THE “ELASTICITY” OF DNA EVIDENCE?
WHEN PROSECUTORIAL STORYTELLING GOES TOO FAR

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I. INTRODUCTION

Out of context, exculpatory DNA evidence found at a crime scene may seem to have one meaning: the defendant did not commit the crime. At the very least, exculpatory DNA evidence would seem to indicate that there may not be probable cause to charge a suspect or that the prosecutor cannot not prove “beyond a reasonable doubt” that the defendant committed the crime. However, there have been cases in which defendants have been convicted of crimes despite the existence of exculpatory DNA evidence. Given the scientific reliability of DNA evidence and the high level of proof required to convict a criminal defendant, why do these convictions happen? This Note explores the potential weakness of exculpatory DNA evidence when contradicted by confession evidence, the power of prosecutorial storytelling in the courtroom, and the improbable theories used to override


2 See generally McMurtrie, supra note 1 (discussing cases in which defendants were convicted despite exculpatory evidence).
exculpatory DNA, as well as the implications of these issues in light of a recent psychological study.

In a 2008 psychological study, *The ‘Elasticity’ of Criminal Evidence: A Moderator of Investigator Bias*, legal psychologists demonstrated that different types of evidence vary in their “elasticity,” or “the extent to which subjective interpretations can be justified.” The results of this study show that DNA evidence offers little elasticity (or is generally not prone to subjective interpretations). Thus, superseding DNA evidence is challenging. Contrastingly, photo evidence was considered moderately “elastic,” and witness evidence was found to be “highly malleable and sensitive to contextual influences.” Indeed, studies show that juries are more persuaded by DNA than any other type of evidence, and DNA is a powerful tool used to exonerate wrongfully convicted individuals. But what happens when DNA evidence (the most persuasive form of scientific evidence) conflicts with a defendant’s confession (the most persuasive form of human testimony)? In several cases, juries have convicted defendants despite exculpatory DNA evidence, in part due to the defendants’ confessions and prosecutors’ theories reconciling the contradictory evidence, implausible as those theories may seem.

In the recent psychological study, *When Self-Report Trumps Science: Effects of Confessions, DNA, and Prosecutorial Theories on Perceptions of Guilt*, Sara C. Appleby and Saul M. Kassin analyzed people’s perceptions of guilt when presented with the following: a defendant who had confessed to a crime, DNA evidence exculpating that defendant, and a prosecutor’s theory explaining the contradictory evidence. Although the study confirms

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4 Id. at 1255.

5 Id. at 1248.

6 Id. at 1245.

7 See Joel D. Lieberman et al., *Gold Versus Platinum: Do Jurors Recognize the Superiority and Limitations of DNA Evidence Compared to Other Types of Forensic Evidence?*, 14 PSYCH., PUB. POL’Y, & L. 27, 52–53 (2008) (finding that public jurors rate DNA evidence as more accurate and persuasive of a suspect’s guilt than other scientific evidence or witness testimony).

8 See DNA Exonerations in the United States, INNOCENCE PROJECT, https://www.innocenceproject.org/dna-exonerations-in-the-united-states (last visited May 28, 2018) (showing the number of DNA exonerations since 1989 and statistics relating to these exonerations).


10 Id. at 137.

11 Id. at 136.
that people are more persuaded by DNA than by confessions, participants in the study were three times more likely to convict when a prosecutor offered an explanation of why the exculpatory DNA conflicted with the confession than when no explanation was presented.\textsuperscript{12} These results demonstrate the persuasive power that prosecutors have when framing contradictory evidence and the potential “elasticity” of DNA evidence.\textsuperscript{13}

Although prosecutorial storytelling in opening statements and closing arguments is not supposed to be considered evidence by juries, jurors are influenced by these stories, even in cases when DNA unequivocally excludes the defendant.\textsuperscript{14} This Note aims to address the juror decision-making process when presented with this type of contradictory evidence and the implications of allowing prosecutors to explain away DNA evidence with implausible stories in light of the study cited here and several recent exonerations. Part I of this Note will provide background information on prosecutorial persuasion in the courtroom and juror perceptions of DNA and confession evidence. Part II will describe several recent cases in which prosecutors used improbable explanatory theories to reconcile contradictory evidence. Part III will discuss the method of Appleby and Kassin’s study and its finding. Finally, Part IV will address solutions to combat unreliable confession evidence and mechanisms that could prevent cases like these from going to trial in the first place.

II. BACKGROUND

To acknowledge the implications of Appleby and Kassin’s study, it is first important to understand how jurors perceive human testimony (also known as self-report evidence) and scientific evidence, and how prosecutors can manipulate conflicting evidence. This section will provide background on prosecutorial storytelling, confessions, DNA evidence, and how each is perceived in the courtroom.

A. PROSECUTORIAL STORYTELLING

Criminal trials are “organized around storytelling.”\textsuperscript{15} Attorneys present their stories through opening statements, exhibits, witnesses, and closing arguments. In doing so, each side creates a narrative, seeking to fit large

\textsuperscript{12} Id. at 133.
\textsuperscript{13} Id. at 136–37.
\textsuperscript{14} Id. at 136–37.
\textsuperscript{15} W. LANCE BENNETT & MARTHA S. FELDMAN, RECONSTRUCTING REALITY IN THE COURTROOM: JUSTICE AND JUDGMENT IN AMERICAN CULTURE 3 (2014).
amounts of information and evidence into a format that jurors can understand and process. These narratives do not necessarily strive to find the truth of what happened or explore various interpretations of the evidence; rather, they provide parties “with a means of reconstructing an incident to their best advantage and presenting the reconstruction to an audience who will judge it according to its plausibility.”

Stories are particularly compelling in the courtroom for several reasons. First, they provide a comprehensible context for large amounts of information. Without context, evidence used in trials is often ambiguous. By framing this evidence with the social context of a story format, attorneys are able to transform even ambiguous evidence into stories that allow jurors to evaluate that evidence. Even without this ambiguity, the sheer quantity of information presented to jurors at trial can cause information overload problems. A story format provides structural categories for jurors to fit evidence, allowing evidence presented at trial to gain “coherence through categorical connections to story elements such as the time frames, the characters, the motives, the settings, and the means.” This structural categorization of evidence may assist jurors in processing so much information. However, instead of accurately assessing the evidence, jurors may actually be evaluating the persuasiveness of attorneys’ stories when making judgments.

Second, stories transport the listener. When a listener is transported, “all mental systems and capacities become focused on events in the narrative.” Researchers developed a scale to measure this absorption into

16 Id. at 7.
17 Id. at 160.
18 Id.
19 Id. at 7.
20 See id. at 5–7 (explaining that behaviors and actions are ambiguous absent social context and describing how evidence gains coherence through the use of story elements).
21 Id. at 7.
22 See id. (explaining that “stories solve the problems of information load in trials by making it possible for individuals continuously to organize and reorganize large amounts of constantly changing information.”).
23 Id.
24 Id. at 8.
25 Id. at 6–8.
26 Sonya Dal Cin et al., Narrative Persuasion and Overcoming Resistance, in RESISTANCE AND PERSUASION 175, 181 (Eric S. Knowles and Jay A. Linn eds., 2004).
a narrative, describing the “major dimensions of transportation:”

cognitive involvement (how mentally involved in the narrative the audience is); emotional involvement (how the narrative emotionally affected the audience); suspense (whether the audience wanted to learn how the narrative ended); focus or lack of awareness (whether the audience had other things going on in the room on their minds); and mental imagery (whether they had a vivid image while listening to the narrative). The trial format forces jurors to be highly mentally involved with each side’s narrative because they are completing the demanding task of processing information in a way that conforms to the legal framework of the case. Jurors may become emotionally involved, especially if attorneys use sympathetic stories to frame their narratives. Finally, distractions in the courtroom context are limited; these factors create a perfect platform for transportation. Research shows that the more people are “transported” by a story, the more they are unable to see errors or illogical arguments in that story. Thus, in a courtroom, where jurors are using all mental capacities focusing on each side’s narrative, attorneys are in a prime position to persuade jurors, even when using flawed arguments.

Finally, stories have the potential to persuade jurors because they can reconcile ambiguous or contradictory evidence. Research shows that the way a story is told—through the use of symbols, structural elements, details, and connections—heavily influences the story’s perceived credibility, regardless of whether the story is actually true. Jurors will make judgments “based on the overall completeness, consistency, and adequacy (in other words, the degree of ambiguity) of story connections.” Thus, in criminal trials with contradictory evidence, jurors may rely heavily on how attorneys frame that information in a way that connects the dots between missing or ambiguous evidence. When certain evidence cannot be reconciled with the overall story structure, jurors may believe they are being deceived or that the story is inadequate. Therefore, a story that uses all the evidence in a way that reconciles inconsistencies will often be considered more persuasive to jurors.

Nonetheless, fitting ambiguous or contradictory evidence into a cogent

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28 Dal Cin et al., supra note 26, at 181 (citing Green & Brock, supra note 27).
29 Dal Cin et al., supra note 26, at 181.
31 Dal Cin et al., supra note 26, at 182.
32 BENNETT & FELDMAN, supra note 15, at 81–82.
33 Id.
34 Id. at 7–8.
story structure does not necessarily require that those stories be factual or unbiased. When listeners are transported by a story, which they inevitably are in the context of a courtroom, they are less likely to see its flaws.\textsuperscript{35} Additionally, people have a tendency to accept new information as true and only evaluate its accuracy if they are motivated to do so.\textsuperscript{36} Given the importance of reaching an accurate verdict and the implications of wrongfully convicting an individual, a criminal trial may be a situation in which people are particularly motivated to evaluate the accuracy of a story. However, if one attorney’s story allows jurors to accept all of the evidence and is a “rationally justified”\textsuperscript{37} interpretation of that evidence, it may be easier for jurors to accept that story than it would be for them to decide which strong pieces of evidence to accept or reject.\textsuperscript{38}

The storytelling nature of the criminal courtroom provides prosecutors with wide discretion when it comes to explaining and interpreting evidence. Although attorneys’ arguments are not supposed to stray from facts introduced in evidence, facts of common knowledge, or logical inferences based on the evidence,\textsuperscript{39} attorneys often use witness questioning and closing arguments to explain away unfavorable inconsistencies.\textsuperscript{40} These explanations are permissible so long as they are based on specific facts in evidence.\textsuperscript{41} Thus, attorneys are permitted to draw inferences and make arguments that are illogical or unlikely as long as they are based on facts in evidence.\textsuperscript{42} Judges instruct juries that these arguments do not themselves constitute evidence, but research shows that opening statements provide jurors with a framework to process information, and closing arguments affect jurors’ decision-making processes.\textsuperscript{43} Thus, the wide discretion given to attorneys in their opening statements and closing arguments increases the

\textsuperscript{35} Dal Cin et al., supra note 26, at 182.


\textsuperscript{37} Ask et al., supra note 3, at 1247.

\textsuperscript{38} Appleby & Kassin, supra note 9, at 137.

\textsuperscript{39} J. ALEXANDER TANFORD, THE TRIAL PROCESS: LAW, TACTICS AND ETHICS 382 (2012).

\textsuperscript{40} Appleby & Kassin, supra note 9, at 132.

\textsuperscript{41} TANFORD, supra note 39, at 383.

\textsuperscript{42} Id.

persuasiveness of otherwise implausible theories.

Although people are generally unwilling to accept stories that seem too extreme, attorneys are able to persuade with an extreme argument so long as jurors remain relatively unaware of its extremity. An implausible story that accepts all of the evidence as true may be extreme or unlikely, but it could certainly seem more acceptable to a juror when its extremity is hidden by the fact that it reconciles all of the evidence. Accordingly, although “DNA evidence is associated with a relatively low degree of elasticity,” because there are few plausible error factors, DNA evidence remains malleable to the extent that prosecutors can explain it in a way that resolves contradictions and fits with their overall story.

By giving prosecutors wide discretion throughout the entire trial process—from the prosecutor’s decision to charge an individual (a “virtually unreviewable” decision) to the leeway given to attorneys through their opening statements and closing arguments—we are occasionally faced with cases with exculpatory DNA that still lead to convictions. Juries are thought to be a check on this process, but given the persuasiveness of storytelling, the adversarial nature of the courtroom, and the difficulty jurors have accepting contradictory evidence, there will inevitably be cases where far-fetched stories are deemed more acceptable and persuasive than the truth.

B. PERCEPTIONS OF CONFESSIONS AND DNA EVIDENCE

Prosecutorial storytelling can also be convincing in cases with both DNA evidence and confessions that contradict that evidence because juries have a hard time properly evaluating defendants’ confessions. While almost 90% of the general population believes DNA is the most persuasive evidence of guilt, confessions are found to be the most compelling form

44 See Dal Cin et al., supra note 26, at 179 (explaining that “one should ideally seek to present an argument that is fairly extreme without making listeners aware of its extremity” by “presenting a message that claims to support a generally acceptable position, but that actually supports a more extreme and possibly objectionable position.”).
45 Ask et al., supra note 3, at 1247.
46 See Appleby & Kassin, supra note 9, at 137 (concluding that the existence of a story reconciling contradictory DNA and confession evidence can cause jurors to discount exculpatory DNA evidence).
47 McMurtrie, supra note 1, at 869.
48 Appleby & Kassin, supra note 9, at 129.
of self-reported evidence and can play a definitive role at trial. Although research shows that people can generally distinguish between voluntary and coerced confessions, the presence of any confession—even a coerced or inadmissible confession—has been shown to increase the conviction rate.

Juries rely heavily on confessions partly because people tend to trust the self-reports of others; this is called a “truth bias.” Truth bias “occurs even when there is no evidence to support the claims made within a statement and even when a statement is clearly labeled as false.” Further, even when asked to evaluate the self-reports of others, studies show that people are not adept at distinguishing when a person is telling the truth or lying. People have an even greater tendency to trust self-incriminating statements. This is because most people cannot imagine why a criminal suspect would confess to a crime that said suspect did not commit, and also believe that they themselves would not falsely confess under almost any circumstances. Although it is true that guilty people confess more often than innocent people, innocent suspects are more likely to waive their rights and speak too freely with investigators, which increases their risk of self-incrimination. Because innocent suspects do not see an interrogation as a threat (since they know they are innocent), they do not realize that the interrogation process itself could elicit a false confession by breaking them down in a way that “diminishes their physiologic resources.”

50 Appleby & Kassin, supra note 9, at 128.
51 Id. at 136–38.
53 Appleby & Kassin, supra note 9, at 128.
56 Id.
57 Henkel et al., supra note 49, at 570 (“While over 60% [of respondents] conceded that the use of physical torture could lead them to falsely confess, other facts were deemed by the majority as “very unlikely” or “never” to lead to them personally falsely confessing, including covering for someone else, a need for notoriety or recognition, the overall stress of the interrogation, or to receive leniency or a lesser charge.”).
59 Id.
overestimation of their own ability to resist falsely confessing, confessions remain the most persuasive form of self-report evidence.

Importantly, confessions are persuasive because they contain “content cues commonly associated with truth telling.” Indeed, an analysis of twenty false confessions concluded that all twenty of them “cited the time and location of the crime,” “contained visual details about the crime and the crime scene,” and “referenced the victim and described the victim’s behavior before, during, and after the crime.” Additionally, many of the false confessions analyzed contained information about a motive and expressions of remorse, some contained apologies, and half “explicitly asserted that [they were] given voluntarily.” When a confession recounts these details, it is deemed more credible, and people feel more confident that the defendant is guilty. Confessions often contain accurate details about the crime because those details were transferred to the confessor during the interrogation process, whether purposefully or inadvertently by the interrogator. Without knowing the frequency of false confessions or the reasons why people are able to give detailed false confessions, jurors cannot adequately assess confession evidence and can be persuaded by a confession even when other evidence exculpates the defendant. Currently, U.S. courts differ in their willingness to admit expert testimony aimed to help juries assess confession evidence.

60 Appleby & Kassin, supra note 9, at 128.
61 Appleby et al., supra note 55, at 117.
62 Id. at 117–18. Additionally, according to this analysis:
95% of the statements referenced co-perpetrators, witnesses, and other actors…; 80% described what the victim said…; 75% described the victim’s face, hair, body, clothing, jewelry, or other aspects of appearance…; and 45% described the victim’s mental or emotional state… 85% reflected on their own thoughts and feelings at the time of the crime. … Additionally, 80% described their motive for committing the crime. … Interestingly, 65% of the confessions contained a minimization theme that psychologically justified, excused, mitigated, or externalized blame for the crime in question. … An astonishing 40% of the confessors expressed sorrow and/or remorse about having committed the crime for which they were factually innocent; 25% outright apologized.
63 Id. at 115–17.
64 Id. at 119.
65 Id. at 125.
66 Id. at 138; David A. Perez, The (In)Admissibility of False Confession Expert Testimony, 26 Touro L. Rev. 23, 25–26 (2012) (explaining that some courts – such as New York, Washington, and Ohio state courts – admit expert testimony when it discusses a particular defendant’s mental condition. Others – such as Indiana, Nebraska, Virginia, and Michigan state courts – will allow experts to testify concerning the “elements of a false confession present in the suspect’s
Luckily, the presence of DNA evidence can provide a check on our tendency to give undue weight to confessions. Recently, advances in DNA technology have made it possible to test biological material that we were not able to test at the time of many defendants’ convictions. DNA exonerations now account for approximately 358 of 2,236 total exonerations in the United States, “expos[ing] deep flaws in our legal system, including misconduct by the police and prosecutors and egregious mistakes made by witnesses and forensic scientists.” One of these flaws is the interrogation process and its tendency to produce a substantial number of false confessions. In fact, false confessions were a contributing factor to wrongful convictions in more than 25% of all DNA exonerations reported by the Innocence Project. Even so, police, prosecutors, jurors, and judges continue to rely heavily on confessions and the interrogation process.

Ideally, DNA evidence is found before charging a suspect, and a false confessor is released from custody. However, DNA evidence is sometimes not found or tested until after a defendant is convicted. Even when exculpatory DNA is found before trial, prosecutors will still sometimes proceed with charges. When post-conviction exculpatory DNA is found, in 88% of cases, prosecutors join defense attorneys in moving to vacate the convictions. However, exoneration data shows that prosecutors have opposed these motions in 12% of those cases, even despite DNA matches to another suspect in 4% of those cases. When challenging post-conviction exculpatory DNA, prosecutors argue either that the exculpatory DNA does not prove innocence in light of other evidence of guilt, or they create new

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67 Appleby & Kassin, supra note 9, at 128.
68 INNOCENCE PROJECT, supra note 8.
71 Appleby et al., supra note 55, at 125.
72 Appleby & Kassin, supra note 9, at 127.
73 Appleby et al., supra note 55, at 111–13.
74 Appleby & Kassin, supra note 9, at 128.
75 Id.
77 Id.
theories of how the crime occurred. Why prosecutors sometimes fight post-conviction evidence so adamantly depends on each case. Some legitimately believe the new evidence is not exonerating. But legal scholars looking at the issue suggest that prosecutors’ concerns about their political future and a culture that values winning over justice also come into play. “They are attached to their convictions . . . and they don’t want to see their work called into question.”

Although scholars have argued that acquittals based only on DNA evidence (especially exculpatory DNA evidence) are justified, the presence of a detailed confession can still cast doubt on the meaning of exculpatory DNA in many people’s minds. Thus, although DNA evidence generally does override confession evidence, confessions’ perceived reliability by attorneys, jurors, and even judges can sometimes thwart exculpatory DNA’s persuasiveness.

III. RECENT EXONERATIONS INVOLVING CONTRADICTORY CONFESSION AND DNA EVIDENCE

The Center on Wrongful Convictions has reported 19 known cases in which a defendant confessed and was convicted despite exculpatory DNA, with additional cases having been reported since then. In rape-murder cases, a common prosecutorial theory used to override exculpatory DNA in the form of semen is known pejoratively as “the unindicted co-ejaculator” theory. The story advanced by prosecutors in these cases is that the victim had prior consensual sex with an unknown male; afterward, the defendant raped her, failed to ejaculate, and killed her. Prosecutors have also argued necrophilia, conspiracy, and other questionable theories in order to discount exculpatory DNA. This section will address several recent cases in which

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79 Martin, supra note 70.
81 Milhizer, supra note 80, at 9–13.
82 Appleby & Kassin, supra note 9, at 128.
83 McMurtrie, supra note 1, at 855.
84 Appleby & Kassin, supra note 9, at 127.
85 McMurtrie, supra note 1, at 856.
these improbable prosecutorial theories were used to explain away DNA evidence.

A. Juan Rivera

One case that has received considerable media attention is *People v. Rivera*. In 1992, Juan Rivera (a “19-year old with a ninth-grade education and a history of psychological problems”) confessed to the rape and murder of an eleven-year-old girl in Illinois. Although Rivera maintained his innocence throughout three days of interrogations and sleep deprivation, on the fourth day of interrogations, he signed a three-page statement confessing to the crime. Because the details of Rivera’s statement were inconsistent with facts gathered during the investigation, police were then instructed by the State Attorney to obtain a new statement in order to resolve the inconsistencies. Police then asked Rivera questions about certain parts of his initial confession that they thought were untrue. Rivera then changed his statement and was charged with capital murder. He was convicted in 1993.

In 2004, Rivera requested post-conviction DNA testing, and the semen found at the scene excluded him from being at the scene of the crime. However, at Rivera’s third trial, in 2009, the prosecutor again obtained a conviction. The State explained the DNA discrepancy using the unindicted co-ejaculator theory despite offering no evidence that the 11-year-old victim was sexually active or in a relationship with another man. In 2012,}

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87 Martin, supra note 70.
88 McMurtrie, supra note 1, at 861–62.
89 Id. at 861.
90 Id. at 861–62.
91 Id. at 862.
92 Id. at 862.
93 Id.
94 Id. at 858.
95 Id.
96 Id.
97 Id. at 863; Martin, supra note 70. According to Martin, although the victim’s sister testified at Rivera’s 2009 trial stating that she and her sister were forced to perform oral sex when they were eight years old and that they had shown each other how to masturbate, prosecutors did not present other evidence that the victim was sexually active. Id. Per a 2011 interview, the victim’s sister stated that she still believed Rivera had killed her sister despite the exculpatory DNA evidence, citing his confession. Id. She said: “Why would you confess? ... If I am getting charged with murder, I am not going to fess to something I did not do and then explain the whole night and how
the Illinois Court of Appeals overturned Rivera’s conviction, explaining that the state’s theories were “highly improbable” and distorted the evidence “to an absurd degree.” The court stated that “the DNA evidence provides no support to the State’s theory that [the] defendant was the individual who committed the offense beyond a reasonable doubt; rather, the DNA evidence embedded reasonable doubt deep into the state’s theory.” Further, the Court acknowledged that false confessions do occur, often as a result of the “abusive and coercive interrogation” tactics to which Rivera was subjected. Rivera was awarded a $20 million settlement in 2015 for the government’s misconduct in his case and appeals.

### B. Jeffrey Deskovic

Jeffrey Deskovic was convicted in 1991 at the age of 17 for the rape and murder of his 15-year-old classmate. Deskovic became a suspect after he was late to school the day the victim disappeared, and he spoke to police eight separate times between December 1989 and January 1990. He agreed to undergo a polygraph examination, believing that if his name was cleared, he could help the police find the perpetrator. After “six hours, three polygraph sessions, and extensive questioning by detectives” with no lawyer or parents present, one of the detectives falsely told Deskovic that he had failed the polygraph test. Deskovic then confessed to the crime, but before trial, DNA testing showed that Deskovic’s DNA did not match the semen found at the scene. Although police had told Deskovic that he would be cleared as a suspect if his DNA was not a match, the prosecution went to trial using his confession as their main evidence. The prosecution succeeded in convicting Deskovic after arguing that the victim may have
been “sexually active”\textsuperscript{108} and “romantically linked to somebody else”\textsuperscript{109} with whom she could have had consensual sex before Deskovic raped and murdered her in a jealous rage.\textsuperscript{110}

In 2006, the Innocence Project took Deskovic’s case and tested the DNA evidence with newer technology.\textsuperscript{111} The semen was matched the DNA of a convicted murderer, Steven Cunningham, who confessed to the crime after Deskovic’s conviction was overturned.\textsuperscript{112} After filing “federal civil lawsuits against the various municipalities and officials involved in his conviction,” Deskovic was awarded a $13 million judgment in 2011 and a separate $41 million judgment in 2014.\textsuperscript{113}

\textbf{C. BILLY WAYNE COPE}

In 2001, Billy Wayne Cope was arrested for the murder of his 12-year-old daughter, who was found strangled and sexually assaulted in her bedroom.\textsuperscript{114} After maintaining his innocence, he asked if he could undergo a polygraph examination.\textsuperscript{115} Despite passing the polygraph, police told him he had failed, and Cope later confessed to the crime.\textsuperscript{116} In two subsequent confessions, Cope said his prior statements were incorrect and changed the details of his confession, many of which did not match the other evidence.\textsuperscript{117} Semen found at the scene was tested and matched the DNA of a convicted burglar and serial rapist, James Sanders.\textsuperscript{118} Although Cope’s confession was induced by the police and did not match the facts of the crime, and although

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\textsuperscript{109} Garrett, supra note 108, at 1055.
\textsuperscript{110} Id.; INNOCENCE PROJECT, supra note 102.
\textsuperscript{111} INNOCENCE PROJECT, supra note 102.

\textsuperscript{112} Id.
\textsuperscript{115} Id. at 179.
\textsuperscript{116} Id.
\textsuperscript{117} Id. at 179–80.
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Sanders admitted he did not even know Cope. In 2013, a 3-2 vote of the South Carolina Supreme Court upheld Cope’s conviction, and in 2014, the United States Supreme Court refused to hear his case. Although Cope died in prison in 2017 and his conviction was never overturned, his case demonstrates the weight a confession can carry despite exculpatory DNA evidence.

D. CENTRAL PARK JOGER & DIXMOOR FIVE

In the infamous 1989 Central Park Jogger case, five teenage boys were convicted of assaulting and raping a woman. The boys went through interrogations lasting up to twenty-eight hours and subsequently confessed to being involved in the attack, but their statements were inconsistent and none of the boys confessed to actually raping the victim. Despite the fact that semen and pubic hair found at the crime scene excluded each of the teenagers, they were all convicted. The prosecutor argued that the DNA was not a match because “there was a sixth unidentified accomplice that the boys either could not, or would not, identify.” The boys were exonerated in 2002 when a convicted rapist and murderer named Matias Reyes confessed to the crime, and DNA testing matched his DNA to the semen found at the scene.

In 1991, in a similar case known as the Dixmoor Five, five teenage boys were convicted of the rape and murder of a 14-year-old girl after confessing to the crime even though their DNA did not match the semen found at the scene. The prosecutor used the unindicted co-ejaculator.

119 Chapman, supra note 114, at 180–81 (quoting Saul M. Kassin, Internalized False Confessions, in HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR EVENTS 175, 177 (Michael P. Toglia et al. eds., 2007)).
122 Id.
123 Appleby & Kassin, supra note 9, at 128.
125 Id. at 1317.
126 Appleby & Kassin, supra note 9, at 128.
127 Duru, supra note 124, at 1315–17.
theory despite offering no evidence that the victim had recently had sex with any other man. In 2011, new DNA tests matched the semen found at the scene to the DNA of a convicted sex offender who had been paroled shortly before the 1991 rape-murder. Even then, the Cook County State’s Attorney’s Office said that the exculpatory DNA evidence was not enough and that the convicted rapist could have engaged in necrophilia after finding the victim’s body shortly after the boys raped and murdered her. After being exonerated in 2011, the five wrongfully convicted men reached a $40 million settlement with Illinois State Police in 2014.

These cases demonstrate the strength of confessions—even when they are coerced or inconsistent with the evidence—to both prosecutors and juries, as well as the logic-defying theories used by prosecutors to overcome exculpatory DNA. Given confession evidence’s perceived credibility and the persuasiveness of stories in the courtroom, inelastic DNA evidence can be manipulated when its inconsistency can be reconciled with a story, even an extreme or highly improbable one such as the unindicted co-ejaculator theory. The following section will address legal psychologists’ analyses of the effects of such stories in cases with contradictory DNA and confession evidence.

IV. “WHEN SELF-REPORT TRUMPS SCIENCE: EFFECTS OF CONFESSIONS, DNA, AND PROSECUTORIAL THEORIES ON PERCEPTIONS OF GUILT”

Sara C. Appleby and Saul M. Kassin analyzed people’s perceptions of guilt when presented with contradictory DNA evidence and human testimony in three studies. They also analyzed how those findings were affected when people were presented with a prosecutorial theory explaining

129 Id.
131 Id.; McMurtrie, supra note 1, at 856.
134 Appleby & Kassin, supra note 9, at 129–30.
away the contradiction. The goal of this research was to better understand why jurors sometimes convict in cases such as the ones discussed in Part II.136

In each of the three studies, participants read the summary of a fictional case, State v. Wilson, involving “the rape and murder of a 16-year-old girl found dead after her closing shift at McDonald’s.”137 In the summary, all participants read that the defendant had previously been questioned by police in a similar case, had no alibi during the time of the attack, and had a history of drinking problems.138 Each study manipulated different conditions within this case summary;139 participants then “rendered a verdict (guilty or not guilty), rated their confidence in that verdict on a ten-point scale (one = not at all, ten = very), and estimated the likelihood that the defendant committed the crime (0% to 100% scale, in intervals of 5 percentage points).”140 They also were asked to rate how convincing of guilt each piece of evidence was on a ten-point scale.141

A. Study 1

The goal of Study 1 was to assess people’s judgments when either a defendant’s confession or an eyewitness’s identification was pitted against DNA.142 105 participants were given a survey in which they read a summary of the case, evaluated the evidence, and answered a series of questions.143 In the summary of State v. Wilson, participants read that DNA evidence (semen) was recovered from the victim and either matched or excluded the defendant.144

The summary also included either an eyewitness statement or the defendant’s statement, both of which were either incriminating or exculpatory.145 For those given an eyewitness statement, participants read that a woman told the police that she saw a man attacking a girl in the doorway of McDonald’s while she was walking through the McDonald’s

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135 Id. at 129.
136 See id.
137 Id. at 130.
138 Id.
139 Id.
140 Id. at 130–31.
141 Id. at 131.
142 Id. at 132.
143 Id. at 129–32.
144 Id. at 130.
145 Id.
parking lot. When presented with a “show-up” picture of the defendant, the witness answered that she was “reasonably confident” that the defendant either was (for the incriminating condition) or was not (for the exculpatory condition) the perpetrator. For those who were given the defendant’s statement, participants read that the defendant was interrogated and that he either denied involvement or signed a confession. In the statement denying involvement (the exculpatory condition), the defendant stated that he left a party around 11:00 P.M. because he had an early morning construction job, and that he was home alone and not in the vicinity of the McDonald’s at the time of the crime. In the confession (the incriminating condition), the defendant confessed to the rape and murder and provided details about the victim’s appearance and the crime itself.

In the study, 80% of participants favored conviction when the DNA incriminated the defendant, while only 3.64% favored conviction when the DNA excluded the defendant. Similarly, participants believed that the defendant was significantly more likely to have committed the crime when the DNA matched the defendant than when it excluded him. Participants rated DNA as the most convincing evidence of guilt, followed by the defendant’s statement, the defendant’s lack of alibi, the eyewitness statement, and the defendant’s history of excessive drinking.

Study 1 confirmed that when participants were presented with contradictory self-report and DNA evidence, they based their decisions on the DNA evidence, even when the self-report evidence included the defendant’s confession.

B. STUDY 2

Given the results of Study 1 showing that participants relied on DNA more than confessions or eyewitness identifications when the two forms of evidence were contradictory, Study 2 sought to analyze the effects of attorneys’ explanatory theories on contradictory self-report and scientific
Here, eighty U.S. participants read the same summary of State v. Wilson with the same DNA manipulation (semen that either matched or excluded the defendant). Some participants read the attorneys’ closing explanations for why the DNA findings contradicted the self-report evidence (theory condition) while others were given no theory explaining the DNA results (no-theory condition). When the DNA excluded the defendant, the prosecutor’s theory was that the presence of different DNA meant not that the defendant was innocent, but that he failed to ejaculate and that the victim had consensual sex with another man earlier that day; the defense attorney argued that the defendant’s confession was coerced. When the DNA incriminated the defendant, the defense attorney argued that the confession was coerced and that the DNA shows that the defendant and victim had consensual sex earlier that day; the prosecutor argued that the confession and DNA were ample proof of guilt.

Again, participants were more likely to convict when the DNA incriminated the defendant (89.74%) than when it excluded the defendant (21.95%). “When the DNA excluded the defendant, participants were more likely to vote guilty when the attorneys presented a theory (33%) than when they did not (10%).” However, when the DNA incriminated the defendant, the attorneys’ theories made no difference in conviction rates or in participants’ verdict confidence scores.

Study 2 confirmed that when presented with incriminating DNA, “participants overwhelmingly perceived guilt and voted for conviction when DNA tests incriminated the confessor.” However, when presented with exculpatory DNA, participants’ verdicts were influenced by whether the prosecutor provided an explanatory theory.
C. STUDY 3

The final study focused on contradictory exculpatory DNA and confession evidence, seeking to reproduce and extend Study 2’s findings with an in-person sample.\textsuperscript{166} Sixty live participants from New York City read the same case summary from Study 2 and completed the questionnaire about the case.\textsuperscript{167} Here, the DNA was exculpatory in all conditions.\textsuperscript{168} Participants read either a prosecutor’s explanatory theory reconciling the exculpatory DNA or no explanatory theory.\textsuperscript{169} Participants also read the same confession or denial from the previous studies.\textsuperscript{170}

Overall, “participants convicted at a threefold higher rate when the prosecutor offered an explanation for the confessor’s exculpatory DNA (45%) than when the prosecutor did not offer an explanation (15%).”\textsuperscript{171} Again, participants were much less confident in their not-guilty verdicts when the prosecutor offered an explanatory theory for the contradictory evidence.\textsuperscript{172} Appleby and Kassin noted that for all of the groups, the average rating of probability that the defendant committed the crime was 41.82%, “a number that falls well short of the certainty needed to prove guilt beyond a reasonable doubt.”\textsuperscript{173} Additionally, even though 45% of participants who were presented with the confession, exculpatory DNA, and the explanatory theory voted for conviction, 75% of those participants cited the DNA as the most convincing piece of evidence.\textsuperscript{174}

D. KEY FINDINGS

Although Appleby and Kassin’s study confirms that people generally trust exculpatory DNA evidence more than confessions when presented with both, it notably finds that prosecutorial theories that explain away the contradictory DNA evidence and confession evidence “increase perceptions of the defendant’s culpability and the rate of guilty verdicts.”\textsuperscript{175} Thus, to the extent that prosecutors are able to reconcile contradictions between DNA
V. PROPOSED SOLUTIONS

Appleby and Kassin’s studies confirm the compelling power stories have in the courtroom. Although their findings demonstrate that people are most persuaded by DNA evidence and will generally not convict if the DNA excludes a defendant, they also demonstrate that the presence of a prosecutor’s improbable explanatory theory can make people more likely to convict a defendant despite exculpatory DNA. Given the success of these stories in the cases in Part II and the consequences of wrongful convictions, this section will focus on solutions that could change perceptions of confession evidence and prevent prosecutors from using implausible stories that are unsupported by adequate evidence.

A. EVALUATION OF CONFESSION EVIDENCE

The stories advanced by prosecutors in the cases in Part II are successful in part because of the presence of the defendants’ confessions. Thus, if confession evidence can be evaluated more accurately—not only by jurors but also by prosecutors, investigators, and judges—then perhaps the stories would carry less weight. Videotaping the interrogation process and admitting expert testimony could help jurors and judges evaluate confession evidence more accurately, while an evidentiary rule for confessions could prevent unreliable confessions from reaching a jury.

1. Videotaping Interrogations

Appleby and Kassin stress the importance of video recording the entire interrogation process as a way to protect innocent suspects, since their study suggests that DNA is not a foolproof safeguard in cases involving false confessions. Videotaping interrogations may deter interrogators from using coercive tactics, reducing the number of false confessions. It would also provide judges and juries with “an objective and accurate record” of the interrogation process. This would help jurors see whether details contained in the defendant’s confession were first raised by the defendant.

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176 Id. at 138.
178 Id.
or leaked by police during the interrogation. Research supports that juries make more informed judgments of voluntariness and guilt when they can see the confession itself and the conditions in which it was made.\textsuperscript{179} Illinois became the first state to require police to record interrogations of homicide suspects in 2003. If this policy had been implemented sooner, it may have affected Juan Rivera’s case by allowing those involved in his conviction the opportunity to better assess his confession.\textsuperscript{180} The Innocence Project reports that nineteen states have enacted legislation requiring electronic recording of interrogations, seven state supreme courts have acted in implementing this requirement, and approximately 1,000 jurisdictions have voluntarily implemented such policies.\textsuperscript{181}

2. Reformed Evidentiary Rules for Confessions

Further, new evidentiary rules, and more specific guidelines for applying evidentiary rules to confession evidence, could prevent more unreliable confessions from reaching a jury altogether.\textsuperscript{182} Federal Rule of Evidence 402 allows courts “to admit all relevant evidence except as otherwise provided by law or by rule.”\textsuperscript{183} Rule 403 states that “courts may exclude relevant evidence, including relevant confession evidence, if ‘its probative value is substantially outweighed by the danger of unfair prejudice … or misleading the jury.’”\textsuperscript{184} However, these rules may be insufficient to suppress unreliable confessions because of the general belief that confessions are highly probative and because even an unreliable confession has some relevance.\textsuperscript{185} Eugene Milhizer explains:

Because the unfairness of the prejudice created by confession evidence increases exponentially as reliability decreases, a judge could be inclined to suppress nearly all confessions to which defense counsel objected on grounds of unreliability. … On the other hand, a judge might be

\textsuperscript{179}Id. at 27 (citing G. Daniel Lassiter et al., Videotaped Interrogations and Confessions: A Simple Change in Camera Perspective Alters Verdicts in Simulated Trials, 87 J. APPLIED PSYCHOL. 867 (2002)).
\textsuperscript{180}McMurtrie, supra note 1, at 867.
\textsuperscript{182}Milhizer, supra note 80, at 2.
\textsuperscript{183}Id. at 34 (citing Fed. R. Evid. 402).
\textsuperscript{184}Milhizer, supra note 80, at 34 (quoting Fed. R. Evid. 403).
\textsuperscript{185}Milhizer, supra note 80, at 34–45.
inclined under Rule 403 to admit nearly all confessions, even where reliability was at issue, on the grounds that a limiting instruction would empower the jury to weigh the evidence bearing on reliability and assign a proportional degree of probative value to the confession evidence.\textsuperscript{186}

Thus, Milhizer proposes a new rule for excluding unreliable confessions: “Evidence of a defendant’s confession or admission … is not admissible in any criminal proceeding if, in the judge’s determination, considering all of the relevant evidence pertaining to the confession, no reasonable juror by a preponderance of the evidence could conclude that the confession is reliable.”\textsuperscript{187} This new rule would determine a confession’s reliability based on “a totality of the circumstances test,” which, unlike the current rules of evidence, would be responsive to the causes of false confessions and prevent more unreliable confessions from reaching a jury.\textsuperscript{188}

3. Expert Testimony

If these confessions are to reach a jury, admitting testimony from experts could help jurors better evaluate confessions.\textsuperscript{189} Because of the natural tendency to trust self-incriminating statements, as well as jurors’ unawareness of the interrogation process and its effects, jurors often place too much weight on confessions.\textsuperscript{190} Expert testimony would inform jurors of how and why false confessions occur; it could also assist the trier-of-fact in evaluating the specific confession and the circumstances surrounding it in the particular case. The American Psychological Association has submitted amicus briefs to state supreme courts arguing that evaluating confession evidence is difficult for both judges and juries; that false confessions occur; that there is reliable scientific research on false confession risk factors; and that psychological expert witnesses could help juries more properly evaluate confession evidence.\textsuperscript{191} Even so, both federal and state courts differ regarding the admissibility of false confession expert testimony.\textsuperscript{192}

\textsuperscript{186} Id. at 35.
\textsuperscript{187} Id. at 47.
\textsuperscript{188} Id. at 66.
\textsuperscript{189} Appleby & Kassin, supra note 9, at 138.
\textsuperscript{190} Id. at 137–38.
\textsuperscript{191} Id.
B. JUDICIAL PRETRIAL INTERVENTIONS

There are also several judicial pretrial interventions that would prevent these improbable theories from reaching juries. As previously discussed, when prosecutors are presented with exculpatory post-conviction DNA evidence, they sometimes oppose overturning the conviction, believing that the exculpatory DNA does not prove innocence. In response to this new evidence, prosecutors sometimes develop a new theory of guilt that contradicts what they argued in previous judicial proceedings. Courts could prevent these new inconsistent arguments by invoking the doctrines of judicial estoppel or judicial admissions, or by adopting a criminal summary judgment procedure.

1. Judicial Estoppel & Judicial Admissions

Judicial estoppel bars a party from asserting a position inconsistent with a position relied on at an earlier proceeding. Judicial estoppel is most often invoked in civil cases, and is typically applied in criminal cases only against defendants who assert a new position on appeal. However, the doctrine could be used against prosecutors to prevent them from asserting implausible arguments in response to exculpatory DNA results if said arguments contradict their original theory of the case. Judicial estoppel may be used only if the argument is truly inconsistent—that is, if its truth “necessarily precludes” the truth of the other argument. Thus, the doctrine could apply when the prosecution offers the unindicted co-ejaculator theory if it had previously asserted that only one perpetrator carried out the crime or that the victim had not had sex with anyone before the attack.

Similarly, the doctrine of judicial admission could also bar prosecutors from asserting new theories of guilt after discovering exculpatory post-conviction DNA. A judicial admission is a formal stipulation by party or

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193 McMurtrie, supra note 1, at 872.
194 Goode, supra note 76.
195 McMurtrie, supra note 1, at 872.
196 Id.
198 Ritter, supra note 78, at 840.
199 McMurtrie, supra note 1, at 873–74.
200 Ritter, supra note 78, at 866 (quoting Melton v. Anderson, 222 S.W.2d 666, 669 (Tenn. Ct. App. 1948)).
201 Ritter, supra note 78, at 866–67.
202 McMurtrie, supra note 1, at 874.
counsel that concedes any element of a claim or defense.” Admissions can be effected in pleadings and other pre-trial procedures or at trial. Thus, if a prosecutor had previously argued in the pleadings or at trial that one person committed a crime, a court could invoke the doctrine of judicial admission to prevent the prosecutor from later arguing that the crime was committed by more than one person. Preventing these arguments could make a material difference in proceedings involving postconviction exculpatory DNA because they would prevent the potential for jurors to be persuaded by implausible interpretations of DNA.

2. Criminal Summary Judgment

Finally, criminal summary judgment proceedings could be used to prevent cases where the prosecution cannot prove its case beyond a reasonable doubt. Although summary judgment is currently used only for civil cases, offering a defensive summary judgment procedure in criminal cases could reduce significant burdens on defendants. Defendants may make motions to dismiss or motions for a judgment notwithstanding the verdict, but most jurisdictions allow them to do so only mid- or post-trial. Given the prosecution’s unfettered discretion in charging a defendant, this mechanism could prevent the prosecution from proceeding to trial in cases with weak evidence. Thus, in cases where the prosecution wants to go to trial or retrial despite exculpatory DNA evidence, defensive criminal summary judgment could prevent prosecutors’ improbable explanatory theories from reaching a jury if the court found that “no rational trier of fact could find the essential elements of the crime charged beyond a reasonable doubt after viewing the evidence in the light most favorable to the prosecution.”

One could argue that a rational trier of fact could convict a defendant despite exculpatory DNA, given the cases discussed in this paper; however, the Illinois Court of Appeals decision in Juan Rivera’s case (describing the unindicted co-ejaculator theory there as “highly

204 Id. at 1127, 1130.
205 McMurtrie, supra note 1, at 874.
206 Id.
207 Id. at 874–75.
208 Id. at 874.
210 Id. at 692.
improbable” and distorting the evidence “to an absurd degree”) suggests that this mechanism could prevent some of these cases from going to trial.

VI. CONCLUSION

When presented with contradictory DNA and confession evidence, people will generally trust the exculpatory DNA evidence. However, even implausible stories used to explain away DNA evidence can persuade jurors to the point that an innocent defendant is convicted. Although DNA is not thought to be particularly susceptible to subjective interpretations, this “elasticity” of DNA evidence is made possible by the persuasiveness of stories in the courtroom and the overreliance on often-questionable confession evidence.

Although cases with exculpatory DNA that lead to convictions are rare and account for a small number of exonerations, they demonstrate a need for reform in our perceptions of confessions, the interrogation process, prosecutorial discretion, and the adversarial nature of the courtroom. A number of mechanisms—such as videotaped confessions, expert testimony at trial, and criminal summary judgment, among others—could have prevented a number of wrongfully convicted confessors from spending years in prison. Appleby and Kassin’s study highlights the unusual power stories can hold in the courtroom, especially in the face of contradictory evidence, and emphasizes the need for reform in our criminal justice system in order to prevent future wrongful convictions.