things up neatly. In a “what was done” case, acquittal is the happy ending. It means that there was no crime, after all, and that the defendant is not a criminal. For example, a jury would rather believe the defense story that Jack was a loving husband who fought to the end to try to save his tragically suicidal wife, Jill, rather than the prosecution story that he deviously murdered her by force-feeding her lithium, holding her mouth shut while she struggled against him. In addition, the jury will happily avoid the angst that could attend condemning Jack to life in prison or even death: What if he was innocent, and the jurors compounded the tragedy of his failing to save his wife from suicide? If Colb and Heller are correct about the inherent advantages of certain types of cases over others, then Jack seems very likely to be exonerated: the evidence is circumstantial rather than direct (Heller), and exoneration is the happiest of all endings (Colb). The jury will walk out feeling good, albeit, perhaps, wearing rose-colored glasses.

90. John H. Blume, *The Dilemma of the Criminal Defendant with a Prior Record—Lessons from the Wrongfully Convicted*, ___ J. Empirical Leg. Stud. ___ (forthcoming 2008) (available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1014181).

(With 609 gone, 608 would of necessity incorporate crimes that fall under this category, broadly described as “*crimen falsi*.”) But Rule 608 should be modified according to the overall framework I have proposed in this Article. The testifying defendant should be able, on direct, to present evidence of good character for truthfulness; it should be understood as a “pertinent trait” under Rule 404. Indeed, a fair reading of Rules 608 and 609 suggests that character for truthfulness is always a pertinent trait for any testifying witness, especially a criminal defendant—after all, if it’s not, then why do the current rules (608 and 609) allow such searching cross-examination concerning this trait? My proposed update of Rule 405, above, would also affect Rule 608 in that it would allow the testifying defendant to use specific acts on direct to show his character for truthfulness.

Such a modification would prevent the current unfair situation, where a defendant is not permitted to offer evidence of his own truthfulness on direct, and then is attacked on cross-examination with specific acts bearing on this trait, but cannot respond by presenting contrasting, specific acts. I would also suggest that Rule 608 be modified to permit such cross-examination only where the defendant has specifically put his own character for truthfulness into play. (The current rule assumes he does so simply by testifying.) The jury most likely already believes that the defendant, on trial for his liberty and perhaps even his life, has serious incentive to lie, and it is likely to consider his testimony with a high dose of skepticism, even without prompting by a prosecutor’s Rule 608 cross-examination. Indeed, historically, criminal defendants were not even permitted to testify, because the likelihood that they would lie was seen as overwhelming.⁹¹

Reforming the rules of evidence to permit meaningful storytelling makes sense. The Federal Rules of Evidence were enacted several years before The Story Model was developed and widely accepted. They were created (I say created, but many of the rules, of course, simply implement longstanding common law rules) based on an understanding of jury decision-making as a probability based method. In any event, the rules seek to *promote* such logical, cognitive decision-making, and to *prevent* emotional decision-making.⁹² They are also, however, created to promote fairness.⁹³ If the Story Model is correct, and if it is correct that jurors’ desire to learn more about the defendant’s character, as it is a crucial element of any story, then it is beyond doubt that the rules of evidence make it harder for jurors to come up with accurate stories. Lacking facts, juries end up inferring (speculating), perhaps wildly, about a defendant’s character. Updated rules would recognize that juries need information about the defendant to help them construct their stories as accurately as possible.

Changing these rules would be an uphill battle, but these changes might be do-able, perhaps even more do-able than the direct attacks on forensic science mentioned at

91. George Fischer, *Evidence* 326 (Foundation Press 2002).

92. See Fed. R. Evid. 403 advisory comm. nn. (rule designed to exclude evidence that would, inter alia, “induc[e] decision on a purely emotional basis”); see also Pennington & Hastie, *supra* n. 5, at 519 (“From clues and fragments appearing in the rules of evidence, appellate decisions, and law texts, we can infer a common image of a ‘reasonable man’ who is capable of rough-and-ready logical deductions, but who is also likely to be prejudiced, swayed, or diverted by sentiment-evoking evidence.”).

the beginning of this essay. These reforms also would be less expensive than the direct attacks. The difficulty is that such reform would have to come from legislatures, and Congress and state legislatures do not now seem to be in a pro-criminal defendant mood. The way to accomplish these reforms politically is to show how they might help *innocent* defendants. There seems to be a developing understanding (emerging narrative?⁹⁴) of the plight of the wrongly convicted that can help bring this about. (This narrative might include understandings of how prosecutorial junk science and forensic scientific mistake and fraud have convicted innocent defendants.) An understanding that we need to add is one grounded in the public's self-interest: When a factually innocent defendant is convicted, the actual perpetrator remains at large. We could also argue to courts that the obstacles that these rules present to defendants' storytelling is so significant that it violates U.S. or state guarantees of due process, as well as the presumption of innocence.⁹⁵

These reforms would help a wrongly charged defendant tell his story of innocence.

VI. CONCLUSION

I have no illusion that my suggested reforms alone can protect all criminal defendants from mistaken and fraudulent science, and from unfair applications of judicial discretion under *Daubert*. My reforms are indirect attacks and should be made concurrently with the direct attacks suggested by other attorneys and scholars such as Peter Neufeld.

That said, we should understand that defendants, especially factually innocent ones, are not powerless against faulty or fraudulent forensic scientific evidence. Studies of juror decision-making suggest that a persuasive story, especially a story told with direct evidence, can repel the circumstantial scientific evidence. Perhaps lawyers should have less fear of bad science. After all, lawyering is both an art and a science, and until there is a science that can somehow transport jurors back to the time and place of the crime, read the defendant's mind, and vividly present this information to a jury, art will be capable of defeating science, especially when the art is grounded in a true story of factual innocence.

94. For example, a 2002 play, *The Exonerated*, which was turned into a 2005 Court TV, movie, depicted six death row inmates who were exonerated after showing they were wrongfully convicted. See CourtTV, *The Exonerated*, <http://www.courtstv.com/movie> (accessed Mar. 31, 2008); *The Exonerated*, <http://www.theexonerated.com> (accessed Mar. 31, 2008). Debuting in January, 2006 on ABC, there was a TV drama series, *In Justice*, where the protagonist had turned his back on his lucrative corporate law practice and spent his own money to form the "National Justice Project," which reexamined jury verdicts to exonerate the wrongfully convicted. According to MSN, the program "was clearly inspired by recent instances wherein a number of innocent people sentence to death or life imprisonment had been freed with the help of concerned legal advocacy groups and new DNA evidence." See MSN, *In Justice*, <http://tv.msn.com/movies/movie.aspx?m=2062863&mp=syn> (accessed Mar. 31, 2008).

95. See Ross, *supra* n. 51, at 274–75 (citing Katherine Goldwasser, *Vindicating the Right to Trial by Jury and the Requirement of Proof Beyond a Reasonable Doubt: A Critique of the Conventional Wisdom about Excluding Defense Evidence*, 86 Geo. L.J. 621, 635 (1998)). Storytelling theory can be employed further in these efforts. See Blume et al., *supra* n. 7, at 1099–1112 (arguing that defendants should be able to tell a story of third party guilt and setting forth standards for when they should be permitted to do so; not permitting defendants to do so violates their due process rights to put on a defense); John B. Mitchell, *Evaluating Brady Error Using Narrative Theory: A Proposal for Reform*, 53 Drake L. Rev. 599 (2005) (using narrative theory to assess whether prosecution's failure to turn over exculpatory evidence was prejudicial).

