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## Improving Prosecutorial Decision Making: Some Lessons of Cognitive Science

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# IMPROVING PROSECUTORIAL DECISION MAKING: SOME LESSONS OF COGNITIVE SCIENCE

ALAFAIR S. BURKE\*

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## INTRODUCTION

Earl Washington Jr., a black mentally retarded farmhand, spent seventeen years in prison—nearly ten of them on death row—for the rape and murder of a white woman before DNA tests linked another man to the crimes.<sup>1</sup> The evidence originally implicating him was questionable. The victim provided little identifying information, indicating before her death only that a black man had attacked her.<sup>2</sup> Washington was convicted based largely on his own confession, even though he simultaneously provided factually inconsistent confessions to four other crimes and did not know the location of the crime scene, whether other people were present, or even the victim's race without the assistance of leading questioning from police.<sup>3</sup> When defense counsel sought postconviction relief based on the discovery of another man's DNA on a blanket linked to the crime, prosecutors resisted.<sup>4</sup> Even after Washington was pardoned because of exonerating evidence, prosecutors insisted that he remained a viable suspect.<sup>5</sup>

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1. Maria Glod, *DNA Not Enough To Charge Va. Rapist: Authorities Kept Identity a Secret*, WASH. POST, Mar. 11, 2004, at B4.

2. *Id.*

3. *Washington v. Murray*, 952 F.2d 1472, 1478 n.5 (4th Cir. 1991) (noting the questionable circumstances surrounding Washington's interrogation); Eric M. Freedman, *Earl Washington's Ordeal*, 29 HOFSTRA L. REV. 1089, 1091-94 (2001) (detailing the history of the Washington "confessions").

4. *See Washington v. Murray*, 4 F.3d 1285, 1286 (4th Cir. 1993); *see also* Editorial, *Justice Begrudged*, N.Y. TIMES, Apr. 10, 2004, at A14 (advocating "an honest vetting of the judicial process that allowed [Washington's] name to be sullied in the first place").

5. *See Glod, supra* note 1 ("There are several people who are potential suspects, and I cannot rule out Earl Washington." (quoting prosecuting attorney)). The current county prosecutor, who assumed office after Washington was convicted, was perhaps even more insistent about his guilt, telling a local paper after Washington's exoneration, "It has been my position all along that Earl Washington is guilty, and that is still my position." Complaint ¶ 117, *Washington v. Buraker*, 322 F. Supp. 2d 692 (W.D. Va. 2004) (No. 3:02-CV-00106) (civil suit filed by Earl Washington against several Virginia officials); *see also* MARGARET EDDS, AN EXPENDABLE MAN: THE NEAR-EXECUTION OF EARL WASHINGTON JR. 181 (2003) ("No one, it seemed, was more convinced of Washington's guilt than [the county's prosecuting attorney]."). Washington's civil suit is still pending. *See Washington v. Wilmore*, 407 F.3d 274, 275-76 (4th Cir. 2005) (affirming the district court's denial of summary judgment on one of Washington's claims).

Earl Washington's case raises questions about the discretionary decisions his prosecutors made from the moment they received the case. Why did they look past apparent problems with the confession? Why did they resist the evidentiary testing that ultimately exonerated an innocent man? Why would they still not concede innocence after his exoneration? Traditionally, commentators have clothed the study of prosecutorial decision making in the rhetoric of fault, attributing normatively inappropriate outcomes to bad prosecutorial intentions and widespread prosecutorial misconduct.<sup>6</sup> From this perspective, Earl Washington's conviction, and his prosecutors' refusal to concede his innocence even after a gubernatorial pardon, result from prosecutorial overzealousness,<sup>7</sup> a culture that emphasizes winning,<sup>8</sup> the absence of "moral courage,"<sup>9</sup> and the failure of prosecutors to act as neutral advocates of justice.<sup>10</sup>

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6. See Tracey L. Meares, *Rewards for Good Behavior: Influencing Prosecutorial Discretion and Conduct with Financial Incentives*, 64 *FORDHAM L. REV.* 851, 890 (1995) ("Prosecutorial misconduct is readily apparent to any lawyer who keeps abreast of appellate review of criminal convictions.").

7. See Stanley Z. Fisher, *In Search of the Virtuous Prosecutor: A Conceptual Framework*, 15 *AM. J. CRIM. L.* 197, 204-13 (1988) (describing factors that cause prosecutors to pursue cases "overzealously"); Bennett L. Gershman, *The New Prosecutors*, 53 *U. PITT. L. REV.* 393, 458 (1992) (arguing that "the present ethos of overzealous prosecutorial advocacy" is "ingrained"); Judith L. Maute, *"In Pursuit of Justice" in High Profile Criminal Matters*, 70 *FORDHAM L. REV.* 1745, 1747 (2002) (noting that "[o]verzealous prosecutors may become too closely aligned with ... witnesses who are willing to shade or falsify their testimony in order to obtain a conviction").

8. See Kenneth Bresler, *"I Never Lost a Trial": When Prosecutors Keep Score of Criminal Convictions*, 9 *GEO. J. LEGAL ETHICS* 537, 541 (1996) (decrying prosecutors who "keep personal tallies ... for self-promotion"); Meares, *supra* note 6, at 882 (describing the "desire to 'win'" as "a central characteristic of prosecutorial culture"); Daniel S. Medwed, *The Zeal Deal: Prosecutorial Resistance to Post-Conviction Claims of Innocence*, 84 *B.U. L. REV.* 125, 134 (2004) (attributing the lack of prosecutorial support for postconviction claims of innocence in part to "the emphasis district attorneys' offices place on conviction rates").

9. Bennett L. Gershman, *The Prosecutor's Duty to Truth*, 14 *GEO. J. LEGAL ETHICS* 309, 350 (2001); see also Anthony V. Alfieri, *Prosecuting Race*, 48 *DUKE L.J.* 1157, 1242-45 (1999) (discussing prosecutorial discretion guided by "moral norms"); Bruce A. Green, *The Role of Personal Values in Professional Decisionmaking*, 11 *GEO. J. LEGAL ETHICS* 19, 59-60 (1997) (advocating ad hoc invocation of moral judgment).

10. Prosecutors are not only obligated to act as advocates to enforce the law but are also entrusted to ensure that justice is met. See *MODEL RULES OF PROF'L CONDUCT* R. 3.8 cmt. 1 (2001) ("A prosecutor has the responsibility of a minister of justice and not simply that of an advocate."); cf. Steven K. Berenson, *Public Lawyers, Private Values: Can, Should, and Will Government Lawyers Serve the Public Interest?*, 41 *B.C. L. REV.* 789, 792-94 (2000) (discussing the public interests served by prosecutors).

This focus upon incentives, priorities, and values as potential taints upon the exercise of prosecutorial discretion reveals an implicit but important assumption about prosecutors: they are rational, utility-maximizing decision makers. Prosecutors choose to overcharge defendants, withhold exculpatory evidence, and turn a blind eye to claims of innocence; therefore, the traditional inference goes, they must value obtaining and maintaining convictions over "doing justice."<sup>11</sup> To ensure that prosecutors do not rationally opt for misconduct to maximize their conviction rates, the fault-based literature recommends reform through changes to the prosecutorial cost-benefit analysis. Common strategies include more stringent ethical rules,<sup>12</sup> increased disciplinary proceedings and sanctions against prosecutors,<sup>13</sup> and professional<sup>14</sup> and financial<sup>15</sup> rewards based on factors other than just obtaining convictions.

Consider, however, a different explanation for the failure of prosecutors always to make just decisions. Perhaps prosecutors sometimes fail to make decisions that rationally further justice, not because they fail to value justice, but because they are, in fact, irrational. They are irrational because they are human, and all human decision makers share a common set of information-processing tendencies that depart from perfect rationality. A

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11. See generally Bruce A. Green, *Why Should Prosecutors "Seek Justice"?*, 26 FORDHAM URB. L.J. 607, 636 (1999) (emphasizing a prosecutor's unique "duty to avoid the public perception that criminal proceedings are unfair"); Fred C. Zacharias, *Structuring the Ethics of Prosecutorial Trial Practice: Can Prosecutors Do Justice?*, 44 VAND. L. REV. 45, 107-09 (1991) (describing the psychological factors that limit the effectiveness of "do justice" provisions).

12. Bruce A. Green, *Prosecutorial Ethics as Usual*, 2003 U. ILL. L. REV. 1573, 1587.

13. Kenneth Rosenthal, *Prosecutor Misconduct, Convictions, and Double Jeopardy: Case Studies in an Emerging Jurisprudence*, 71 TEMP. L. REV. 887, 889 (1998) (noting an "absence of disciplinary sanctions against prosecutors, even in the most egregious cases"); Fred C. Zacharias, *The Professional Discipline of Prosecutors*, 79 N.C. L. REV. 721 (2001) (assessing the lack of discipline for prosecutorial misconduct).

14. Berenson, *supra* note 10, at 846 (recommending that professional advancement in prosecutors' offices "should be based on richer measures of compliance with the 'do justice' standard, rather than simply on conviction rates"); Erwin Chemerinsky, *The Role of Prosecutors in Dealing with Police Abuse: The Lessons of Los Angeles*, 8 VA. J. SOC. POL'Y & L. 305, 320-21 (2001) (suggesting that prosecutors be rewarded with promotion opportunities for identifying police misconduct); Medwed, *supra* note 8, at 172 (advocating incentives for prosecutors to respond to postconviction claims of innocence).

15. Meares, *supra* note 6, at 873-74 (proposing the reduction of overcharging by rewarding prosecutors financially for obtaining convictions on charges initially pursued).

compelling body of cognitive research demonstrates that people systematically hold a set of cognitive biases, rendering them neither perfectly rational information processors, nor wholly random or irrational decision makers.<sup>16</sup> Drawing on the cognitive literature, the growing literature of behavioral law and economics explores the limitations of cost-benefit rationality, challenging the assumption of traditional economists that people are perfect wealth maximizers.<sup>17</sup> From both the cognitive and behavioral economics literature emerges a theory of bounded rationality that seeks to explain how cognitive biases and limitations in our cognitive abilities distort perfect information processing in nonrandom, predictable ways.<sup>18</sup>

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16. See ZIVA KUNDA, SOCIAL COGNITION: MAKING SENSE OF PEOPLE 211-63 (1999); RICHARD NISBETT & LEE ROSS, HUMAN INFERENCE: STRATEGIES AND SHORTCOMINGS OF SOCIAL JUDGMENT 17-42 (1980); STEVEN PINKER, HOW THE MIND WORKS 175 (1997); see also Cass R. Sunstein, *Behavioral Analysis of Law*, 64 U. CHI. L. REV. 1175, 1175 (1997) (noting that although “[c]ognitive errors ... may press behavior far from the anticipated directions,” human decision making is not “unpredictable, systematically irrational, random, rule-free, or elusive to social scientists”). See generally DANIEL KAHNEMAN, PAUL SLOVIC & AMOS TVERSKY, JUDGMENT UNDER UNCERTAINTY: HEURISTICS AND BIASES (1982).

17. Traditional law and economics assumes that actors make utility-maximizing decisions about their behavior, weighing with perfect rationality the benefits of a behavior against its costs, assessed by the likely sanction and probability of detection. See, e.g., A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 77-78 (2d ed. 1989).

18. See generally CASS R. SUNSTEIN, BEHAVIORAL LAW AND ECONOMICS (2000); Christine Jolls, Cass R. Sunstein & Richard H. Thaler, *Theories and Tropes: A Reply to Posner and Kelman*, 50 STAN. L. REV. 1593, 1594-96 (1998); Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CAL. L. REV. 1051, 1075 (2000). For example, reliance on the “availability heuristic” causes people to overestimate the occurrence of events that are easily imagined. Amos Tversky & Daniel Kahneman, *Availability: A Heuristic for Judging Frequency and Probability*, 5 COGNITIVE PSYCHOL. 207, 208 (1973). As a result, they may be more fearful of and more willing to devote resources to prevent highly salient and unlikely occurrences, such as airplane crashes, than less salient and more likely events, such as automobile accidents. See generally Timur Kuran & Cass R. Sunstein, *Availability Cascades and Risk Regulation*, 51 STAN. L. REV. 683, 685 (1999). Similarly, the “endowment effect” describes the overvaluation of property that is already owned, which can distort efficient bargaining. See generally Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 NW. U. L. REV. 1227, 1232-35 (2003).

Others have suggested how cognitive bias and bounded rationality can affect juries,<sup>19</sup> judges,<sup>20</sup> the regulation of risk,<sup>21</sup> federal rulemaking,<sup>22</sup> corporate disclosures,<sup>23</sup> contract law,<sup>24</sup> consumer choice,<sup>25</sup> employment discrimination,<sup>26</sup> and group deliberations.<sup>27</sup> This Article seeks to explain how cognitive bias can affect the exercise of prosecutorial discretion. Viewing cases like Earl Washington's through a lens of human cognition, rather than fault, colors not only the description of the problem, but also the recommended solutions. When the underlying problem is human irrationality, rather than the malicious intentions of a single prosecutor or the indifference of a prosecutorial culture, the result is a far more complicated story about the criminal justice system. If prosecutors fail to achieve justice not because they are bad, but because they are human, what hope is there for change?

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19. Rebecca Hollander-Blumoff & Matthew T. Bodie, *The Effects of Jury Ignorance About Damage Caps: The Case of the 1991 Civil Rights Act*, 90 IOWA L. REV. 1361, 1375-88 (2005) (discussing the effects on jury decision making of disclosing the cap on jury awards); Saul M. Kassir, *The American Jury: Handicapped in the Pursuit of Justice*, 51 OHIO ST. L.J. 687, 697 (1990) (noting that cautionary instructions and cross-examination may not cure damage of misleading witness testimony because early impressions are resistant to change); Edward J. McCaffery et al., *Framing the Jury: Cognitive Perspectives on Pain and Suffering Awards*, 81 VA. L. REV. 1341, 1354-73 (1995) (considering how the use of cognitive theory in the framing of jury instructions can affect monetary awards for pain and suffering).

20. Dan Simon, *A Psychological Model of Judicial Decision Making*, 30 RUTGERS L.J. 1, 121-23 (1998).

21. Kuran & Sunstein, *supra* note 18, at 711-23.

22. Stephanie Stern, *Cognitive Consistency: Theory Maintenance and Administrative Rulemaking*, 63 U. PITT. L. REV. 589, 620-30 (2002).

23. Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Market Investors (And Cause Other Social Harms)*, 146 U. PA. L. REV. 101, 130-48 (1997).

24. Melvin Aron Eisenberg, *The Limits of Cognition and the Limits of Contract*, 47 STAN. L. REV. 211, 225-58 (1995).

25. Norman I. Silber, *Observing Reasonable Consumers: Cognitive Psychology, Consumer Behavior and Consumer Law*, 2 LOY. CONSUMER L. REP. 69, 71 (1990).

26. Linda Hamilton Krieger, *The Content of Our Categories: A Cognitive Bias Approach to Discrimination and Equal Employment Opportunity*, 47 STAN. L. REV. 1161, 1186-217 (1995).

27. Cass R. Sunstein, *Deliberative Trouble? Why Groups Go to Extremes*, 110 YALE L.J. 71, 88-90 (2000).

This Article explores the potential that even “virtuous,”<sup>28</sup> “conscientious,”<sup>29</sup> and “prudent”<sup>30</sup> prosecutors fall prey to cognitive failures. Part I summarizes four related aspects of cognitive bias that can affect theory formation and maintenance. Part II explores how these cognitive phenomena might adversely affect the exercise of prosecutorial discretion. Finally, Part III proposes a series of reforms that might improve the quality of prosecutorial decision making, despite the limitations of human cognition.

### I. COGNITIVE BIAS: FOUR EXAMPLES OF IMPERFECT DECISION MAKING

Decades of empirical research demonstrate that people’s beliefs are both imperfect and resistant to change. Once people form theories, they fail to adjust the strength of their beliefs when confronted with evidence that challenges the accuracy of those theories.<sup>31</sup> Indeed, theory maintenance will often hold even when people learn that the evidence that originally justified the theory is inaccurate.<sup>32</sup> At the same time that people fail to consider information that disconfirms a theory, they tend both to seek out and to overvalue information that confirms it.<sup>33</sup>

This Article explores four related but separate aspects of cognitive bias that can contribute to imperfect theory formation and maintenance: confirmation bias, selective information processing, belief perseverance, and the avoidance of cognitive dissonance. Confirmation bias is the tendency to seek to confirm, rather than

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28. H. Richard Uviller, Commentary, *The Virtuous Prosecutor in Quest of an Ethical Standard: Guidance from the ABA*, 71 MICH. L. REV. 1145, 1155-59 (1973) (discussing ethical problems unique to prosecutors).

29. MONROE H. FREEDMAN, UNDERSTANDING LAWYERS’ ETHICS 219 (1990) (speaking of the charging obligations of “conscientious prosecutors”).

30. Leslie C. Griffin, *The Prudent Prosecutor*, 14 GEO. J. LEGAL ETHICS 259, 261 (2001) (discussing the moral and legal discretion held by prosecutors in performing their jobs).

31. NISBETT & ROSS, *supra* note 16, at 169.

32. *Id.*

33. See Charles G. Lord, Lee Ross & Mark R. Lepper, *Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence*, 37 J. PERSONALITY & SOC. PSYCHOL. 2098 (1979); Mark Snyder & William B. Swann, Jr., *Hypothesis-Testing Processes in Social Interaction*, 36 J. PERSONALITY & SOC. PSYCHOL. 1202 (1978).



disconfirm, any hypothesis under study.<sup>34</sup> Selective information processing causes people to overvalue information that is consistent with their preexisting theories and to undervalue information that challenges those theories.<sup>35</sup> Belief perseverance refers to the human tendency to continue to adhere to a theory, even after the evidence underlying the theory is disproved.<sup>36</sup> Finally, the desire to avoid cognitive dissonance can cause people to adjust their beliefs to maintain existing self-perceptions.<sup>37</sup> This Part summarizes the empirical literature regarding each of these cognitive phenomena.

### A. Confirmation Bias

When testing a hypothesis's validity, people tend to favor information that confirms their theory over disconfirming information.<sup>38</sup> Good evidence suggests that this information-seeking bias results because people tend to recognize the relevance of confirming evidence more than disconfirming evidence.<sup>39</sup> This is true even when an effort to disconfirm is an essential step towards confirmation of the hypothesis under test.

For example, in a classic study of confirmation bias in hypothesis testing, Peter Wason presented subjects with four cards and told them that each card contained a letter on one side and a number on the other.<sup>40</sup> The revealed sides of the four cards displayed one vowel, one consonant, one even number, and one odd number.<sup>41</sup> Subjects were then asked which of the four cards needed to be

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34. See *infra* Part I.A.

35. See *infra* Part I.B.

36. See *infra* Part I.C.

37. See *infra* Part I.D.

38. P. C. WASON & P. N. JOHNSON-LAIRD, *PSYCHOLOGY OF REASONING: STRUCTURE AND CONTENT* 210-11 (1972).

39. *Id.* at 202-17; see also KUNDA, *supra* note 39, at 112-17 (describing hypothesis confirmation when evaluating other people); Joshua Klayman & Young-Won Ha, *Confirmation, Disconfirmation, and Information in Hypothesis Testing*, 94 *PSYCHOL. REV.* 211 (1987) (arguing that confirmation bias is better understood as a positive test strategy).

40. P. C. Wason, *Reasoning About a Rule*, 20 *Q. J. EXPERIMENTAL PSYCHOL.* 273, 273 (1968).

41. *Id.*

turned over to test the following rule: If a card has a vowel on one side, then it has an even number on the other side.<sup>42</sup>

Proper scientific method requires that researchers seek to *disprove* their working hypotheses.<sup>43</sup> Accordingly, the rational test of Wason's "if vowel, then even number" card test is to turn over the vowel and odd number cards. The vowel card provides a relevant test because discovery of an odd number on its backside would disprove the tested rule. The odd number card provides an equally relevant test because the discovery of a vowel on the backside of the odd number card would disconfirm the proposed "if vowel, then even number" rule in the same way as any odd number on the other side of the vowel card.

However, to test the rule that all vowel cards had even numbers on the other side, subjects overwhelmingly selected from their four choices either just the vowel card, or the vowel and the even number cards.<sup>44</sup> They failed to select the odd number card that was necessary to test the rule properly.<sup>45</sup> Moreover, subjects who chose the even number card erred still further because that card's backside offered no probative value to the rule at hand.<sup>46</sup> The subjects' choice of cards demonstrated that the subjects failed to recognize the importance of disconfirming evidence and instead sought information that would tend to *confirm* the working rule.<sup>47</sup>

In another classic study, Mark Snyder and William Swann replicated confirmation bias in the context of social inference.<sup>48</sup> Subjects were asked to select questions from a list for the purpose of interviewing a target person.<sup>49</sup> Half of the subjects were instructed to choose questions that would test whether the target person was an extrovert, and half were told to test whether the

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42. *Id.* at 273-75.

43. See generally KARL R. POPPER, *THE LOGIC OF SCIENTIFIC DISCOVERY* 32-33 (1968).

44. Wason, *supra* note 40, at 273-77.

45. *Id.* at 276-77.

46. *Id.* at 280-81. To discover a vowel on the other side of the even number card would simply provide an example consistent with the "if vowel, then even number" rule. However, to discover a consonant on the other side would do nothing to disprove the "if vowel, then even number" rule, which says nothing about the reverse side of consonant cards. *Id.* at 280.

47. *Id.*

48. Snyder & Swann, *supra* note 33, at 1202.

49. *Id.* at 1203.

target person was an introvert.<sup>50</sup> The results demonstrated a strong confirmation bias.<sup>51</sup> Subjects selected questions that could only prove, and never disprove, their working hypothesis.<sup>52</sup> For example, subjects testing for extroversion chose questions like "What would you do if you wanted to liven things up at a party?," while subjects testing for introversion chose questions like "In what situations do you wish you could be more outgoing?"<sup>53</sup>

The social science literature suggests that people demonstrate confirmation bias not only in seeking new information, but also in the recollection of stored information. In one study, subjects were given the same list of traits about a woman named Jane.<sup>54</sup> Some of the listed traits were characteristic of extroversion, some of introversion, and others neutral.<sup>55</sup> Two days later, subjects were asked to determine Jane's suitability for a job either as a real estate agent or as a librarian.<sup>56</sup> Even though all subjects were exposed to the same information about Jane, those subjects testing Jane's suitability for real estate work tended to recall more extroverted than introverted facts about her, whereas the reverse was true for subjects testing her suitability as a librarian.<sup>57</sup> The researchers concluded that subjects were searching their memories in a biased manner, preferring information that tended to confirm the hypothesis presented.<sup>58</sup>

### *B. Selective Information Processing*

A good deal of empirical research demonstrates that people are incapable of evaluating the strength of evidence independent of their prior beliefs. People not only demonstrate search and recall preferences for information that tends to confirm their preexisting

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50. *Id.* at 1203-04.

51. *Id.* at 1202-12.

52. *Id.*

53. *Id.* at 1204.

54. See Mark Snyder & Nancy Cantor, *Testing Hypotheses About Other People: The Use of Historical Knowledge*, 15 J. EXPERIMENTAL SOC. PSYCHOL. 330 (1979).

55. *Id.* at 330-33.

56. *Id.* at 333.

57. *Id.* at 334-35.

58. *Id.* at 341-42.

theories, they also tend to devalue disconfirming evidence, even when presented with it. As a result of selective information processing, people weigh evidence that supports their prior beliefs more heavily than evidence that contradicts their beliefs.

Charles Lord, Lee Ross, and Mark Lepper conducted what is perhaps the most well-known study demonstrating this bias against disconfirmation.<sup>59</sup> Based on prior questioning, the researchers knew that half of their subjects were proponents of the death penalty who believed that the death penalty deterred murder, while the other half were opponents who did not believe that the death penalty deterred.<sup>60</sup> Subjects were asked to evaluate two studies, one that supported a deterrent efficacy of the death penalty, and one that suggested the death penalty's inefficacy as a deterrent.<sup>61</sup> The researchers found that proponents of the death penalty judged the prodeterrence study as more convincing than the nondeterrence study, whereas opponents of the death penalty reached the opposite conclusion.<sup>62</sup> Even though the studies described the same experimental procedures but with differing results, subjects articulated detailed justifications to support their conclusion that the study supporting their preexisting view was superior.<sup>63</sup> Moreover, as a result of the biased evaluation of the two studies, subjects became more polarized in their beliefs. In other words, even though all subjects read two contradictory studies on the death penalty, proponents of the death penalty reported that they were more in favor of capital punishment after reading the studies, while opponents reported that they were less in favor.<sup>64</sup>

Other researchers have replicated the phenomenon of selective information processing in a variety of contexts.<sup>65</sup> Social scientists

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59. Lord, Ross & Lepper, *supra* note 33, at 2098.

60. *Id.* at 2100.

61. *Id.*

62. *Id.* at 2101-02.

63. *Id.* at 2103.

64. *Id.* at 2103-04.

65. See, e.g., Craig A. Anderson et al., *Argument Availability as a Mediator of Social Theory Perseverance*, 3 SOC. COGNITION 235, 244-48 (1985) (argument availability); Peter H. Ditto & David F. Lopez, *Motivated Skepticism: Use of Differential Decision Criteria for Preferred and Nonpreferred Conclusions*, 63 J. PERSONALITY & SOC. PSYCHOL. 568 (1992) (information evaluation); Kari Edwards & Edward E. Smith, *A Disconfirmation Bias in the Evaluation of Arguments*, 71 J. PERSONALITY & SOC. PSYCHOL. 5 (1996) (argument

have suggested that the mechanism for selective information processing is attributable at least in part to motivational factors.<sup>66</sup> As an initial matter, people choose to expose themselves to information that is consonant with their beliefs rather than dissonant.<sup>67</sup> Moreover, when exposed to dissonant information, they are motivated to defend their beliefs, giving more attention and heightened scrutiny to information that challenges those beliefs.<sup>68</sup> They will search internally for material that refutes the disconfirming evidence, and, once that material is retrieved from memory, a bias will exist to judge the disconfirming evidence as weak.<sup>69</sup> In contrast, when presented with information that supports

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evaluation); Charles G. Lord, Mark R. Lepper & Elizabeth Preston, *Considering the Opposite: A Corrective Strategy for Social Judgment*, 47 J. PERSONALITY & SOC. PSYCHOL. 1231 (1984) (social judgment); Arthur G. Miller et al., *The Attitude Polarization Phenomenon: Role of Response Measure, Attitude Extremity, and Behavioral Consequences of Reported Attitude Change*, 64 J. PERSONALITY & SOC. PSYCHOL. 561, 563-64 (1993) (attitude polarization among research participants with a broad range of preexisting attitudes); Geoffrey D. Munro & Peter H. Ditto, *Biased Assimilation, Attitude Polarization, and Affect in Reactions to Stereotype-Relevant Scientific Information*, 23 PERSONALITY & SOC. PSYCHOL. BULL. 636 (1997) (biased assimilation and attitude polarization in the processing of stereotype-relevant scientific information); Norbert Schwarz et al., *Interactive Effects of Writing and Reading a Persuasive Essay on Attitude Change and Selective Exposure*, 16 J. EXPERIMENTAL SOC. PSYCHOL. 1, 5-9 (1980) (reporting that subjects found sample letters to the editor more convincing and less biased when the letters supported their own positions). *But see* Miller et al., *supra*, at 561-69 (replicating the study by Lord, Ross, and Lepper, but finding no attitude polarization when subjects' positions were directly assessed by asking the same questions presented prior to the administration of the opposing studies).

66. See Ziva Kunda, *The Case for Motivated Reasoning*, 108 PSYCHOL. BULL. 480, 493-95 (1990); Tom Pyszczynski & Jeff Greenberg, *Toward an Integration of Cognitive and Motivational Perspectives on Social Inference: A Biased Hypothesis-Testing Model*, in 20 ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY 297, 333 (Leonard Berkowitz ed., 1987); Tom Pyszczynski, Jeff Greenberg & Kathleen Holt, *Maintaining Consistency Between Self-Serving Beliefs and Available Data: A Bias in Information Evaluation*, 11 PERSONALITY & SOC. PSYCHOL. BULL. 179, 186-88 (1985).

67. See Tom Pyszczynski, Jeff Greenberg & John LaPrelle, *Social Comparison After Success and Failure: Biased Search for Information Consistent with a Self-Serving Conclusion*, 21 J. EXPERIMENTAL SOC. PSYCHOL. 195, 206-11 (1985) ("In both studies failure subjects showed a high level of interest in acquiring additional information when they expected it to reveal that most other students performed poorly and very little interest in acquiring additional information when they expected it to reveal that most others performed well.").

68. See Ditto & Lopez, *supra* note 65, at 580-82 (suggesting a mechanism by which motivational factors affect judgment processes); Edwards & Smith, *supra* note 65, at 18 (summarizing the values that supposedly underlie the motivation to defend prior beliefs).

69. See Edwards & Smith, *supra* note 65, at 18 (proposing a model to account for disconfirmation bias).

prior beliefs, people allocate fewer resources to scrutinizing the information and are more inclined to accept the information at face value.<sup>70</sup>

At a general level, selective information processing may be normatively rational.<sup>71</sup> When new information is compatible with what we already know, it is probably accurate. Careful scrutiny and a search for contradictory material would expend cognitive resources unnecessarily.<sup>72</sup> On the other hand, information that is incompatible with existing information may be fallacious, and cognitive work to reveal the fallacy is well spent.<sup>73</sup> Of course, disconfirmation bias leads to effective decision making only when the prior beliefs that bias the assimilation of new information are themselves supported by accurate information.<sup>74</sup> In criminal cases, prosecutors enjoy no such guarantee, potentially basing their theories of guilt on retracted confessions, flawed eyewitness testimony, and false testimony from jailhouse informants.<sup>75</sup>

### C. *Belief Perseverance*

Although selective information processing can prevent rational, incremental adjustments in response to new information, the phenomenon of belief perseverance describes the tendency to adhere to theories even when new information wholly discredits the theory's evidentiary basis. With belief perseverance, human cognition departs from perfectly rational decision making not through biased assimilation of ambiguous new information, but by failing to adjust beliefs in response to proof that prior information was demonstrably false.

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70. *Id.*

71. NISBETT & ROSS, *supra* note 16, at 171 (addressing the normative status of disconfirmation bias); Edwards & Smith, *supra* note 65, at 22 (same).

72. Edwards & Smith, *supra* note 65, at 22.

73. *Id.*

74. NISBETT & ROSS, *supra* note 16, at 171.

75. See Darryl K. Brown, *Rationing Criminal Defense Entitlements: An Argument from Institutional Design*, 104 COLUM. L. REV. 801, 822-25 (2004) (discussing sources of wrongful convictions); Stanley Z. Fisher & Ian McKenzie, *A Miscarriage of Justice in Massachusetts: Eyewitness Identification Procedures, Unrecorded Admissions, and a Comparison with English Law*, 13 B.U. PUB. INT. L.J. 1, 3-15 (2003) (same).

In a well-known experiment by Lee Ross, Mark Lepper, and Michael Hubbard, subjects were asked to discern between fake and actual suicide notes.<sup>76</sup> By manipulating false feedback given to subjects as they performed the dummy task, the experimenters led subjects to believe that they had average performance, above average performance (success condition), or below average performance (failure condition).<sup>77</sup> Following their completion of the task, subjects were fully debriefed and learned that the feedback had been false, predetermined, and random.<sup>78</sup> Subjects were even shown the experimenters' instruction sheet, which preassigned subjects to each of the three performance conditions and stipulated the corresponding feedback to be delivered.<sup>79</sup>

After subjects were debriefed, they were asked to assess their actual performance on the task, to estimate the average performance, and to predict their probable performance if they were to repeat the task.<sup>80</sup> The researchers found considerable belief perseverance among subjects, despite the debriefing. Subjects assigned the "success condition" rated both their actual and future task performance more favorably than other subjects, while subjects assigned the "failure condition" showed the opposite pattern, continuing to rate their performance unfavorably.<sup>81</sup>

Moreover, the study found that belief perseverance was not limited to self-evaluation, but extended to perceptions of others. Observer subjects who watched both the feedback sessions and the subsequent debriefings from behind a one-way glass also continued to demonstrate belief perseverance after the debriefings.<sup>82</sup> In other words, observers tended to maintain their beliefs about the observed subject's ability to distinguish between fake and actual suicide notes, even after learning that the feedback was false.<sup>83</sup>

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76. Lee Ross, Mark R. Lepper & Michael Hubbard, *Perseverance in Self-Perception and Social Perception: Biased Attributional Processes in the Debriefing Paradigm*, 32 J. PERSONALITY & SOC. PSYCHOL. 880, 882 (1975).

77. *Id.* at 882-83.

78. *Id.* at 883.

79. *Id.*

80. *Id.*

81. *Id.* at 883-84.

82. *Id.* at 884-87.

83. *Id.*

Similarly, in another study, Anderson, Lepper, and Ross presented subjects with purportedly authentic histories of firefighters and asked the subjects to write an explanation of the relationship between risk preference and firefighting abilities observed in the case histories.<sup>84</sup> By manipulating the case histories, the experimenters led subjects to perceive either a positive or negative correlation between the two traits.<sup>85</sup> The researchers reported that, even after subjects were debriefed concerning the fictitious nature of the case histories, they continued to cling to the theories they formed from those histories.<sup>86</sup> In other words, the subjects adhered to their conclusions, even after the evidence underlying the conclusions was wholly discredited. As the researchers concluded, “[i]nitial beliefs may persevere in the face of a subsequent invalidation of the evidence on which they are based, even when this initial evidence is itself ... weak.”<sup>87</sup>

#### *D. The Avoidance of Cognitive Dissonance*

Another phenomenon that can affect prosecutorial cognition is the desire to find consistency between one’s behavior and beliefs. The social science evidence suggests that inconsistency between one’s external behavior and internal beliefs creates an uncomfortable cognitive dissonance. To mitigate the dissonance, people will adjust their beliefs in a direction consistent with their behavior.<sup>88</sup>

For example, in a classic study, Leon Festinger and James Carlsmith paid subjects either one or twenty dollars to misinform another person, a confederate who was supposedly waiting to serve as a subject, that a long, boring task was actually interesting.<sup>89</sup>

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84. Craig A. Anderson, Mark R. Lepper & Lee Ross, *Perseverance of Social Theories: The Role of Explanation in the Persistence of Discredited Information*, 39 J. PERSONALITY & SOC. PSYCHOL. 1037, 1039-40 (1980).

85. *Id.*

86. *Id.* at 1040-42.

87. *Id.* at 1045.

88. See generally LEON FESTINGER, A THEORY OF COGNITIVE DISSONANCE 1-31 (1957) (explaining that individuals seek to reduce dissonance and achieve consonance between their beliefs and behavior, and that individuals will often avoid situations that give rise to dissonance).

89. Leon Festinger & James M. Carlsmith, *Cognitive Consequences of Forced Compliance*, 58 J. ABNORMAL & SOC. PSYCHOL. 203, 204-07 (1959).



Even though subjects were all required to complete the same mundane task, the subjects who were paid only a dollar to deceive the confederate reported that they found the task more interesting than either the subjects who received the more substantial payment or the control subjects, who had performed the task but had not been asked to deceive the confederate.<sup>90</sup>

The researchers concluded that cognitive dissonance was created by the conflict between the subjects' beliefs that the task was boring and the subjects' behavior in telling someone that the task was interesting.<sup>91</sup> To reconcile this dissonance, subjects who were paid only a dollar to mislead adjusted their own beliefs about the task.<sup>92</sup> In contrast, those who were paid twenty dollars had an additional consonant cognition—"I was paid twenty dollars to lie"—and therefore had no need to adjust their beliefs to be consistent with their conduct.<sup>93</sup> Since Fester and Carlsmith's original study, other researchers have reported robust effects of cognitive dissonance in other settings.<sup>94</sup>

## II. THE ETHICAL PROSECUTOR AND COGNITIVE BIAS

No reason exists to believe that lawyers are immune from the documented bounds of rationality, and yet the literature on prosecutorial decision making continues to describe prosecutors as rational, wealth-maximizing actors who would make better, more just decisions if they only had better, more just values.<sup>95</sup> Through the lens of the cognitive phenomena summarized in Part I, a more

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90. *Id.* at 207-08.

91. *Id.* at 209-10.

92. *Id.*

93. *Id.*

94. *See, e.g.*, ROBERT B. CIALDINI, *INFLUENCE: SCIENCE AND PRACTICE* 73-92 (3d ed. 1993) (stating that people are more likely to agree to substantial requests after first agreeing to small ones); Elliot Aronson & Judson Mills, *The Effect of Severity of Initiation on Liking for a Group*, 59 J. ABNORMAL & SOC. PSYCHOL. 177, 177-81 (1959) (reporting that subjects who were required to undergo an embarrassing initiation to join a group subsequently evaluated the group as more interesting than did control subjects); Robert E. Knox & James A. Inkster, *Postdecision Dissonance at Post Time*, 8 J. PERSONALITY & SOC. PSYCHOL. 319, 319 (1968) (finding that racetrack bettors upgraded the likelihood of their horses winning after placing a bet).

95. *See supra* notes 7-16 and accompanying text.

complicated story is evident. That prosecutors should be motivated by justice, not conviction rates, should go without saying. The harder question to answer is whether good motives, both individually and institutionally, are enough. The implications of the cognitive literature suggest not.

The broad powers of the prosecutor are familiar. If brought into an investigation prior to a suspect's arrest, prosecutors can shape the investigation's direction and scope by, for example, determining whom to investigate and through what tactics.<sup>96</sup> Once an arrest is made, the prosecutor's full powers come into play as she determines whether to bring charges, what charges to bring, whether to drop charges once brought, whether to negotiate a plea and under what terms, whether to grant immunity, and what sentence to seek upon conviction.<sup>97</sup> This Part explores some of the potential ways that cognitive bias may taint the decision making of even ethical prosecutors when executing this broad discretion.

### *A. Investigation and Charging Decisions*

The potential for cognitive bias to creep into prosecutorial decision making starts from the earliest case-screening stages, when prosecutors must determine whether sufficient evidence exists to proceed with a prosecution. In hypothesis testing terms, they are testing the hypothesis that the defendant is guilty.<sup>98</sup> The phenomenon of confirmation bias suggests a natural tendency to review the reports not for exculpatory evidence that might disconfirm the tested hypothesis, but instead for inculpatory, confirming evidence.<sup>99</sup> In Earl Washington's case, for example, the prosecutor might have been looking for the fact of the confession,

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96. Griffin, *supra* note 30, at 266-68.

97. For a discussion of the powers of the prosecuting attorney, see generally Angela J. Davis, *The American Prosecutor: Independence, Power, and the Threat of Tyranny*, 86 IOWA L. REV. 393, 432-38 (2001) (describing prosecutorial abuse of the charging power); Green, *supra* note 12, at 1587-88 (describing prosecutorial discretion); Griffin, *supra* note 30, at 263-303 (discussing the various aspects and restrictions on prosecutorial discretion as well as recommending standards that should guide it).

98. See POPPER, *supra* note 43, at 32-33.

99. See *supra* Part I.A for a discussion of confirmation bias.

not for the surrounding circumstances that might undermine its reliability.

If the investigation is still ongoing, confirmation bias might cause law enforcement officers to conduct searches and to ask questions that will yield either further inculpatory evidence or nothing at all. Just as Snyder and Swann's subjects primarily asked suspected extroverts questions like "What would you do if you wanted to liven things up at a party?,"<sup>100</sup> police eyeing an initial suspect might ask, "What were you and the victim fighting about the night before the murder?" Confirmation bias will reduce the likelihood that the investigation will be directed in a manner that would yield evidence of innocence.<sup>101</sup>

Recent attention to the risks of wrongful convictions<sup>102</sup> has brought to light the influence of "tunnel vision," whereby the belief that a particular suspect has committed the crime might obfuscate an objective evaluation of alternative suspects or theories.<sup>103</sup> In Illinois, a special commission on capital punishment identified tunnel vision as a contributing factor in many of the capital convictions of thirteen men who were subsequently exonerated and released from death row.<sup>104</sup> Similarly, in Canada, a report issued

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100. Snyder & Swann, *supra* note 33, at 1204.

101. See *supra* notes 48-57 and accompanying text.

102. Much of this attention has come from postconviction exonerations of innocent defendants, often in the form of DNA evidence, and even in a startling number of capital cases. See, e.g., JIM DWYER, PETER NEUFELD & BARRY SCHECK, ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION, AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED 262-67 (2000) (providing statistics on DNA exonerations); Death Penalty Information Center, Innocence and the Death Penalty, <http://www.deathpenaltyinfo.org/article.php?did=412&scid=6> (listing 123 death-row exonerations since 1973) (last visited Mar. 12, 2006).

103. See Randolph N. Jonakait, *The Ethical Prosecutor's Misconduct*, 23 CRIM. L. BULL. 550, 559 (1987) ("The natural inclination is not to see inconsistent or contradictory evidence for what it is, but to categorize it as irrelevant or a petty incongruity."); James McCloskey, Commentary, *Convicting the Innocent*, 8 CRIM. JUST. ETHICS 2, 56 (1989) (noting that "[o]nce [the police] come to suspect someone as the culprit .... [e]vidence or information that does not fit the suspect or the prevailing theory of the crime is dismissed as not material or is changed to implicate the suspect"); Medwed, *supra* note 8, at 140-41 (discussing prosecutorial deference to police with tunnel vision); Ellen Yaroshefsky, *Cooperation with Federal Prosecutors: Experiences of Truth Telling and Embellishment*, 68 FORDHAM L. REV. 917, 945 (1999) (noting that prosecutors "get wedded to their theory and things inconsistent with their theory are ignored" (citation omitted)).

104. COMM'N ON CAPITAL PUNISHMENT, STATE OF ILL., REPORT OF THE GOVERNOR'S COMMISSION ON CAPITAL PUNISHMENT 19-22 (2002), available at [http://www.idoc.state.il.us/ccp/ccp/reports/commission\\_report/chapter\\_02.pdf](http://www.idoc.state.il.us/ccp/ccp/reports/commission_report/chapter_02.pdf).

under the authority of federal, provincial, and territorial justice ministers concluded that tunnel vision was one of the eight most common factors leading to convictions of the innocent.<sup>105</sup> In cognitive terms, the tunnel vision phenomenon is simply one application of the widespread cognitive phenomenon of confirmation bias. Law enforcement fails to investigate alternative theories of the crime because people generally fail to look for evidence that disconfirms working hypotheses.

### *B. Sticky Presumptions of Guilt*

If the prosecutor decides to pursue charges, the potential of cognitive bias to taint decision making only worsens. Prosecutorial reluctance to revisit a theory of guilt is difficult to explain when prosecutors are viewed as rational actors. Attempts to do so often rely on accounts of either individual or institutional indifference to the truth.<sup>106</sup> However, widespread prosecutorial skepticism of innocence claims is wholly understandable, and in fact predictable, in light of disconfirmation bias, belief perseverance, and cognitive consistency. Although some have argued to the contrary,<sup>107</sup> many commentators believe that the ethical prosecutor brings charges only when she is sufficiently certain in her own mind of the accused's guilt.<sup>108</sup> Accordingly, if charges are brought, the prosecutor

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105. FPT HEADS OF PROSECUTIONS COMM. WORKING GROUP, REPORT ON THE PREVENTION OF MISCARRIAGES OF JUSTICE 3, 34-41 (2005), available at <http://canada.justice.gc.ca/en/dept/pub/hop/PreventionOfMiscarriagesOfJustice.pdf>.

106. See McCloskey, *supra* note 103, at 56.

107. Commonly cited for this proposition is Professor Uviller, who wrote, "[W]hen the issue stands in equipoise in his own mind, when he is honestly unable to judge where the truth of the matter lies, I see no flaw in the conduct of the prosecutor who fairly lays the matter before the judge or jury." Uviller, *supra* note 28, at 1159; see also Fisher, *supra* note 7, at 230 n.144 (noting that the "prevailing view, at least in the world of practice, surely" does not require prosecutors to have a personal belief in the defendant's guilt); Zacharias, *supra* note 11, at 94 (asserting that "prosecutors need not act as judges of their witness's testimony unless they are sure the witness is falsifying facts"). The limited scope of Uviller's oft-quoted approval of the agnostic prosecutor is apparent. More recently, Uviller explained, "The prosecutor should be assured to a fairly high degree of certainty that he has the right person." H. Richard Uviller, *The Neutral Prosecutor: The Obligation of Dispassion in a Passionate Pursuit*, 68 *FORDHAM L. REV.* 1695, 1703 (2000) [hereinafter Uviller, *The Neutral Prosecutor*].

108. See, e.g., FREEDMAN, *supra* note 29, at 219 ("[C]onscientious prosecutors do not put the destructive engine of the criminal process into motion unless they are satisfied beyond

has presumably made a personal determination about the defendant's guilt. If additional evidence arises, selective information processing comes into play. The prosecutor will accept at face value any evidence that supports the theory of guilt and will interpret ambiguous evidence in a manner that strengthens her faith in the case.<sup>109</sup> Should any potentially exonerative evidence arise, she will scrutinize it carefully, searching for an explanation that undermines the reliability of the evidence or otherwise reconciles it with the existing theory of guilt.<sup>110</sup> As a result of selective information processing, she will continue to adhere to her initial charging decision, regardless of the new information.

Indeed, even if the inculpatory evidence that initially supported the charges is wholly undermined, belief perseverance suggests that the theory of guilt will nevertheless linger. Others have noted the large number of cases, such as Earl Washington's, in which prosecutors continue to insist that a released defendant remains a suspect.<sup>111</sup> Although prosecutorial resistance to claims of factual

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a reasonable doubt that the accused is guilty."); Gershman, *supra* note 9, at 309 (noting from experience that it was "accepted ethos" that prosecutors should not take a case to trial unless personally convinced of the defendant's guilt); Green, *supra* note 12, at 1588 ("[P]rosecutors are expected to bring prosecutions only when the guilt of the accused is sufficiently certain."); John Kaplan, *The Prosecutorial Discretion—A Comment*, 60 NW. U. L. REV. 174, 178-79 (1965) (noting from his own experience that "[t]he great majority, if not all, of the assistants felt that it was morally wrong to prosecute a man unless one was personally convinced of his guilt"); Kenneth J. Melilli, *Prosecutorial Discretion in an Adversary System*, 1992 BYU L. REV. 669, 700 ("Prosecutors do not serve the interests of society by pursuing cases where the prosecutors themselves have reasonable doubts as to the factual guilt of the defendants."); Whitney North Seymour, Jr., *Why Prosecutors Act Like Prosecutors*, 11 REC. ASS'N B. CITY N.Y. 302, 312-13 (1956) (noting that charging decisions are made "only after [prosecutors] have satisfied [themselves] of the defendant's actual guilt").

109. See *supra* Part I.B for a summary of selective information processing and disconfirmation bias.

110. See *supra* Part I.B.

111. See Freedman, *supra* note 3, at 1100-01, for a discussion of the government's reaction to exculpatory evidence presented by Washington's defense counsel. A released defendant's celebration will be commonly coupled with a prosecutor's statement that the defendant has not been exonerated. See Glod, *supra* note 1 (quoting Earl Washington's prosecutor as saying that he "cannot rule out" Washington as a suspect); Sara Rimer, *DNA Testing in Rape Cases Frees Prisoner After 15 Years*, N.Y. TIMES, Feb. 15, 2002, at A12 (reporting that a defendant was released after fifteen years based on exonerating DNA; prosecutor insists there is "no reason to doubt the validity of [the defendant's] confession" but that "there is [in]sufficient evidence to convict him beyond a reasonable doubt, and in this business a tie goes to the defendant"). In at least one case, the prosecution decided to retry the defendant after new DNA evidence led to his release. Bruce Lambert, *Prosecutor Will Retry Man Freed by DNA*

innocence is often attributed to a prosecutorial culture tainted by politics and an indifference to justice,<sup>112</sup> sticky beliefs about guilt may simply be the result of belief perseverance.

Consider, for example, the government's much criticized spy charges against Ahmad Al Halabi, an Air Force translator at the U.S. naval base at Guantanamo Bay.<sup>113</sup> The initial evidence appeared damning. Al Halabi had stored nearly two hundred detainee notes in his personal laptop, had taken prohibited photographs of the base's guard towers, and had plans to travel to Syria.<sup>114</sup> A computer analyst concluded from an inspection of Al Halabi's laptop that he had already e-mailed some of the stored documents over the Internet.<sup>115</sup>

Within weeks, a different computer investigator concluded that the initial analysis of the laptop was flawed and that Al Halabi had not sent any material over the Internet.<sup>116</sup> Nevertheless, for nearly four months prosecutors continued to seek additional analysis from the "best places."<sup>117</sup> Even when prosecutors concluded that absolutely no evidence existed to show that Al Halabi e-mailed any materials, the government dismissed only those charges that alleged the transmittal of classified information; sixteen charges, including espionage, remained.<sup>118</sup>

Still, the government's case had problems. The supposedly secret documents on Al Halabi's laptop were innocuous communications, such as letters from detainees to parents.<sup>119</sup> Moreover, he had an explanation for their presence on his laptop: translators, including himself, had been asked to alleviate a shortage of computers on the

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in *L.I. Rape-Murder*, N.Y. TIMES, Sept. 12, 2003, at B5 (announcing prosecutor's decision to retry released defendant based on his retracted confession).

112. See, e.g., Medwed, *supra* note 8, at 132-69 (discussing the institutional and political barriers to prosecutorial recognition of postconviction claims of innocence).

113. For a summary of the investigation of a supposed spy ring at Guantanamo, see Nicole Guadiano, *Case Closed? Not Yet; Spy Charges Have Been Dropped in Guantanamo Trials, but Many Questions Remain Unanswered*, A.F. TIMES, Oct. 11, 2004, at 22.

114. *60 Minutes: Spy Ring at Gitmo?* (CBS television broadcast Nov. 24, 2004) (transcript available at <http://www.cbsnews.com/stories/2004/11/24/60minutes/main657704.shtml>).

115. *Id.*

116. *Id.*

117. *Id.*

118. See Guadiano, *supra* note 113.

119. *60 Minutes: Spy Ring at Gitmo?*, *supra* note 114.

base by using their personal computers.<sup>120</sup> Al Halabi did admit to photographing the base, but only to remember his military service there, not to conduct espionage.<sup>121</sup> He also offered a justification for his anticipated travel to Syria—his upcoming wedding.<sup>122</sup> Nevertheless, prosecutors persisted, arguing that the wedding was a ruse to conceal Al Halabi's true intentions of delivering secret information to an enemy.<sup>123</sup>

Ultimately, the government conceded that only one of the nearly two hundred documents on Al Halabi's computer was classified as secret.<sup>124</sup> Nearly all charges were dropped, and Al Halabi agreed to plead guilty to relatively minor charges relating to the mishandling of a document, the prohibited photographs of the camp, and his false statements concerning the photographs.<sup>125</sup> What was once a death penalty case ended with a discharge and demotion, but no additional jail time.<sup>126</sup>

Some have suggested that Al Halabi was the victim of an anti-Muslim witch hunt at Guantanamo.<sup>127</sup> Although Al Halabi's Muslim faith undoubtedly contributed to the government's willingness to believe that he was a spy, belief perseverance may have played a larger role in the government's unwillingness to yield that belief. After the evidence of e-mailing was demonstrated to be inaccurate, the theory of guilt continued to taint the prosecutor's evaluation of the remaining evidence.<sup>128</sup> Indeed, even after the government's case

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120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. Guadiano, *supra* note 113.

125. *Id.*

126. *Id.*

127. *See id.*; Elizabeth Mehren, *Translator Pleads Guilty to Taking Documents*, L.A. TIMES, Jan. 11, 2005, at A12 (quoting a spokesperson for the Council on American-Islamic Relations as saying that the case against Al Halabi "seemed to be based more on anti-Muslim hysteria than ... on the actual facts"); *60 Minutes: Spy Ring at Gitmo?*, *supra* note 114.

128. An attorney for a similarly situated defendant described the problem: "I think the people who are responsible at Guantanamo Bay created in their minds the notion there was a spy ring of people who were all Muslims and they were basically in cahoots with one another." *60 Minutes: Spy Ring at Gitmo?*, *supra* note 114 (quoting Eugene Fidell, defendant James Yee's attorney).

unraveled, Al Halabi's prosecutor insisted, "He was engaged in suspicious behavior. He took prohibited photographs."<sup>129</sup>

### C. The Disclosure of Exculpatory Evidence

The fallibility of human cognition raises especially disturbing questions about a prosecutor's ability to determine whether evidence is exculpatory. Under *Brady v. Maryland*<sup>130</sup> and its progeny, prosecutors must disclose materially exculpatory evidence to the defense.<sup>131</sup> The problem lies in the Court's definition of "materiality." Borrowing from the Court's standard in *Strickland v. Washington* for granting a new trial based on ineffective assistance of counsel,<sup>132</sup> the Court held in *United States v. Bagley* that evidence is material and therefore required to be disclosed to the defense "only if there is a reasonable probability that, had the evidence been disclosed to the defense, the result of the proceeding would have been different."<sup>133</sup> The Court defined a "reasonable probability" as "a probability sufficient to undermine confidence in the outcome."<sup>134</sup> The Court subsequently made clear that the materiality standard is not whether the trial's outcome would more likely than not have

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129. *Id.*

130. 373 U.S. 83 (1963).

131. *Id.* at 87. Although the Court recognized in *Brady* that prosecutorial suppression of evidence could amount to a due process violation, it later restricted the scope of this due process right to the discovery of evidence that was material either to guilt or punishment. In *Brady*, the Court held that a prosecutor's failure to disclose a cooperating witness's statement, which the defense requested and which revealed that the witness was the principal actor in the charged murder, violated due process. *Id.* at 84-87. In *United States v. Agurs*, the Court distinguished specific requests for information, like the one at issue in *Brady*, from vague requests for exculpatory evidence and cases in which defense counsel made no request at all. 427 U.S. 97, 106-07 (1976). In the latter cases, the Court held that the prosecutor's constitutional obligation to disclose extended only to exculpatory evidence that met a "standard of materiality." *Id.* at 107. Later, in *United States v. Bagley*, 473 U.S. 667, 682 (1985), the Court held that a single standard of materiality governed all cases involving nondisclosed exculpatory evidence.

132. 466 U.S. 668 (1984). In *Strickland*, the Court held that a trial counsel's incompetence warrants a new trial only if "there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different." *Id.* at 694. The *Strickland* Court defined a "reasonable probability" as "a probability sufficient to undermine confidence in the outcome." *Id.*

133. *Bagley*, 473 U.S. at 682.

134. *Id.*



been different with the evidence at issue, but whether “the favorable evidence could reasonably be taken to put the whole case in such a different light as to undermine confidence in the verdict.”<sup>135</sup>

Because *Brady*'s materiality standard turns on a comparison of the supposedly exculpatory evidence and the rest of the trial record, applying the standard prior to trial requires that prosecutors engage in a bizarre kind of anticipatory hindsight review. They must anticipate what the other evidence against the defendant will be by the end of the trial, and then speculate in hypothetical hindsight whether the evidence at issue would place “the whole case”<sup>136</sup> in a different light.<sup>137</sup> Others have previously criticized *Brady* for relying on prosecutors to determine the materiality of evidence in their own files.<sup>138</sup> Prosecutors, some say, are in a poor position to evaluate the materiality of evidence because they are unaware of the planned defense strategy<sup>139</sup> and are, in any event, conflicted by their desire to win.<sup>140</sup> Moreover, if a prosecutor wrongly decides to withhold materially exculpatory evidence, the misapplication of the standard may never be detected, and there will never be judicial review of the prosecutor's decision.<sup>141</sup>

The point about *Brady* made in this Article is a slightly different one. This Article does not dispute that a prosecutor's review of her own file for exculpatory evidence might be biased; rather, this Article sees cognitive psychology as providing a potential basis for explaining the *mechanism* underlying the prosecutor's bias. From

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135. *Kyles v. Whitley*, 514 U.S. 419, 435 (1995).

136. *Id.*

137. See Green, *supra* note 12, at 1592 n.101 (noting the difficulty of assessing the materiality of evidence prospectively).

138. See, e.g., Daniel J. Capra, *Access to Exculpatory Evidence: Avoiding the Agurs Problems of Prosecutorial Discretion and Retrospective Review*, 53 *FORDHAM L. REV.* 391, 393-97 (1984); Tom Stacy, *The Search for the Truth in Constitutional Criminal Procedure*, 91 *COLUM. L. REV.* 1369, 1393 (1991).

139. Stacy, *supra* note 138, at 1393.

140. Capra, *supra* note 138, at 394-95; Stephen A. Saltzburg, *Perjury and False Testimony: Should the Difference Matter So Much?*, 68 *FORDHAM L. REV.* 1537, 1578-79 (2000) (“In our adversary system, any limitation like ‘materiality’ invites prosecutors and their law enforcement assistants to make their own biased judgments about materiality.”); Stacy, *supra* note 138, at 1393.

141. Capra, *supra* note 138, at 396 n.35; Saltzburg, *supra* note 140, at 1579 (noting that, in most cases, “withheld evidence will never see the light of day,” thereby preventing judicial review); Stacy, *supra* note 138, at 1393.

this perspective, the prosecutor's application of *Brady* is biased not merely because she is a zealous advocate engaged in a "competitive enterprise,"<sup>142</sup> but because the theory she has developed from that enterprise might trigger cognitive biases, such as confirmation bias and selective information processing.<sup>143</sup>

*Brady* requires a prosecutor who is determining whether to disclose a piece of evidence to the defense to speculate first about how the remaining evidence will come together against the defendant at trial, and then about whether a reasonable probability exists that the piece of evidence at issue would affect the result of the trial.<sup>144</sup> During the first step, a risk exists that prosecutors will engage in biased recall, retrieving from memory only those facts that tend to confirm the hypothesis of guilt.<sup>145</sup> Moreover, because of selective information processing, the prosecutor will accept at face value the evidence she views as inculpatory, without subjecting it to the scrutiny that a defense attorney would encourage jurors to apply.<sup>146</sup>

Cognitive bias would also appear to taint the second speculative step of the *Brady* analysis, requiring the prosecutor to determine the value of the potentially exculpatory evidence in the context of the entire record.<sup>147</sup> Because of selective information processing, the prosecutor will look for weaknesses in evidence contradicting

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142. Capra, *supra* note 138, at 395.

143. This Article does not attempt to tackle the difficult question of whether courts are themselves immune to heuristics that might taint rational decision making. For example, a number of scholars have posited that courts may favor decisions made by their predecessors, leading to information cascades. *See generally* Andrew F. Daughety & Jennifer F. Reinganum, *Stampede to Judgment: Persuasive Influence and Herding Behavior by Courts*, 1 AM. L. & ECON. REV. 158, 159 (1999) (analyzing the "informational cascades" that occur among courts "when their decisions are decreasingly determined by their own information and increasingly determined by the actions of others"); Eric Talley, *Precedential Cascades: An Appraisal*, 73 S. CAL. L. REV. 87, 192 (1999) (evaluating "whether a cascade theory of precedent represents a cogent description of legal evolution, focusing principally on information cascades"). Reviewing courts may thus also be subject to a bias in favor of what prior courts have already done.

144. *United States v. Bagley*, 473 U.S. 667, 682 (1985); *Brady v. Maryland*, 373 U.S. 83, 87-88 (1963).

145. *See supra* notes 53-57 and accompanying text for a discussion of confirmation bias's effect on recall.

146. *See supra* Part I.B for a summary of selective information processing.

147. *See supra* notes 135-39 and accompanying text.

her existing belief in the defendant's guilt.<sup>148</sup> In short, compared to a neutral decision maker, the prosecutor will overestimate the strength of the government's case against the defendant and underestimate the potential exculpatory value of the evidence whose disclosure is at issue. As a consequence, the prosecutor will fail to see materiality where it might in fact exist.

#### *D. Stickier Presumptions of Guilt Postconviction*

A further barrier to prosecutorial neutrality arises upon the defendant's conviction. Just as the majority of commentators believe that prosecutors should bring charges only when they are personally convinced of an accused's culpability, prosecutors also have an obligation to seek postconviction redress if they believe that an innocent person has been convicted.<sup>149</sup> Even if prosecutors do not seek the defendant's release *sua sponte*, one would at least expect a conscientious prosecutor not to oppose relief for an innocent person who requests it.<sup>150</sup> The problem, of course, is convincing the prosecutor that the defendant is, in fact, innocent.

Whether the conviction was obtained through a jury verdict or the defendant's own guilty plea, the prosecutor will view the conviction as further evidence confirming the accuracy of her initial theory of guilt.<sup>151</sup> The prosecutor's strengthened belief in her theory will continue to taint her analysis of any new evidence submitted by the defense postconviction.<sup>152</sup>

Moreover, cognitive dissonance will further hinder the prosecutor's ability to conduct a neutral evaluation of potentially

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148. See *supra* notes 66-69 and accompanying text for a discussion of people's tendency to scrutinize information that is dissonant with existing theories.

149. Green, *supra* note 11, at 637-42; Uviller, *The Neutral Prosecutor*, *supra* note 107, at 1704-05 (arguing that prosecutors have an obligation to investigate any "firmly based charge" that an innocent defendant has been convicted and, if the claim is substantiated, "to urge immediate remedy to assist the court in righting the wrong").

150. See generally *Young v. United States*, 315 U.S. 257, 258 (1942) ("The public trust reposed in the law enforcement officers of the Government requires that they be quick to confess error when, in their opinion, a miscarriage of justice may result from their remaining silent.").

151. See *supra* Part I.A for a discussion of selective information processing.

152. See *supra* notes 83-86 and accompanying text for a discussion of how belief perseverance can affect a prosecutor's evaluation of potentially exculpatory evidence.

exculpatory evidence.<sup>153</sup> The conviction of an innocent person is inconsistent with the ethical prosecutor's belief that charges should be brought only against suspects who are actually guilty.<sup>154</sup> To avoid cognitive dissonance, an ethical prosecutor might cling to the theory of guilt to reconcile her conduct with her beliefs, especially after the defendant has been convicted. From this perspective, prosecutorial bias against postconviction exculpatory evidence is not an indication of corrupt ethics at all; rather, it may indicate a deep but biasing adherence to the edict that prosecutors should only do justice. A prosecutor may give short shrift to claims of innocence, in other words, not because she is callous about wrongful convictions, but because she cannot bring herself to believe that she has played a part in one.

### III. IMPROVING PROSECUTORIAL DECISION MAKING

Prosecutorial shortcomings such as tunnel vision, failures to disclose exculpatory evidence, and stubborn adherence to theories of guilt are often categorized as "prosecutorial misconduct,"<sup>155</sup> suggesting a culpable mental state in the wrongdoing prosecutors. Not surprisingly, then, commentators who seek to prevent these prosecutorial shortcomings look for reform through improvements in prosecutorial values.<sup>156</sup> Common reform suggestions include,

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153. See *supra* Part II.B for a discussion of postconviction belief perseverance.

154. See *supra* note 108 for citations to the many scholars who have concluded that an ethical prosecutor does not bring charges unless she personally believes that the defendant is guilty.

155. See Roberta K. Flowers, *What You See Is What You Get: Applying the Appearance of Impropriety Standard to Prosecutors*, 63 MO. L. REV. 699, 734 (1998); Bennett L. Gershman, *Mental Culpability and Prosecutorial Misconduct*, 26 AM. J. CRIM. L. 121, 133-35 (1998); Peter J. Henning, *Prosecutorial Misconduct in Grand Jury Investigations*, 51 S.C. L. REV. 1, 14-20 (1999); Andrew M. Hetherington, *Prosecutorial Misconduct*, 90 GEO. L.J. 1679 (2002); Medwed, *supra* note 8, at 174.

156. Another model of reform is the limitation of prosecutorial discretion. See, e.g., Davis, *supra* note 97, at 460-64; Robert Heller, Comment, *Selective Prosecution and the Federalization of Criminal Law: The Need for Meaningful Judicial Review of Prosecutorial Discretion*, 145 U. PA. L. REV. 1309, 1325-28 (1997). The judiciary is typically loathe to intrude upon the broad discretion of prosecutors, in part out of respect for the separation of powers. See *United States v. Armstrong*, 517 U.S. 456, 464 (1996) (invoking separation of powers concerns in setting a high standard for scrutinizing the charging decisions of federal prosecutors). For purposes of this Article, the lessons of cognitive psychology are used to suggest methods of improving the quality of decisions made within the scope of a prosecutor's

for example, increases in both the frequency and severity of sanctions against unethical prosecutors and a transformation of a prosecutorial culture that is described as valuing conviction rates above justice.<sup>157</sup> If only prosecutors cared about claims of innocence, the story seems to go, we might trust their decision making.

Without disputing the suggestion that some prosecutors—both individually and institutionally—could give more weight to doing justice, this Article has tried to suggest that the story is a more complicated one. This Article seeks to add a cognitive dimension to the traditional explanation of “misconduct,” not because all prosecutors are well intentioned, but because suggesting that only bad-intentioned prosecutors are at risk of poor decision making is simply too easy. Prosecutors sometimes make biased decisions, this Article has argued, because people generally are biased decision makers. A cognitive explanation for prosecutorial bias suggests that improving the values of prosecutors is not enough; an improvement in the cognitive process is required. This Part attempts to set forth some initial suggestions for reform, aimed at reducing the influence of cognitive bias upon sound prosecutorial decision making.

### *A. Improving the Initial Theory of Guilt*

Confirmation bias, selective information processing, and belief perseverance are all triggered by the decision maker’s existing beliefs. In the context of prosecutorial decision making, the biasing theory is the prosecutor’s belief that the defendant is guilty. Once that belief is formed, confirmation bias causes her to seek information that confirms the theory of guilt; selective information processing causes her to trust information tending to confirm the theory of guilt and distrust potentially exculpatory evidence; and belief perseverance causes her to adhere to the theory of guilt even when the evidence initially supporting that theory is undermined.<sup>158</sup>

Because the theory of guilt triggers sources of cognitive bias, prosecutorial neutrality should be at its peak prior to the prosecu-

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discretion, but the proper breadth of that discretionary authority is not addressed.

157. See *supra* notes 12-16 and accompanying text.

158. See *supra* Part I.A-C for a summary of confirmation bias, selective information processing, and belief perseverance.

tor's charging decision, before she has formed a theory of guilt that will taint subsequent information processing.<sup>159</sup> Accordingly, the accuracy of a prosecutor's decision making would be maximized if she had access to all relevant evidence gathered by the police prior to making the initial charging decision. Early access to all relevant evidence could be improved in two ways. First, prosecutors could be involved in investigations prior to initiating formal charges, as they often are in the federal system or in major crime investigations at the state level.<sup>160</sup> Second, in less serious cases in which resources would not feasibly permit prosecutorial involvement in the cases' investigative stage, police should record, preserve, and disclose to the prosecutor all evidence collected during their investigation, both inculpatory and exculpatory.<sup>161</sup>

Because police agencies act independently of prosecutors' offices in most jurisdictions, prosecutors have no guarantee that police will give them the information they need to make a fully informed evaluation of a case.<sup>162</sup> Although *Brady* provides *defendants* a right of access to material exculpatory evidence, it does so through a trial right that governs the conduct of prosecutors, not the police.<sup>163</sup> And although the Supreme Court has extended prosecutors' *Brady* obligations to all exculpatory evidence known to law enforcement agencies "acting on the government's behalf in the case,"<sup>164</sup> no

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159. See *supra* Part II.A.

160. The prosecutor's participation during investigations is a relatively recent but increasingly common role. See Rory K. Little, *Proportionality as an Ethical Precept for Prosecutors in Their Investigative Role*, 68 *FORDHAM L. REV.* 723, 733-36 (1999) (discussing the twentieth-century development of the prosecutorial role in investigations).

161. Of course, full disclosure from police to prosecutors does not resolve flaws that exist in the investigation stage, such as the investigating officers' tunnel vision and other cognitive biases. See, e.g., McCloskey, *supra* note 103, at 56. That is why recent reform suggestions in the context of wrongful convictions have included training police officers to continue to investigate all alternative theories. See, e.g., *COMM'N ON CAPITAL PUNISHMENT*, *supra* note 104, at 20-21. Moreover, even if flaws exist in the police investigation, full disclosure by police officers to prosecutors, coupled with enhanced disclosure duties of prosecutors to defense attorneys, see *infra* Part III, would likely increase the probability that those flaws might be detected prior to conviction.

162. The State of Illinois Commission on Capital Punishment recently attempted to resolve this problem in the context of preserving the integrity of capital offense investigations. See *COMM'N ON CAPITAL PUNISHMENT*, *supra* note 104, at 22.

163. See *United States v. Bagley*, 473 U.S. 667, 682 (1985); *Brady v. Maryland*, 373 U.S. 83, 87 (1963).

164. *Kyles v. Whitley*, 514 U.S. 419, 437 (1995).

doctrinal basis exists for assuring prosecutorial access to this information.

Professor Fisher has suggested that prosecutorial access to exculpatory information gathered by the police could be increased either directly through legislation or indirectly through changes to the ethical rules that govern prosecutors.<sup>165</sup> This Article seeks only to offer an additional reason for ensuring the police's full disclosure of information to prosecutors and does not explore the best doctrinal basis for doing so. Prosecutorial access to all information gathered by police during their investigation is essential not only to the ability of prosecutors to comply with *Brady* but also to the accuracy of their initial charging decisions, which the cognitive literature suggests are hard to shake.<sup>166</sup>

Of course, no process can assure one hundred percent accuracy in a prosecutor's decision making. However, improving prosecutorial access to investigatory information prior to the initial charging decision improves decision-making outcomes in two related ways. First, it maximizes the availability of prosecutorial neutrality, ensuring that the prosecutor's initial theory about the case is based upon all available information. Second, to the extent that the prosecutor's initial charging decision will bias her subsequent decisions in the case, improving the accuracy of the prosecutor's initial theory of guilt will mitigate from a normative perspective the adverse effects of cognitive bias upon the prosecutor's ultimate decisions.

### *B. Educating Prosecutors and Future Prosecutors*

Another possible method of improving prosecutorial decision making is to train prosecutors and future prosecutors about the sources of cognitive bias and the potential effects of cognitive bias upon rational decision making. Commentators often look to

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165. See Stanley Z. Fisher, *The Prosecutor's Ethical Duty To Seek Exculpatory Evidence in Police Hands: Lessons from England*, 68 *FORDHAM L. REV.* 1379, 1385 (2000); see also Lissa Griffin, *The Correction of Wrongful Convictions: A Comparative Perspective*, 16 *AM. U. INT'L L. REV.* 1241, 1251-55 (2001) (comparing the *Brady* regime to the English requirement that police record and disclose to prosecutors all relevant information).

166. See *supra* Part II.A.

education to improve prosecutorial decision making,<sup>167</sup> but they tend to emphasize education about good prosecutorial values. They have argued, for example, that prosecutors should be admonished to approach cases with “a healthy skepticism” and “to assume an active role in confirming the truth of the evidence of guilt and investigating contradictory evidence of innocence.”<sup>168</sup> To the virtuous prosecutor, these obligations are apparent. What is less apparent are the cognitive biases that may taint the decision making of even ethical prosecutors.

With increased academic attention to the effects of cognitive bias on legal theory, doctrine, and practice, there has been some movement toward teaching law students about the limits of their own rationality.<sup>169</sup> Additionally, recent responses to wrongful convictions have included the recommendation that prosecutors learn about cognitive bias and its effects upon prosecutorial decision making.<sup>170</sup> Some empirical evidence suggests that self-awareness of cognitive limitations can improve the quality of individual decision making.<sup>171</sup> For example, recall that in their well-known experiment involving the fake suicide note task, Ross, Lepper, and Hubbard found that both the actors who performed the task and the observers who watched maintained their beliefs about the actors’ ability to perform the task, even after being told that the experimenters provided false feedback.<sup>172</sup> As part of the study, experimenters also exposed some subjects to a further “process debriefing,” which provided a detailed discussion of the belief

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167. See, e.g., Ellen S. Podgor, *The Ethics and Professionalism of Prosecutors in Discretionary Decisions*, 68 *FORDHAM L. REV.* 1511, 1513 (2000).

168. Gershman, *supra* note 9, at 342, 348.

169. See Joseph W. Rand, *Understanding Why Good Lawyers Go Bad: Using Case Studies in Teaching Cognitive Bias in Legal Decision-Making*, 9 *CLINICAL L. REV.* 731, 734 (2003) (illustrating the use of case studies in clinical education to teach students about cognitive bias).

170. *COMM’N ON CAPITAL PUNISHMENT*, *supra* note 104, at 111 (suggesting that all prosecutors and defense lawyers who try capital cases should receive periodic training on the dangers of tunnel vision or confirmation bias, and other factors contributing to wrongful convictions); *FPT HEADS OF PROSECUTIONS COMM. WORKING GROUP*, *supra* note 105, at 40-41 (recommending educating prosecutors about tunnel vision).

171. See NISBETT & ROSS, *supra* note 16, at 191 (“The effectiveness of a variety of procedures for discrediting information also may depend on their capacity to make subjects aware of some of the processes underlying the perseverance of their beliefs.”).

172. See Ross, Lepper & Hubbard, *supra* note 76, at 880-87.



perseverance phenomenon.<sup>173</sup> The experimenters found that process debriefing eliminated the effects of the false feedback, at least among the subjects who completed the task themselves.<sup>174</sup>

However, some social science evidence suggests that self-awareness is not enough to prevent cognitive bias. For example, although Ross, Lepper, and Hubbard found that “process debriefing” about the phenomenon of belief perseverance eliminated belief perseverance among subjects concerning their *own* performance on the suicide note task, they also found continued perseverance effects among observer subjects, despite process debriefing.<sup>175</sup> In other words, observer subjects continued to view an actor’s ability as consistent with the discredited feedback.<sup>176</sup> Similarly, Wason found that alerting subjects to their errors in the card-selection task did little to improve their accuracy in selecting the appropriate cards for hypothesis testing.<sup>177</sup> Accordingly, although education about cognitive bias may hold some potential to improve prosecutorial decision making, it is doubtful that education alone will assure prosecutorial neutrality.

### C. *The Practice of “Switching Sides”*

One possible method for the ethical prosecutor to avoid cognitive bias would be to act as her own neutralizing adversary by generating pro-defense counterarguments to her own prosecutorial interpretations of the evidence against the defendant. Cognitive research suggests that the generation of explanatory arguments plays a role in belief perseverance, and that generating explanatory counterarguments can mitigate belief perseverance. For example, recall Anderson, Lepper, and Ross’s study, in which subjects were led to believe through fictionalized case histories that either a negative or positive correlation existed between risk preference and

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173. *Id.* at 885.

174. *Id.* at 887-88.

175. *Id.* at 888.

176. *Id.*

177. See WASON & JOHNSON-LAIRD, *supra* note 38, at 194-97 (summarizing evidence demonstrating the difficulty subjects had with the card-selection task even when fully informed about the correct response).

firefighting abilities.<sup>178</sup> The study replicated the basic belief perseverance phenomenon, with subjects continuing to adhere to beliefs about the perceived relationship even after learning that the case histories were fictional.<sup>179</sup> Importantly though, the researchers asked subjects prior to the debriefing to generate possible explanations for the perceived relationship.<sup>180</sup> Those subjects who generated a plausible theory to support the observed correlation displayed more perseverance than subjects whose explanations simply restated the existence of an observed correlation.<sup>181</sup>

One suggested mechanism for belief perseverance, then, is that once a theory is formed to explain a data set, it exists apart from the data and may continue to be treated as the most plausible theory even after the underlying data is discredited.<sup>182</sup> Such a mechanism suggests that generating countertheories should mitigate perseverance effects, and the cognitive literature does provide some support for counterexplanation as a debiasing technique.<sup>183</sup> Anderson and Sechler, for example, found that

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178. See Anderson, Lepper & Ross, *supra* note 84, at 1039. The study is summarized in notes 183-86 *infra* and accompanying text.

179. Anderson, Lepper & Ross, *supra* note 84, at 1045.

180. *Id.* at 1039.

181. *Id.* at 1045; see also Anderson et al., *supra* note 65, at 244-48 (finding that subjects who produced causal arguments to support their beliefs were more likely to show a perseverance of belief after the presentation of evidence that explicitly disconfirmed their initial beliefs); Lee Ross et al., *Social Explanation and Social Expectation: Effects of Real and Hypothetical Explanations on Subjective Likelihood*, 35 J. PERSONALITY & SOC. PSYCHOL. 817, 825-26 (1977) (finding that subjects who generated an explanation for purely hypothetical data demonstrated greater belief perseverance than subjects who had not generated an explanation).

182. Anderson, Lepper & Ross, *supra* note 84, at 1047; see also NISBETT & ROSS, *supra* note 16, at 183-86 (attributing belief perseverance to misplaced adherence to causal explanations); Craig A. Anderson, *Inoculation and Counterexplanation: Debiasing Techniques in the Perseverance of Social Theories*, 1 SOC. COGNITION 126, 128 (1982) [hereinafter Anderson, *Inoculation*] (suggesting a possible mechanism for the perseverance enhancing effect of explanation). Some have suggested that confirmation bias and the availability heuristic may play a role in the mechanism for belief perseverance. If people search their memories for confirming evidence to support a theory while they are forming it, that retrieved information remains available and therefore influential to decision making, even after the initial evidence that led to the theory is undermined. See KUNDA, *supra* note 16, at 100 (suggesting a link between belief perseverance and the availability heuristic).

183. See NISBETT & ROSS, *supra* note 16, at 190 ("It seems probable that attempts to discredit beliefs may have relatively greater impact when they prompt the use of plausible theories or 'scripts' that encompass both the initial information and the subsequent challenge to that information.").

subjects who were asked to generate arguments to support an assigned position shifted their attitudes toward the assigned position.<sup>184</sup> However, when the experimenters asked subjects to generate arguments to support the opposite position, the belief perseverance effects were reversed.<sup>185</sup> Similarly, Lord, Lepper, and Preston found a corrective effect when subjects were induced to consider opposing possibilities, either upon explicit instruction or through exposure to materials that made the opposing possibility more salient.<sup>186</sup>

In lawyer terms, a prosecutor seeking to avoid cognitive bias through counterexplanation would simply switch litigation sides and play the role of her own devil's advocate, a practice she probably learned her first year of law school. The mental exercise of switching sides could help mitigate cognitive bias in two separate contexts.<sup>187</sup> First, as evidence is evaluated on an ongoing basis during a case's pendency, the prosecutor could try to generate plausible explanations of both guilt and innocence for each piece of incoming evidence. This procedure might serve as inoculation against unwarranted belief perseverance by preventing the prosecutor's theory of guilt from becoming disconnected from the evidence underlying it. Second, if an early piece of evidence is subsequently discredited, a prosecutor who had formed an opinion of guilt based in part on the discredited evidence could imagine alternative explanations for any remaining evidence. This counterexplanation exercise of switching sides would assist the prosecutor in an unbiased evaluation of the prosecution's remaining case without the discredited evidence.

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184. Craig A. Anderson & Elizabeth S. Sechler, *Effects of Explanation and Counterexplanation on the Development and Use of Social Theories*, 50 J. PERSONALITY & SOC. PSYCHOL. 24, 27-28 (1986).

185. *Id.* at 29.

186. Lord, Lepper & Preston, *supra* note 65, at 1239. The researchers found that both strategies for inducing subjects to consider the opposite had greater corrective effects than instructions for subjects to be fair and unbiased. *Id.*

187. These examples are based upon psychologist Craig Anderson's examples of how perseverance-reducing procedures can be used generally. *See* Anderson, *Inoculation*, *supra* note 182, at 129.

#### *D. Second Opinions and Committee Input*

Another possible method to mitigate the influence of cognitive bias on prosecutorial decision making is to involve additional, unbiased decision makers in the process. The reduction of bias might be achieved internally within a prosecutor's office by establishing a process for "fresh looks" of a file by a lawyer or a committee of lawyers whose evaluation would not be tainted by earlier developments in the case.<sup>188</sup> For example, such a process might be helpful when the prosecuting attorney learns of a new piece of potentially exonerating evidence and the initial theory of guilt might cause her to undervalue its importance.<sup>189</sup> A fresh look might also be helpful when the credibility of a piece of evidence that contributed to the prosecutor's initial charging decision is undermined. A separate attorney would be able to comment on the strength of existing evidence against the defendant without the taint of a preexisting theory of guilt.<sup>190</sup> Similarly, a fresh look attorney would not be biased by the desire to avoid the cognitive dissonance associated with having charged an innocent person with a crime.<sup>191</sup>

Limitations exist, however, in another prosecutor's ability to provide a neutral evaluation of a coworker's case. Herbert Packer observed long ago the operational "presumption of guilt" that allows the fast-paced case screening process in most district attorneys' offices to function.<sup>192</sup> At least some prosecutors might open each

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188. The establishment of internal "fresh look" procedures would resemble committees formed in some district attorneys' offices to review cases resting upon the testimony of a single eyewitness. See Medwed, *supra* note 8, at 127 & n.6; Robin Topping, *Panel Puts Justice Before Prosecution*, NEWSDAY, Jan. 8, 2003, at A21 (describing such a committee in Nassau County, New York).

189. See *supra* Part II.A for a discussion of how a prosecutor's initial charging decision may cause her to underestimate the exculpatory value of subsequently discovered evidence.

190. See *supra* Part II.B for a discussion of how belief perseverance can cause a prosecutor to adhere to her theory of guilt even after critical evidence against the defendant is undermined.

191. See *supra* Part II.D for a discussion of how the avoidance of cognitive dissonance can prevent prosecutors from acknowledging that they have charged or convicted an innocent person of a crime.

192. HERBERT L. PACKER, *THE LIMITS OF THE CRIMINAL SANCTION* 160 (1968) ("The presumption of guilt is what makes it possible for the system to deal efficiently with large numbers, as the Crime Control Model demands.").

new file assuming that police would not have arrested the suspect and referred him for charges if they did not have their man.<sup>193</sup> Accordingly, a prosecutor serving as a fresh look attorney may be tainted by an initial theory of guilt even before reading a police report. Moreover, a fresh look attorney may be reluctant to dissent from her colleague's initial case evaluation. The social science literature demonstrates the difficulty decision makers have in resisting the power of their peers.<sup>194</sup> For example, in Solomon Asch's classic studies on conformity, he found that large percentages of subjects could be induced to reach erroneous conclusions in a simple line-matching task if a number of the researchers' confederates first answered incorrectly.<sup>195</sup>

Accordingly, a more meaningful fresh look process might involve an advisory committee that includes nonprosecutors. Asch's research on conformity demonstrated the power of even one lone dissenting voice to encourage people to depart from group opinion and assess a problem independently.<sup>196</sup> Judges, defense attorneys, and civil practitioners would be less likely to apply a presumption of guilt and would feel less pressure to conform their views to other prosecutors; accordingly, they may be more likely to provide a true fresh look.<sup>197</sup>

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193. See George T. Felkenes, *The Prosecutor: A Look at Reality*, 7 SW. U. L. REV. 98, 112 (1975) (describing the phenomenon of "pre-conviction" as the tendency of prosecutors to presume the guilt of the accused).

194. See, e.g., Leonard Berkowitz & Nigel Walker, *Laws and Moral Judgments*, 30 SOCIOLOGY 410, 418 (1967) (finding that subjects' approval of conduct conformed to their peers' opinions).

195. Specifically, subjects were asked to choose which of three lines was the same length as a comparison line. See SOLOMON E. ASCH, SOCIAL PSYCHOLOGY 450-59 (1952) [hereinafter ASCH, SOCIAL PSYCHOLOGY]; Solomon E. Asch, *Studies of Independence and Conformity: A Minority of One Against a Unanimous Majority*, 70 PSYCHOL. MONOGRAPHS 1 (1956); see also Richard S. Crutchfield, *Conformity and Character*, 10 AM. PSYCHOLOGIST 191, 196 (1955) (replicating Asch's study with female subjects).

196. Asch demonstrated the power of a lone dissenting voice in his line-matching studies. When experimenters varied the research design to include one accurate confederate among the inaccurate peers, subjects deviated from majority opinion and chose the correct line. ASCH, SOCIAL PSYCHOLOGY, *supra* note 195, at 477-79; see also CASS R. SUNSTEIN, WHY SOCIETIES NEED DISSENT 21 (2003) (noting that the lone person with knowledge of the truth may not want to risk her reputation by insisting that she is correct).

197. See NISBETT & ROSS, *supra* note 16, at 291 (suggesting that collective and institutional judgments are most capable of improvement because of the potential to formalize decision-making procedures to account for cognitive barriers to effective

Some prosecutors might resist the involvement of outsiders in the case-evaluation process as an unwarranted intrusion into prosecutorial discretion. However, the full scope of prosecutorial discretion could be preserved if the fresh look committee served solely in an advisory capacity and the district attorney's office retained ultimate decision-making authority. Moreover, the committee's advisory capacity could be limited to specific questions, such as the strength of a case or the potential value of exonerating evidence.<sup>198</sup> Such a limited consulting role would not involve the committee in the broader policy questions that generally justify deference to prosecutorial discretion, such as the jurisdiction's enforcement priorities or where a single case fits within those priorities.<sup>199</sup>

With limited responsibilities, a diversely constituted fresh look committee could be modeled loosely after the civilian review boards that increasingly monitor police.<sup>200</sup> Most of those boards participate in the oversight of police departments in narrow ways, such as resolving complaints against individual police officers, without interfering in broader questions about the department's policing

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evaluations).

198. Professor Freedman has suggested a similar process in which a panel acting like a grand jury would review postconviction innocence claims in capital cases. See Eric M. Freedman, *Innocence, Federalism, and the Capital Jury: Two Legislative Proposals for Evaluating Post-Trial Evidence of Innocence in Death Penalty Cases*, 18 N.Y.U. REV. L. & SOC. CHANGE 315, 322-23 (1990).

199. The judiciary has typically deferred to prosecutorial discretion, reasoning that its exercise calls for decisions that the judiciary is ill-equipped to make. These include decisions about law enforcement priorities, the appropriateness of a single prosecution as a part of those priorities, the allocation of prosecutorial resources, and the individualization of justice in a single case. See *Town of Newton v. Rumery*, 480 U.S. 386, 396 (1987) (noting that the prosecutor, not the judiciary, must evaluate the merits of the case, allocation of resources, and enforcement objectives); *Wayte v. United States*, 470 U.S. 598, 607 (1985) ("Such factors as the strength of the case, the prosecution's general deterrence value, the Government's enforcement priorities, and the case's relationship to the Government's overall enforcement plan are not readily susceptible to the kind of analysis the courts are competent to undertake.").

200. See generally David H. Bayley, *Community Policing: A Report from the Devil's Advocate*, in COMMUNITY POLICING: RHETORIC OR REALITY 225, 236-37 (Jack R. Greene & Stephen D. Mastrofski eds., 1988) (arguing that external monitoring of police is an essential component of implementing community policing); Debra Livingston, *Police Discretion and the Quality of Life in Public Places: Courts, Communities, and the New Policing*, 97 COLUM. L. REV. 551, 575-78 (1997) (discussing the increase in the use of civilian oversight boards in the policing context).

strategies.<sup>201</sup> Although police departments initially balked at even minimal civilian involvement in their affairs, at least some role for external monitoring of police is increasingly acceptable.<sup>202</sup> If prosecutors' offices could survive a similar cultural adjustment, they could have the benefits of neutral fresh looks without sacrificing the autonomy brought by prosecutorial discretion.<sup>203</sup>

### *E. Prosecutorial Involvement in Innocence Projects*

Another proposal for reform is increased prosecutorial involvement in the organizations that govern and address professional ethics among lawyers generally and prosecutors specifically, such as state and local bar committees, innocence projects, and groups concerned with providing quality defense representation in criminal cases. Currently, prosecutors are underrepresented in bar and pro bono oriented activities.<sup>204</sup> Apart from the benefits that might inure to these organizations from increased and diversified participation, prosecutorial involvement in such groups would provide prosecutors with a venue for behavior demonstrating their commitment to protecting innocent defendants. That objective behavioral commitment could in turn assist prosecutors in their own internal decision making by mitigating the biasing effects of cognitive dissonance.

Part II.D suggested that cognitive dissonance might prevent prosecutors from neutrally evaluating defendants' claims of innocence because ethical prosecutors may not want to believe that they have convicted, or even charged, an innocent person of a crime. Accordingly, to resist dissonance, the prosecutor might underesti-

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201. Livingston, *supra* note 200, at 665.

202. *Id.* at 664-66.

203. Professor Davis has advocated the creation of prosecution review boards to review complaints against prosecutors and their discretionary decisions. Davis, *supra* note 97, at 463-64. This Article's proposal differs by recommending the participation of outsiders to improve the quality of prosecutorial decisions as they are being made.

204. See, e.g., *The Effect of State Ethics Rules on Federal Law Enforcement: Hearing Before the Subcomm. on Criminal Justice Oversight of the S. Comm. on the Judiciary*, 106th Cong. 53 (1999) (statement of John Smietanka, former prosecutor) (testifying that "[t]ime, money and, to some unfortunate extent, a cultural chasm" prevent prosecutors from "meaningful participation" in bar activities); cf. Lisa G. Lerman, *Public Service by Public Servants*, 19 HOFSTRA L. REV. 1141 (1991) (noting obstacles that prevent government lawyers from undertaking pro bono work).

mate the merits of a claim to innocence.<sup>205</sup> However, recent research on dissonance suggests that dissonance resistance can be mitigated when people are given an alternative method of affirming their own values and self-perceptions. For example, Claude Steele has theorized that cognitive dissonance results from people's desire to affirm their own sense of integrity.<sup>206</sup> According to Steele's self-affirmation theory, a person changes her beliefs in the face of dissonant conduct because the act implies that the person is not "morally adequate" and challenges the person's self-adequacy.<sup>207</sup> To affirm her own image, the person adjusts her beliefs in response to the dissonance.<sup>208</sup> Steele's theory is consistent with this Article's suggestion that prosecutors may resist reevaluating a defendant's guilt in an attempt to preserve their own sense of professional integrity.

Steele's research provides some support not only for the theorized mechanism underlying the reaction to dissonance, but also for its corollary that belief adjustment in response to dissonance can be mitigated if people are provided an alternative mechanism for self-affirmation. For example, Steele and Liu asked subjects to write an essay supporting increases in tuition, even though the subjects opposed the hikes.<sup>209</sup> Subjects were also asked to complete a questionnaire about politics and economics.<sup>210</sup> Replicating the classic finding of cognitive dissonance, subjects generally demonstrated a change in their beliefs, reporting less opposition to tuition increases after writing essays favoring them.<sup>211</sup> However, the researchers found that subjects who valued politics and economics, and who had affirmed their values by completing the required questionnaire, demonstrated less belief change as a result of the forced counterattitudinal essay.<sup>212</sup> The researchers construed the

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205. See *supra* Part II.D.

206. Claude M. Steele, *The Psychology of Self-Affirmation: Sustaining the Integrity of the Self*, in 21 ADVANCES IN EXPERIMENTAL SOCIAL PSYCHOLOGY 261, 277 (Leonard Berkowitz ed., 1988).

207. *Id.* at 278.

208. *Id.*

209. Claude M. Steele & Thomas J. Liu, *Dissonance Processes as Self-Affirmation*, 45 J. PERSONALITY & SOC. PSYCHOL. 5, 7-8 (1983).

210. *Id.*

211. *Id.*

212. *Id.*



data as suggesting that salient, self-affirming cognitions might help people respond objectively to information that challenges their self-image.<sup>213</sup>

Similarly, in another study, researchers found that subjects who were asked to write an essay opposing state funding for the construction of handicapped facilities demonstrated less change in their beliefs about the appropriateness of such facilities if they expected to have an opportunity to personally assist the handicapped after the experiment.<sup>214</sup>

These studies suggest that prosecutors could mitigate the effects of dissonance resistance on decision making by creating alternative mechanisms to support their own self images as ethical prosecutors committed to the pursuit of justice. Personal involvement in professional organizations that value legal and prosecutorial ethics might increase the prosecutor's own confidence in her commitment to protecting the innocent and may therefore decrease the likelihood of bias in evaluating claims of innocence.

#### *F. Repairing Brady*

This Article's final suggestion for reform concerns a prosecutor's disclosure of evidence to the defense under *Brady v. Maryland*.<sup>215</sup> The previously suggested reforms of increased prosecutorial access to information, prosecutorial training about cognitive bias, the practice of switching litigation sides, internal fresh look reviews, and prosecutorial involvement in professional organizations all carry some potential to improve a prosecutor's application of the *Brady* standard because they all seek to mitigate cognitive bias and will therefore increase the likelihood of an accurate assessment of the exculpatory value of a piece of evidence. Additional improve-

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213. *Id.*

214. Claude M. Steele & Thomas J. Liu, *Making the Dissonant Act Unreflective of Self: Dissonance Avoidance and the Expectancy of a Value-Affirming Response*, 7 PERSONALITY & SOC. PSYCHOL. BULL. 393, 396-97 (1981). Subjects demonstrated reduced attitude change as a result of writing the essay if they were led to believe that they would provide study assistance for blind students after the experiment. *Id.* at 393.

215. See Part II.C, *supra*, for a discussion of *Brady v. Maryland*, 373 U.S. 83 (1963), and the potential of cognitive bias to affect its application.

ment in prosecutorial disclosure, however, requires a rethinking of *Brady's* materiality standard.

As explored in Part II.C, limiting a prosecutor's constitutional disclosure obligation to evidence that poses a "reasonable probability"<sup>216</sup> of affecting a case's outcome invites decision making that is biased against disclosure. Because the prosecutor has already formed a theory of guilt, she will overestimate the value of inculpatory evidence, underestimate the value of the exculpatory evidence, and ultimately undercount instances of materiality.<sup>217</sup> The problem with the Court's *Brady* doctrine is its use of a harmless error standard not just in determining whether the reversal of a conviction is warranted based on the nondisclosure of exculpatory evidence, but also in determining whether disclosure is required in the first place.

This flaw results from the Court's misplaced reliance in the *Brady* context on the standard established in *Strickland v. Washington*<sup>218</sup> for granting a new trial based on ineffective assistance of counsel.<sup>219</sup> Importantly, unlike *Brady's* materiality standard, the Court's test under *Strickland* is a two-prong test that separates the standard for attorney performance from the question of the defendant's entitlement to a new trial should counsel fail to meet that standard.<sup>220</sup> The first prong makes clear that the standard for attorney performance is that of "reasonably effective assistance."<sup>221</sup> The second prong of *Strickland* applies as a harmless error standard, asking whether the deficiency of counsel's performance affected the trial's outcome.<sup>222</sup> In light of the two

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216. *United States v. Bagley*, 473 U.S. 667, 682 (1985).

217. *See supra* Part II.C.

218. 466 U.S. 668 (1984). In *Strickland*, the Court held that the demonstration of trial counsel's incompetence warrants a new trial only if "there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different." *Id.* at 694. The *Strickland* Court defined a "reasonable probability" as "a probability sufficient to undermine confidence in the outcome." *Id.*

219. *See Bagley*, 473 U.S. at 682 (relying on *Strickland*, 466 U.S. at 694-95, in defining the "materiality" of evidence subject to disclosure).

220. *Strickland*, 466 U.S. at 687.

221. *Id.* Trial counsel's performance is measured by an objective standard and is reasonably effective if her services fall within the range of competence demanded in a criminal case. *Id.* at 687-88.

222. *Id.* at 694.

prongs separating the standard for attorney performance from the standard for a defendant's remedy, a defense attorney who looked to *Strickland* for guidance about her duties of performance would be hard pressed to argue that she was professionally, ethically, and legally entitled to provide an incompetent, unreasonable defense as long as her client was a lost cause.<sup>223</sup>

Unlike *Strickland's* two-prong test, the Court's prosecutorial disclosure jurisprudence establishes a single standard for determining both counsel's obligations and the defendant's entitlement to relief if those obligations go unmet.<sup>224</sup> As a standard for determining the availability of postconviction relief, *Brady's* materiality requirement may be a sensible method of ensuring that convictions are not lightly reversed when undisclosed evidence could not have affected a case's disposition. It is not, however, a helpful pretrial standard for prosecutors trying to determine at the outset whether to disclose evidence to the defense.

The standard governing prosecutors' disclosure to the defense should be separate from the standard that determines whether a defendant's conviction should be reversed due to a failure to disclose. Importantly, to mitigate cognitive bias, the standard for disclosure should require prosecutors to evaluate the potential exculpatory value of evidence from the defense's perspective, not through the lens of their preexisting theory of guilt. For example, Professor Capra suggested long ago that prosecutors should be required to disclose any evidence "favorable to the defendant's preparation or presentation of his defense."<sup>225</sup>

Model Rule of Professional Conduct 3.8(d), the ethical rule governing prosecutors' disclosure of evidence, is a step in the right direction because it requires prosecutors to "make timely disclosure to the defense of all evidence or information known to the prosecu-

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223. *Strickland* does permit a court reviewing trial counsel's performance after the fact to apply the second prong first, thereby avoiding any ruling on the attorney's performance by ruling instead that any proven incompetence would have been harmless. *Id.* at 697. Accordingly, *Strickland* does permit attorney incompetence to go unaddressed absent separate civil or disciplinary proceedings against counsel. Nevertheless, as a decision providing prospective guidance to defense counsel, *Strickland* does make clear that the standard for attorney performance is reasonably effective assistance. *Id.* at 687.

224. *Brady v. Maryland*, 373 U.S. 83, 87 (1963).

225. Capra, *supra* note 138, at 428.

tor that tends to negate the guilt of the accused or mitigates the offense."<sup>226</sup> Although the rule primarily codifies prosecutors' constitutional obligations under *Brady*, the provision does not contain the limitation of materiality found in the Court's due process jurisprudence.<sup>227</sup>

Unfortunately, an ethical rule that governs prosecutorial disclosure is unlikely to alter the psychology of prosecutors trained to apply the well-known, constitutionally based *Brady* standard. As an initial matter, prosecutors receive far more training about the constitutional rules of criminal procedure than about ethical rules.<sup>228</sup> Accordingly, they may not even be aware that Model Rule 3.8(d) requires broader disclosure than *Brady*. Even if aware of the gap between the Model Rule and *Brady*'s materiality standard, prosecutors may feel an obligation as an advocate to violate Model Rule 3.8(d) and to pursue all constitutional means of convicting a defendant they believe is guilty.<sup>229</sup> Because prosecutors, unlike private attorneys, are members of law enforcement, empowered by the executive branch, it is not uncommon for them to think of their obligations only as law enforcement officers governed by constitutional and statutory rules, not as lawyers governed by the rules of professional conduct.<sup>230</sup>

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226. MODEL RULES OF PROF'L CONDUCT R. 3.8(d) (1998). With respect to sentencing, the rule goes on to require disclosure to the defense and the court of "all unprivileged mitigating information known to the prosecutor ...." *Id.*

227. See Gershman, *supra* note 9, at 328 (noting that prosecutors' constitutional obligations are narrower than their ethical obligations under Rule 3.8(d)); Lisa M. Kurcias, Note, *Prosecutor's Duty To Disclose Exculpatory Evidence*, 69 FORDHAM L. REV. 1205, 1205-06, 1216 (2000) (discussing the difference between prosecutors' obligations under *Brady* and Model Rule 3.8(d)).

228. See Melilli, *supra* note 108, at 686 (explaining that young lawyers entering into service as prosecutors are inexperienced and given little or no education in prosecutorial ethics).

229. See John M. Burkoff, *Prosecutorial Ethics: The Duty Not "To Strike Foul Blows,"* 53 U. PITT. L. REV. 271, 274-75 (1992) (noting that prosecutors' groups and especially the Department of Justice have been critical of the American Bar Association's attempts to regulate the unethical conduct of prosecutors).

230. See Zacharias, *supra* note 13, at 761 (noting that bar authorities often operate under the power of the judiciary and may be reluctant to discipline prosecutors because of concerns about the separation of powers). When Richard Thornburgh was Attorney General, for example, he accused "[t]he defense bar, with ABA sponsorship, [of] attempting to use rules of professional conduct to stymie criminal investigations and prosecutions." Press Release, U.S. Dept of Justice, National Association of Attorneys General, and National District

The failure of bar authorities to inject ethical rules into the daily practice of prosecutors does little to alter this psychology. Even prosecutors who violate their constitutional disclosure obligations are rarely disciplined.<sup>231</sup> Thus, prosecutors who fail to disclose evidence that falls under Model Rule 3.8(d), but not *Brady*, are unlikely to be disciplined.<sup>232</sup> In short, the rejection of the materiality requirement by Model Rule 3.8(d), standing alone, is unlikely to alter the decision-making process of a prosecutor evaluating the exculpatory value of evidence.

Critics of *Brady* have suggested a variety of alternative reforms. Professor Capra has argued for a right to *in camera* inspection of the prosecutors' files so that a judge can fully effectuate the defendants' *Brady* rights.<sup>233</sup> Still others have argued for the "open file" policies already adopted by several jurisdictions in capital prosecutions.<sup>234</sup> This Article's purpose is not to explore fully the

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Attorneys Association (Aug. 6, 1991). He argued that the enforcement of ethical rules against prosecutors amounted to

an undisguised effort by the defense bar to undo what both Congress and the Supreme Court have declared to be the law .... We find it curious and inappropriate that the ABA, in which the interests of the defense bar are well-represented, should be in the business of making rules for the government's conduct of criminal prosecutions, particularly in areas where the courts and legislatures have already acted. This is the business of Congress and the courts.

*Id.*

231. See Richard A. Rosen, *Disciplinary Sanctions Against Prosecutors for Brady Violations: A Paper Tiger*, 65 N.C. L. REV. 693, 697 (1987); Joseph R. Weeks, *No Wrong Without a Remedy: The Effective Enforcement of the Duty of Prosecutors to Disclose Exculpatory Evidence*, 22 OKLA. CITY U. L. REV. 833, 898 (1997) ("[T]he disciplinary process has been almost totally ineffective in sanctioning even egregious *Brady* violations."); Zacharias, *supra* note 13, at 755.

232. See Green, *supra* note 12, at 1593 (reporting that "courts and disciplinary authorities do not sanction prosecutors for failing to disclose evidence as required by the rule but not by other law").

233. Capra, *supra* note 138, at 426-30.

234. James S. Liebman, *The Overproduction of Death*, 100 COLUM. L. REV. 2030, 2145-56 (2000) (calling for open file access in capital cases); Jenny Roberts, *Too Little, Too Late: Ineffective Assistance of Counsel, the Duty to Investigate, and Pretrial Discovery in Criminal Cases*, 31 FORDHAM URB. L.J. 1097, 1153-54 (2004) (arguing in favor of open file discovery as a prophylactic rule to protect *Brady* rights); Victor Bass, Comment, *Brady v. Maryland and the Prosecutor's Duty to Disclose*, 40 U. CHI. L. REV. 112, 113 (1972) ("[T]he prosecutor's entire file should, except in special cases, be open to defense inspection."). *But see* John G. Douglass, *Fatal Attraction? The Uneasy Courtship of Brady and Plea Bargaining*, 50 EMORY L.J. 437, 460-61 (2001) (arguing that open file and other informal discovery processes have shortcomings); Steven Alan Reiss, *Prosecutorial Intent in Constitutional Criminal Procedure*,

relative strengths and weaknesses of all possible reforms. Rather, this Article's intention is to demonstrate that the *Brady* rule should be modified to separate the standard that governs the disclosure requirement from the harmless error standard that determines the availability of a remedy if required discovery is withheld. Moreover, in light of what we know about cognitive bias, the governing standard for prosecutorial disclosure should attempt to avoid the recipe for cognitive disaster that is inherent in the current *Brady* standard. Broadening the *Brady* standard to include all favorable information, rather than just materially favorable information, would be a helpful move in the right direction. A standard turning on the favorability of the evidence instead of its materiality invites reviewing the file from the defense's perspective and therefore mitigates the influence of the prosecutor's preexisting theory of guilt on the decision-making process.

#### CONCLUSION

I wanted to write this Article to explore questions I have carried in my own mind since my first weeks as a prosecutor. Fresh out of my judicial clerkship, I was asked to help draft the papers required to obtain the release of two people who had been convicted of murder five years earlier. Police suspected that the woman whom the defendants supposedly killed, Tanya Bennett, was in fact the victim of a self-named, self-confessed serial killer. But even after the so-called Happy Face Killer included Bennett on his list of victims and provided detailed information about her murder, the prosecutors in my office who had obtained the original convictions remained doubtful. The Happy Face Killer must have known one of the convicted defendants, they speculated, or perhaps read the details in the newspaper. Only when the man led police to Bennett's long-abandoned purse, buried beneath half a decade's growth of blackberry bushes near the Columbia River Gorge, did the state agree to release the previously convicted defendants.

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135 U. PA. L. REV. 1365, 1462-64 (1987) (arguing that open file policies deter prosecutors from seeking out additional information that might benefit the defendant).

As a new lawyer reviewing the reports only with the benefit of hindsight, I could see potential problems with the prosecution's original case. Like Earl Washington's,<sup>235</sup> the defendants' convictions rested largely upon a retracted confession, obtained after repeated police questioning and corroborated by little other evidence. Nevertheless, I wondered as I drafted a memorandum summarizing the events leading to the erroneous convictions, *would I have done anything differently?* I do not purport to have the answer to that question today, but I do know that it was a valid question to ask myself then and, more importantly, a question that ethical prosecutors themselves need to raise in daily practice.

This Article has attempted to explore how cognitive bias might trigger poor decision making by prosecutors who intend to do justice. By doing so, this Article seeks to complement rather than supplant the vast literature that treats prosecutors as rational actors who choose to engage in misconduct. Adding a cognitive dimension to the current discussion of prosecutorial decision making is important in two different ways.

First, it shapes the direction of reform. Although sanctions and other alterations of the prosecutorial cost-benefit analysis may deter wrongful conduct in prosecutors who are not motivated to do justice, a cognitive explanation for how even virtuous prosecutors might contribute to wrongful convictions suggests that good values are not enough. As an admittedly introductory effort, this Article sets forth a few suggestions for enhancing neutral decision making by ethical prosecutors.

Moving beyond fault-based rhetoric to include a cognitive view of prosecutorial decision making also establishes a necessary discursive shift in the important, ongoing study of wrongful convictions. Using only the language of fault in the discussion invites an adversarial relationship between prosecutors and advocates for the innocent, because prosecutors naturally resist their depiction as wrongdoers. By antagonizing prosecutors and creating an opposing political force, the language of fault impairs the chances for meaningful prosecutor-initiated reforms, such as internal review

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235. See *supra* text accompanying notes 1-10 for a discussion of the Earl Washington case.

committees<sup>236</sup> or office guidelines to improve the exercise of prosecutorial discretion.<sup>237</sup>

In contrast, a cognitive explanation for faulty prosecutorial decision making creates the potential to fold ethical prosecutors into the dialogue. This discursive shift may encourage ethical prosecutors to examine the danger that they might personally contribute to wrongful convictions. Only when that happens can ethical prosecutors improve the quality of their own decisions and attempt to implement reforms that might improve the prosecutorial decision making of others.

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236. See *supra* notes 188-95 and accompanying text for a discussion of the power to improve the exercise of prosecutorial discretion through review committees within district attorneys' offices.

237. Many have suggested that internal guidelines may be one of the most effective methods of improving the exercise of prosecutorial discretion. See, e.g., Norman Abrams, *Internal Policy: Guiding the Exercise of Prosecutorial Discretion*, 19 UCLA L. REV. 1, 57 (1971); James Vorenberg, *Decent Restraint of Prosecutorial Power*, 94 HARV. L. REV. 1521, 1562 (1981).